



**XXI. International Balkan and Near Eastern Congress Series on  
Economics, Business and Management  
Plovdiv / Bulgaria**

**March 16-17, 2024**

University of Agribusiness and Rural Development/Bulgaria  
University "St. Kliment Ohridski" Faculty of Economics/Republic of North Macedonia  
University "Isa Boletini"- Mitrovica, Faculty of Economics / Republic of Kosovo  
IBANESS

# **PROCEEDINGS**

**Editors**

**Prof.Dr. Mariana IVANOVA**

**Prof.Dr. Dragica ODZAKLIESKA**

**Prof.Dr. Rasim YILMAZ**

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## FOREWORD

International Balkan and Near Eastern Congress Series brings together many distinguished social and behavioral science researchers from all over the world. Participants find opportunities for presenting new research, exchanging information, and discussing current issues.

We are delighted and honored to host the IBANESS Congress Series in Plovdiv / Bulgaria. Presented papers have been selected from submitted papers by the referees. Sincere thanks to those all who have submitted papers.

We hope that through exchange of the presented researches and experiences, the Congress will enhance communication and dissemination of knowledge in Balkan and Near Eastern Countries.

The Organization Committee  
March 16-17, 2024



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## **SESSION CHAIRS**

## CONGRESS ID

## TITLE OF CONGRESS

XXI. International Balkan and Near Eastern Congresses Series on Economics, Business and Management-Plovdiv/Bulgaria

## DATE – PLACE

16-17 March 2024  
Plovdiv, Bulgaria

## ORGANIZATION

IBANESS, University of Agribusiness and Rural Development/Bulgaria,  
University "St. Kliment Ohridski", Faculty of Economics – Prilep/Republic of North Macedonia,  
University "Isa Boletini"- Mitrovica, Faculty of Economics / Republic of Kosovo



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## EVALUATION PROCESS

All submitted articles have undergone a double-blind peer review process.

## PARTICIPANT COUNTRIES (13)

Albania, Azerbaijan, Bulgaria, Greece, Hungary, Kosovo, Latvia, Moldova, North Macedonia, Romania, Russia, Slovenia, Turkey

TOTAL NUMBER OF PAPERS: 153  
THE NUMBER OF PAPERS FROM TURKEY: 61  
THE NUMBER OF PAPERS FROM OTHER COUNTRIES: 92

## Program

10:00 – 11:00	Parallel Session I	Hall 1 Chair Person: Assoc.Prof.Dr. Ruhangiz ALIYEVA	
		Nadja DAMIJ Talib DAMIJ Liljana Ferbar TRATAR Janez GRAD	Optimising an Ecological Farming Plan Using Linear and Goal Programming Methods
		Gentjan MEHMETI Eda LUGA	Exploring Farmers' Awareness on Water Use in Agriculture
		Zaiga OZOLIŅA Biruta SLOKA	Evaluation of the Development Stage of Mussel Usage in the Baltic Sea Region
		András SCHLETT Judit BEKE	After Twenty Years. The Impact of EU Accession on Hungarian Agriculture
10:00 – 11:00	Parallel Session I	Hall 2 Chair Person: Prof. Albana DEMI (MOSHO)	
		Albana DEMI (MOSHO) Shqipe XHAFERRI Alba RRAMALLARI Flutura DOMI Majlinda VELCANI	An Overview of Public Accounting and Auditing in Albania
		Eni DANAJ Lorela RECI	Auditing as Motivation and Reliability
		Aysegül ÖNGEN Şerafettin SEVİM	An Investigation into the Components of Corporate Risk Management in Publicly Listed Companies
		Enea QOSE Fabian PJETRI	Risk Management and the Insurance Market. The Case of Albania
10:00 – 11:00	Parallel Session I	Hall 3 Chair Person: Prof.Dr. Alfred HALILAJ	
		Alfred HALILAJ	Continuing Education and its Role in Strengthening Education in Albania
		Ogultumar HEZRETKULIYEVA	Role of Literature in Foreign Language Teaching

		Selma DENEME GENÇOĞLU	
		Fatih Çağatay BAZ	A Study on the Use of Distance Education Platforms in Foreign Language Teaching in Turkey
		Tudor IRIMIAȘ Diana PITIC	"Bridges" between Management Learning and Practice: Design and Assessment of a Business Simulation Game in Higher Education
10:00 – 11:00	Parallel Session I	Hall 4 Chair Person: Assoc.Prof.Dr. Resül YAZICI	
		Resül YAZICI Ayla YAZICI	Endüstri 5.0 ve ESG'nin Sürdürülebilirlik Üzerindeki Etkileri Hakkında Bir Çalışma
		Murat Çetin Ömer Sinan PEHLİVAN	İnsani Gelişme Endeksi Bileşenlerinin Türkiye için Sınanması: Bir Zaman Serisi Analizi
		Burak GÜRİŞ Hüseyin İÇEN	Ulaştırma Sektöründe Enerji Tüketimi Kaynaklı Karbondioksit Emisyonu
		Havva GÜLTEKİN Kübra KARADAĞ	Kirlilik Sığınağı Hipotezi ve Kirlenme Hale Hipotezinin Yeni Kırılgan Beşli Ülkelerinde Sınanması: Panel Eşbütünleşme ve Nedensellik Yaklaşımı
11:00 – 12:00	Parallel Session II	Hall 1 Chair Person: Assoc.Prof.Dr. Alexandra NOVAC	
		Alexandra NOVAC	Exploring the Attitudes towards Entrepreneurship: Insights from Moldovan Entrepreneurs
		Aytuğ SÖZÜER Semanur YALÇIN	The Relationship Between Leadership Styles and Crisis Management in Türkiye: A Literature Review
		Ioannis KOUKOUMPLIAKOS Grigorios GIANNARAKIS Lampros SDROLIAS Stavros KALOGIANNIDIS Dimitrios SYNDOUKAS Cris MAGNIS Apostlos STAGIANNIS Ioannis PAPADIMOPOULOS Nikolaos KOUKOUMPLIAKOS	Corporate Social Responsibility, as a Dynamic Concept Reflected in the Modern Business Environment
		Angeliki MILIOTI Panagiota I. XANTHOPOULOU	Optimization of Marketing Tools with the Use of Artificial Intelligence: Prospects and Challenges

11:00 – 12:00	Parallel Session II	Hall 2 Chair Person: Prof.Dr. Hasan VURAL	
		Mücahit DEMİRCİ Ozan Hikmet ARICAN	Borusan Limanı'nın "Çevresel Performansı ve Yeşil Liman Uygulamaları"
		Ruhangiz ALIYEVA	Azerbaycan'da Yeşil Pazarlama Stratejisinin Ana Yönleri
		Hasan VURAL	Ahududu Üretimi ve Ekonomisi
		Hasan VURAL Adım Ahmad SEEDI	İklim Değişikliğinin Tarıma Etkileri
11:00 – 12:00	Parallel Session II	Hall 3 Chair Person: Prof.Dr. Gentjan MEHMETI	
		Sara MUCHA	The Adoption of Renewable Energy Practices in MSME-s in North Macedonia: Barriers and Benefits
		Nurcan ÖZKAN	Assessment of Plastic Waste Situation in the Oceans (Seventh Continent)
		Nurcan ÖZKAN	A Sustainable Environment for Sustainable Development
		Eda LUGA Gentjan MEHMETI	Consumer Perception Toward Trust in Food Value Chain
11:00 – 12:00	Parallel Session II	Hall 4 Chair Person: Prof.Dr. Gamze SANER	
		Gökhan İŞİL Esra ERİK AKYOL	Değişen Dünya için Sürdürülebilir Çözümler: Döngüsel Ekonomik Sistem
		Zühtü KOÇASLAN Serdar GÖNCÜ	Zeytinyağı Üretim Atıklarının Döngüsel Ekonomi Bağlamında Değerlendirilmesi Üzerine Bir İnceleme: İzmir İli Örneği
		Adem GÜRBÜZ Halil KIZILASLAN	Tüketicilerin Yaş Meyve ve Sebze İsrafı Üzerine Bir Araştırma (Ankara İli Etimesgut İlçesi Örneği)
		Sevilay İZCAN Minel BAŞENGİR Duygu TOSUN Gamze SANER	Zeytinyağı İşletmelerinde İnovasyon Yönetimi Üzerine Bir İnceleme: Balıkesir-Ayvalık İlçesi Örneği
12:00 – 13:30	Lunch		
13:30 – 14:30	Parallel Session III	Hall 1 Chair Person: Prof. Arjana KADIU	

		Simeana BESHİ Driola SUSURI	Public Finance and Parliamentary Constitutionalism: An Analysis of Institutional Dynamics
		Albana DEMI (MOSHO) Arjana KADIU Era TIÇO	Mapping the Globalization Financial Network
		Erdi BAYRAM Rabia AKTAŞ	Paradigm Shift in Finance: A Review of Alternative Perspectives
		Ada ŞTAHOVSCHI	Public Debt Management Strategy in the Context of European Integration
13:30 – 14:30	Parallel Session III	Hall 2 Chair Person: Prof.Dr. Murat ÇETİN	
		Selçuk TEKİN	Holding Şirketlerin İlişkili Kişilerine Borçlanma Yasağının Değerlendirilmesi
		Murat ÇETİN Ömer Sinan PEHLİVAN	Finansal Gelişmenin Belirleyicileri Türkiye Örneği: Bir Zaman Serisi Analizi
		Sami BUHUR	Mali Disiplini Sağlamada Maastricht Mali Kriterlerinin Güncel Durumunun Analizi
		Utku ALTUNÖZ	Faiz ve Enflasyon Bağlamında Türkiye Ekonomisi için Fisher Etkisi Üzerine Teorik ve Ampirik Araştırma
13:30 – 14:30	Parallel Session III	Hall 3 Chair Person: Prof.Dr. Aristidis BITZENIS	
		Klajdi LOGU	Economic Realities Versus Populist Rhetoric: An Empirical Assessment of Inequality's Role in Fueling Albanian Populism
		Saadet Yağmur KUMCU Özden Sevgi AKINCI	Analysis of Economic Targets in Türkiye Information Society Strategies Action Plans
		Eduard ȚUGUI	Free Economic Zones of the Republic of Moldova: Peculiarities, Foreign Direct Investment and European Integration
		Aristidis BITZENIS Nikos KOUTSOUPIAS	Foreign Direct Investment in Southeast and Eastern Europe: A Scientometric Review
13:30 – 14:30	Parallel Session III	Hall 4 Chair Person: Prof.Dr Matanat RASULOVA	



		Alican SARISOY Sinem Pınar GÜREL	Vergi Gelirlerinin Kamu Harcamalarını Karşılama Pozisyonu: Türkiye’de Seçilmiş İller Özelinde Bir Araştırma
		Eda ÖZEN Yunus SÜNETÇİ	Yolsuzluğun Vergi Gelirleri Üzerindeki Etkisi
		Raşit GÜLTEKİN	Gümrük İdaresinden Alınan Bağlayıcı Bilginin Hukuki Niteliği ve Vergisel Etkileri
		Ela HİÇYORULMAZ	Muhasebe Alanında Yazılan Tezlerin İncelenmesi
		Matanat RASULOVA Ayaz MUSEYİBOV Erol AHMADLİ	Basel Komitesi: Küresel Finansal Standartların Düzenlenmesindeki Rolü ve İşlevleri
14:30 – 15:30	Parallel Session IV	Hall 1 Chair Person: Assoc.Prof.Dr. Gerti SQAPI	
		Gerti SQAPI	Self-Expression Values as a Conditional Factor for Establishment of a Well-Functioning Democracy: The Case of Albania
		Türkan ÖZKAN	An Evaluation of ‘Safe Third Country’ Concept and Recent Practices in Context of International and Human Rights Law
		Visar MALAJ Najada FIRZA	Corruption and Emigration in the Western Balkans: Key Facts and Statistics
		Blendi LAMI	Greek Veto: An Analysis of Albania’s Integration Process Amidst Populist Trends in the European Union
14:30 – 15:30	Parallel Session IV	Hall 2 Chair Person: Prof.Dr. Nurcan METİN	
		Gül Ş. HUYUGÜZEL KIŞLA Burcu TÜRKCAN Meltem İNCE YENİLMEZ	Covid-19’un İşgücü Piyasalarında Cinsiyet Temelli Etkileri: İzmir Üzerine Bir Araştırma
		Recep UZUNALIOĞLU	2023 Küresel İstihdam Raporu Kapsamında Dünyada İşgücü Piyasası Durum Analizi
		Seçkin GÜN	Yapay Zekanın İşe Alım Çalışmalarında Kullanımının Etkileri
		Fatma ÖZCAN HAN Ethem DUYGULU	Dinmik Yetenekler Yaklaşımı ve Mavi Okyanus Stratejisi İlişkisinin Bibliyometrik Analizi

		Sevgi BULUTLU Sevi BALOĞLU SEVİNÇ Aytaç GÜT H. Selçuk ETİ	Pazarlamada Yapay Zekâ
14:30 – 15:30	Parallel Session IV	Hall 3 Chair Person: Assoc.Prof.Dr. Emanuela ESMEROVA	
		Emanuela ESMEROVA	The Concept of Good Quality Management
		Celal Özgür BÜYÜKYAVUZ Mehmet Arcan TUZCU	Impact of Servant Leadership on Job Embeddedness
		Besnik HAJDARI	The Importance of Management through Information Technology in Enterprises in Kosovo
		Ilindena SOTIROFSKI	Communication Strategies for Change Management in Organizations
14:30 – 15:30	Parallel Session IV	Hall 4 Chair Person: Asst. Prof.Dr. Hikmet ASUTAY	
		Coşkun DOĞAN	Öteki Kavramından Hareketle Çokkültürlülük
		Coşkun DOĞAN	Kültürlerarası Buluşma Noktası: Toplum Çevirmenliği
		Hikmet ASUTAY	Türk-Alman Kültürel İlişkilerde İstanbul Buluşması: "İstanbul'da Uyanmak"
		Hikmet ASUTAY	Altmış Üç Yıllık Türk Alman Kültürel Çifte Vatandaşlığı: Emine Sevgi Özdamar'ın "Aynadaki Avlu" Adlı Eserinde İzler
15:30 – 16:30	Parallel Session V	Hall 1 Chair Person: Asst.Prof.Dr. Oriola THEODHORI	
		Aldona MINGA Bitila ZHULI	Touristic-Environmental Assessment of the Përmet Area (Albania Region) and Its Typical Products
		Arjan SHUMELI Era HOXHAJ Erion SHEHU	The Helpfulness of Hotel Online Reviews: Using Linguistic Analysis to Decode Their Meaning
		Esmerelda SHKIRA Oriola THEODHORI Landi GUSHI	Sustainable Resources Management in the Hotel Industry of the Korça Region
		Erjola SHEHU	Consumer Behaviour on Food Labeling in Albania, A

		Eda LUGA	Review of Research Studies
15:30 – 16:30	Parallel Session V	Hall 2 Chair Person: Prof.Dr. Burak GÜRİŞ	
		Bekir AŞIK Salih Eren DERMAN	ARDL ve Nardl Tahmin Yöntemleriyle Tüketici Fiyat Endeksi ve Seçilmiş Alt Kalemlerine Döviz Kurunun Geçiş Etkisi: Türkiye Örneği
		Arya AKDENİZ	Kazakistan Ekonomisinde Kilit Sektörlerin Değişimi: 2000-2022 Dönemi
		Burak GÜRİŞ Buğra POLAT	Petrol İthalatında Şoklar Geçici mi? Yeni Testlerden Bulgular
		Esra CEBECİ	Havayolu Taşımacılığı ve Ekonomik Büyüme: E7 Ülkeleri Örneği
15:30 – 16:30	Parallel Session V	Hall 3 Chair Person: Prof.Dr. Denisa KURTAJ	
		Yusif MAMMADOV	Towards A Green Future: The Role of Banking in Environmental Sustainability
		Igor TROFIMOV Luminita DIACONU	Environmental Control as the Main Instrument for Ensuring Environmental Protection
		Havva ARABACI Nurcan ÖZKAN	Examination of Metropolitan Cities and Nature-Friendly Sustainable Cities
		Văidean VIORELA-LIGIA Turceniuc ALEXIA-RALUCA	The Impact of Climate Change on Prosperity – Past, Present and Future
15:30 – 16:30	Parallel Session V	Hall 4 Chair Person: Prof.Dr. Cüneyt KOYUNCU	
		Sümeyye Esila KIMİL Fatih Çağatay CENGİZ	Türkçülüğün Sınır Ötesi İnşası: Rusya Kökenli Türkçülerin Tarihsel Kökenleri
		Mustafa ALTUNOK	Türkiye’de Göç Bakanlığı Kurulmasının Gerekliliği Üzerine bir Tartışma
		Hikmet ASUTAY Binnur ARABACI CANDAN	Almanya: Altmış Üç Yıllık Yeni Vatan
16:30 – 17:30	Parallel Session VI	Hall 1 Chair Person: Assoc.Prof.Dr. Ilir	

		TOMORRI	
		Ilir TOMORRI Remzi KECO Joana SHIMA	The Impact of Good Governance on Economic Development, an Empirical Analysis
		Polyxeni KECHAGIA Theodore METAXAS	Formal Institutions and Foreign Capital Inflows in Turkey: The Role of Economic Freedom
		Petru GLAVAN	A Review on the Economic Costs of Domestic Violence in the Republic of Moldova
		Juljan MYFTARI	Quantitative Analysis of Democracy in the Western Balkans Using Advanced Statistical Models
16:30 – 17:30	Parallel Session VI	Hall 2 Chair Person: Assoc.Prof.Dr. Erdal ARSLAN	
		Gökhan IŞIL Fatih KAYHAN Esra ERİK AKYOL	Türkiye’de Finansal Piyasaların (Faiz, Döviz, Borsa) Bankaların Kredi Portföy Değişimine Etkisi
		İlhan EROĞLU Ülkü SATANER	Dijital Paranın Merkez Bankası Para Politikalarına Etkisi
		Murat KARAKAYA Sadiye OKTAY	Türkiye’de Banka Kredileri ile BİST Toplam Piyasa Değeri İlişkisinin Granger Nedensellik Testiyle Araştırılması
		Erdal ARSLAN Ali BORA	Covid-19 Pandemi Krizinde G20 Ülkelerinde ve Türk Bankacılık Sektöründe Uygulanan Politikalar
16:30 – 17:30	Parallel Session VI	Hall 3 Chair Person: Assoc.Prof.Dr. Alberta TAHIRI	
		He YIYANG	Research on the Current Situation and Future Trends of Ecotourism in Montenegro: A Sustainable Development Perspective
		Irina Teodora MANOLESCU Mihai TALMACIU	Impaled in Denial the Potential of Dark Tourism. Evaluating Attractions and Development Perspectives
		Alberta TAHIRI Idriz KOVAÇI Diellza MISINI Jehona RAMA Kaltrina NIKQI	Development of Cultural Tourism in Kosovo
		Idriz KOVAÇI	Human Resource Management and Performance

		Alberta TAHIRI Thëllëza Latifi SADRIJA Jehona RAMA Anela DŽOGOVIĆ	Evaluation in Hotels in Kosovo
16:30 – 17:30	Parallel Session VI	Hall 4 Chair Person: Prof.Dr. Hülya BAKIRTAŞ	
		Ömer Zafer GÜVEN Ömür ÖZKUK	X ve Y Kuşağındaki Tüketicilerin Bireysel Değerleri ile Satın Alma Tarzları Arasındaki İlişkinin İncelenmesi
		Zafer CESUR Salih MEMİŞ	Algılanan Tüketici Kullanışlılık, Kolaylık ve Etkileşiminin Dijital İçerik Sunum Hizmetleri Sunan Uygulamaları (SPOTIFY) Kullanma Niyetine Etkisinin İncelenmesi
		Yusuf TEPELİ Ayşe ÇAYGEÇEN	Oyun Teorisi ve Doğrusal Programlama ile Optimal Portföy Seçimi
		Aleyna KARABİNAOĞLU Hülya BAKIRTAŞ	Self Servis Teknolojilerine İlişkin Bibliyometrik Analiz

## Sunday Sessions

11:00 – 12:00	Parallel Session I	Hall 1 Chair Person: Prof.Dr. Biruta SLOKA	
		Ludmila LOZOVA Biruta SLOKA	Latvian Production Sector: Looking for Alternative Export Markets
		Emi MALAJ	Gravity Model: An Application to Albanian International Trade Flows
		Laura DIACONU (MAXIM)	The Impact of Low-Cost Airlines' Competition on Romanian Aviation Market
		Rasim YILMAZ	Assessing Trade Relations Between Turkey and Russia
		Rasim YILMAZ	The Pros and Cons of a Fixed Exchange Rate System: A Case Study of Egypt
11:00 – 12:00	Parallel Session I	Hall 2 Chair Person: Prof.Dr. Ahmet KUBAŞ	
		Su ÜNLÜ	Kapadokya Bölgesindeki Turizmin İncelenmesi
		Ayhan GADAŞOV	Tarım Sektöründe Dijital Teknolojilerin Rolü Artan Talep Karşısında Ekolojik Dengenin Korunması
		Havva ARABACI	Yavaş Şehir Yaklaşımının Sürdürülebilir Yerel Kalkınmaya Etkisi
11:00 – 12:00	Parallel Session I	Hall 3 Chair Person: Assoc.Prof.Dr. Liliana CIMPOIES	
		Denisa KURTAJ	Health as a Motive for Choosing Healthy Foods
		Liliana CIMPOIES Adrian COJOCARU	Unlocking Potential: Assessing Opportunities and Challenges for Moldovan Agri-Food Exports
		Luminita DIACONU	Institutional Mechanisms for Environmental Monitoring: Ecological Expertise and Environmental Impact Assessment
		Sabbina PAGANOU	Virtual Health Care to Health Organizations in Greece During The COVID-19 Pandemic

11:00 – 12:00	Parallel Session II	Hall 1 Chair Person: Assoc.Prof. Dr. Angela TĂLĂMBUȚĂ	
		Angela TĂLĂMBUȚĂ	Legal Regulations regarding Common Property in the Republic of Moldova
		Angela TĂLĂMBUȚĂ	The Comparative Study on the Defense of Patrimonial Rights
		Joó Patrik ZSOLT	European Approach to Managing Online Disinformation and Conspiracy Theories
		Mihaela Ioana GURĂU Mariana GURĂU	The Involvement of Social Networks in Globalization and Deglobalization Processes
11:00 – 12:00	Parallel Session II	Hall 2 Chair Person: Asst.Prof. Dr. Remzi KECO	
		Budișteanu TUDOR-GABRIEL	Emerging Economies and Cryptocurrency Regulation: A Comparative Analysis of Legislative Approaches in Serbia, Romania, Hungary, Croatia, Albania, Ukraine, Bulgaria, and Moldova
		Daniel BULIN	Central Bank Digital Currencies Challenges – Reshaping Relationship between Public and Private Money in the New Monetary Landscape
		Ilindena SOTIROFSKI	The Impact of Technological Development in Digital Marketing Strategies
		Sahin ÜNSAL	Importance of Software-Evaluation in Modern Production Environment
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		Florim SALIHU	Pronouncing the Sentence for the Perpetrator of the Criminal Offense According to the Criminal Code of Kosovo

		Kosovare SOPI	Criminal Investigation as the Initial Stage of the Criminal Procedure
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## Development of cultural tourism in Kosovo

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**Abstract:** In this paper we will address some of the key advantages and also also see the shortcomings with which Kosovo is distinguished, because the cultural is expected tourism in the coming period to be included in the tourist turnover in a larger percent, and also to represent one of the factors for economic and economic development in Kosovo.

Also, in this paper, we research and support the development of cultural tourism in Kosovo. With a focus on the rich cultural heritage, the goal is the integration of cultural treasures in the tourism industry, with an emphasis on sustainability and the improvement of the local community.

This paper aims to address the components, role and importance of cultural heritage in the development of cultural tourism, analyzing Kosovo and its cultural heritage as a specific case. The favorable geostrategic position and natural resources made Kosovo, although a small country, stand out with its rich cultural heritage. Kosovo has cultural heritage under permanent protection and temporary protection and sufficient potential for the development of cultural tourism . This paper also reviews the tourist potential and cultural values of Kosovo, as well as the specifics of the regions in Kosovo. In addition to the development of cultural and historical development of Kosovo and management of cultural values and intangible cultural heritage. This paper contains the important festivals and cultural events in Kosovo, as well as the ethnography - traditional clothing and folklore, national treasure and food in Kosovo.

**Key words:** tourism, cultural heritage, preservation and protection, sustainability, development, visits, Kosovo.

### Introduction

Tourism as a branch is a significant challenge for the economic development of the country, so is cultural tourism for the movement of people in the foundation created by cultural motives, such as study tours, performing arts and cultural tours, trips to festivals and other cultural events, Visit monuments with the purpose of recording nature, as well as the movement of people to satisfy people's needs for diversity, in order to raise the cultural level of the individual, his knowledge and experiences.

With the help of tourism, the economic growth and development of the country increases, new investments are attracted, new jobs are created, and the standard of living is developed. Tourism also helps to produce local industry and trade, to promote cultural values and natural resources. As well as for the protection of cultural heritage and the like. The Internet, like electronic social networks, offers many products and services to attract attention to online tourism.

The Internet is the main source of information, at a time when the competition in the tourist market is quite. Those travel agencies and tourism sector, want to be successful and notice the development of the development in their work, to adapt to these changes. This especially applies to the online travel offer. This is because potential tourists and travelers need information about the tourist destinations they want to visit.

Tourism has become a major form of economic development in many countries around the world. Nature with different forms and cultural heritage with its mosaic are generators of tourism. Tourism is important to many countries, as a result of the large inflow of money from the trade in their goods and services and as a means of employment in tourism-related service activities. It includes a wide range of monuments and relationships that arise during the tourist journey, while not only entering the economic aspect, but also the environmental, social and cultural aspects of life.

Through the experience and what is published from contact with nature, culture and cultural heritage (material and spiritual) on topol, tourism becomes a natural generic mechanism for exchange of changes and relations between people of all ages, religions and races. Much more attractive than the mechanical forms of global trade and economic development. Tourist markets are becoming more competitive with the implementation of various types and forms of movement in tourism. Already new forms are being replaced by forms, giving worldwide reach and abolishing the tourist monopoly of warm coastal regions and economically developed countries.

As the tour industry has shifted from promoting inbound tourism to promoting cross-border tourism, many countries are facing intense competition for inbound tourists. Some national policy makers have shifted their priority from promoting limited tourism to contributing to the local economy.

The meaning of tourism is part of the primordial curiosity and desires and activities of man to understand the world around him, there is a very fast trend of development, both in the world and in the Republic of Kosovo. Tourism offers people meaningful use of their free time in spaces, which with their natural and social characteristics are the basis for new attractive experiences and relaxation.

### **The tourist potential of the Republic of Kosovo**

When we talk about the potentials for the development of tourism in the regions of Kosovo, we can say that each of them has potential for development, but it needs to be upgraded and the current one improved condition. As we said the regions are surrounded by mountains, lakes, rivers, bridges and cultural heritage, which as such represent great potential for tourism development. More specifically, the current situation refers to traffic, culture, politics and health. On all this investments also affect, if we have bigger investments, success is guaranteed. So, the success of attracting investment depends on the type of cooperation between the private and public sectors and their readiness to constantly exchange information. Investment marketing and the promotion of tourism requires support from the private and public investments, as well as citizens' associations. Although the potential of each municipality is determined by its geographical location position, climate, natural and cultural resources, they are primarily oriented to people according to their commitment, ability, energy, values and the organization. When it comes to traffic, we can let's say that every day we work on improving it and networking with other neighboring borders so that traffic can be better regulated, yes respect all the rules of behavior and thereby preserve nature.

The natural and cultural resources of Kosovo are the main pillars of the tourism product and here we include cultural, mountain, alpine, rural, eco and alternative tourism, active tourism, cross-border trips, meetings and the holding of various conferences in this field, sports tourism, spa tourism and city tourism in which we can let's include the thematic tourism.

Ecotourism is related to conservation and protection of enviroment. Forests are not cut because the trees are destroyed. In we should not throw garbage in the rivers, because the water is polluted and thus disturbed people's health. Cultural tourism is related to historical monuments and the whole cultural heritage that needs to be protected from various negative elements, such as their destruction, demolition, burning and others. Kosovo has a rich culture that includes a large number of churches, mosques, museums, towers, monasteries, etc. Obstacles affecting the promotion of cultural tourism are numerous, and that is why the organizers of the events point them out the following difficulties in their official work:

- Funds received from local and central authorities are limited.
- They do not have adequate infrastructure for performing cultural and artistic events.
- The inability of local authorities to integrate cultures in a wider one strategic framework when it comes to tourism development.
- Lack of adequate cultural and tourism policy at all levels. Rural tourism in Kosovo is rich in agriculture, trade, grains and other types of crops.

The purpose of this topic is to give an overview of the tourism potential of the Republic of Kosovo. Through analyzes and theoretical aspects, it is shown how the region can apply tourism for the economic development of the country. Tourism is an economic activity aimed at the use of tourist potentials.

Although the Republic of Kosovo has sufficient tourism potential, it still does not treat this activity in the right place for the economic development of the country. Its development will affect the increase of the country's

gross product, which will occupy a significant place in the country's economic development strategy, which requires greater promotion of significant attractions, localities, events and food, organizing tourism fairs, in order to visit and attracting domestic and foreign visitors, as well as more foreign investments.

The Republic of Kosovo has many attractive places that can serve the development of tourism and the economy. As the youngest country in Europe, in the heart of Southeast Europe, positioned in the center of the Balkan Peninsula, the Republic of Kosovo is an important link between Central and Southern Europe, between the Adriatic and the Black Sea. This predominantly mountainous country promises many unforgettable sights and experiences.

Prizren is a charming Balkan town, which gives the impression that it was built along the banks of the Bistrica river, which divides the town between the high green mountains into two parts. Built over many centuries with a blend of architecture with a dominant Ottoman influence, Prizren is definitely one of the most attractive cities in the Republic of Kosovo.

The largest and capital city of the Republic of Kosovo - Pristina is the cultural, economic and administrative center of the country with a long history. Archaeological discoveries date back to Neolithic times. Ulpiana, the southern suburb of Pristina, is believed to be the center of the Illyrian province of Dardania and one of the most beautiful cities in the period from the 2nd to the 4th century.

Visoki Decani Monastery, located near the town of Decani, is one of the most important cultural sites in Kosovo. It dates back to the 14th century and has been designated a UNESCO World Heritage Site. The monastery is filled with tranquility. The frescoes on the walls represent various scenes from the Bible and create a beautiful setting. As in past centuries, the monks here still live a simple and peaceful life. They produce food for the monastery, which is well known for its delicious cheese and good wine.

Gračanica Monastery is a Serbian Orthodox monastery, located in the village of the same name, 10 kilometers from Pristina. It was founded by the Serbian king Stefan Milutin in 1321. Gračanica Monastery was declared a cultural monument of exceptional importance in 1990. Since 2006, it has been a UNESCO World Heritage Site, on the "Medieval Monuments of Kosovo" list, as an expansion of the Visoki Decani monastery.

The Imperial Mosque (Sultan Mehmed Fatih Mosque), the largest in Pristina, was built by order of Sultan Mehmed II, also known as El-Fatih. The most prominent feature of this mosque is the huge 15 meter dome. Today, hundreds of citizens of Pristina use this mosque for daily prayer. As a national icon, the Imperial Mosque is undisputedly considered as one of the largest buildings in the city. For a short period, during the Austro-Turkish War (from 1690 to 1698), the mosque was turned into a church, and during the Second World War it was marked with a swastika by German troops.

The entrance to the Gadime Cave (Marble Cave) was discovered in 1966 by Ahmet Diti, a villager who was removing stones from his yard and happened to see a glowing hole in the ground. Upon closer inspection, he was surprised to discover that the glow emanated from a cave full of crystallized stalagmites. Today, stalagmites and stalactites are the main attraction in the cave. Their creation over millions of years enabled the formation of various shapes and forms, which the local residents named.

The Patriarchate of Pec, a UNESCO World Heritage Site, is a complex of churches located in the suburbs of Pec, near the Prizrenska Bistrica river, at the beginning of the Rugov Gorge. This complex dates back to the 13th century and is where Serbian bishops and patriarchs lived. Since its foundation, the Patriarchate has been a meeting place for theologians, writers and artists – a place where artistic heritage has always been emphasized and to this day is one of the key monuments of Kosovo's cultural heritage. For tourists to be satisfied with the tourist destination, we need to satisfy their needs and give them the best conditions to feel at home. The city of Pec and other cities in the Western Region of Kosovo have a lot to offer, so they should be promoted the most. It is important to mention that both local people and tourists should be involved and that they are intermediaries between private companies and the government in order to protect and conserve their natural resources.

The implementation of the strategies aims to create such conditions that will affect the sustainability and use of natural resources and cultural heritage, which will better promote the region, using methods that will help to process the statistics obtained from the field, by surveying persons working in tourism institutions, such as: hotels, restaurants, travel agencies, Statistics Office of Kosovo, as well as experts in this field. Based on the obtained results, it is concluded that the tourist offer of the Western Region is developed and attractive for tourists, as well as that they are satisfied with the quality of the services they provide, that the infrastructure

should be improved and that in the future there should be more investors from developed countries. So, by holding various events (sports, recreational and cultural), they increase visits in the city environment. Applying this strategy, it is pointed out that of the six regions, Pec and Gjakovica have the best potential for tourism development.

Tourism expert Paige Viren said that the Republic of Kosovo has a lot of potential to develop tourism, saying: "I traveled through Kosovo and saw a culture that is special. I visited the mosque in Gjakovica, the bazaar and handicraft shops. Everyone was welcoming and friendly, and this is an asset for tourism."

According to her, the capital of Kosovo, Pristina, is the same as other cities, and she believes that in the Republic of Kosovo, people understand tourism very well, but there is a need for a trade union of entrepreneurs, and external and internal promotion is also needed, and one should be aware of the beauties that the Republic of Kosovo has. Also, tourism development has opportunities for many new jobs in every country, so a strategy should be created to drive the tourism agenda forward and this should be a further goal. In order to achieve a positive effect, it is necessary to work as a regional community, to protect young people to stay and not to leave.

The Agency for Investments and Enterprise Support in Kosovo (KIESA) organized the state presentation at the International Tourism Fair "ITB Berlin", which is held in Berlin, Germany. In this state presentation with the world-famous brand "Kosovo Ready For You", five Kosovo tour operators represent the tourism potential of Kosovo. The Kosovo stand was visited by visitors from different countries, who were closely informed about what the country has to offer in terms of tourist attractions and from a cultural-historical point of view.

The participation of tour operators from Kosovo was organized by the Ministry of Trade and Industry, i.e. the Agency for Investment and Support of Enterprises in Kosovo (KIESA), at the ITB Berlin fair in 2018.

The paper also lists the ways that would help in strengthening the image of the Republic of Kosovo as a tourist destination. The cultural heritage (material and spiritual), the natural potential and the improvement of the tourist infrastructure are the elements that will attract the attention of foreigners and the local population to visit the country.

Tourism in Kosovo is a branch of the economy that has increased participation in economic activity after 1999, because it inherited a tourist tradition that was not developed for years due to the political situation and unfavorable and unstimulating security for the development of tourism.

The Constitution and other relevant documents, including the letter of the Kosovans institutions from October 7, 2015, addressed to the national delegations of UNESCO, stating the obligations of Kosovo regarding the protection of the religious and cultural heritage, form the institutional basis for the development of the Cultural Strategy legacy 2017-2027. The legal basis consists of the laws in force: the Law on Cultural Heritage, the Law on Special Protected Areas (including the Historic Center Act), the Freedom of Religion Act, The law on expropriation, the law on construction, the law on cultural institutions and the law for local self-government; other laws such as Spatial Planning Laws and Laws on archives, by-laws such as those for the council for implementing supervision, are determine in accordance with the law on special protection zones and other administrative Acts that provide special protection of cultural and religious heritage, as well as provisions for European cooperation and international standards of cultural heritage and best practices, including those that promote cultural and religious variety and dialogue. Kosovo is an area with a rich cultural tradition and valuable cultural heritage the different ethnic groups that live on it.

Kosovo should be a tourist country in the future and is still a country oriented towards the development of tourism. The increase in turnover in investments and tourism shows that tourism for the country is and will be the driving force of economic development in general.

Table 1. Hotel capacities in Kosovo by type of accommodation

Unit types of accommodation	Unit	Room	Beds
Hotele	214	4457	7195
Motels	177	2132	2836
Shelter	10	46	99
Hostele	9	43	171
Apartment	15	25	32
Bungallo	41	374	768
<b>Total</b>	<b>466</b>	<b>7077</b>	<b>11101</b>

Source: ASK – 2019

Table 2. Kosovo hotel capacities by region

Region	Accommodation unit	Room	Beds
Gjakova	27	353	488
Gjilani	34	472	699
Mitrovica	29	484	734
Peja	87	1145	2154
Prizreni	83	1219	2483
Prishtina	144	2607	3514
Ferizaj	62	797	1029
<b>Total</b>	<b>466</b>	<b>7077</b>	<b>11101</b>

Source: ASK – 2019

## Cultural values in R. Kosovo and methodology of work to attract potential tourists

The methodology for conducting this paper includes the use of methods such as research, research method, analysis, comparative methods, and information and data are provided by various sources of information, such as publications in the field of tourism, tourist information office of Republic of Kosovo. In particular, we will study the specifics of some of the largest cities in Kosovo.

In order to achieve development and positive economic effects from tourism in Kosovo, it is necessary to adopt and present the development strategy at the national level. The cultural-historical monuments transparently show the past of this environment, and the responsibility lies with the local government, but also with the republic, because they are not sufficiently dedicated to presenting the existing values to the public, especially the tourist clientele, for which they should be protected. from harm, influence and abuse. Organizations in the field of tourism pay special attention to culture by allocating significant funds, because it is culture that offers value to tourists, and specialized individuals are hired who focus their activities on the management of cultural values that represent the special offers of each tourist environment. In recent decades, cultural tourism has become synonymous with modern tourism, which is a special attraction for all tourist environments.

There are several other definitions of cultural tourism:- One of the most accepted definitions of cultural tourism was given by Greg Richards in 1999, according to which "cultural tourism means the movement of people caused by cultural attractions outside the usual place of residence, with the intention of collect new information and experiences, how to satisfy their cultural needs".

- "Cultural tourism is an entertaining and educational experience that combines art, natural and cultural heritage with history",
- "Cultural tourism is a tourist choice that educates people about the art, architecture and history of a specific destination",
- "Cultural tourism is a mosaic of sites, tradition and works of art that portray the nation and the people, reflecting diversity in their characters."

Several areas have increased their tourist image thanks to cultural-historical monuments, because tourists, besides beaches, sea water, nature, are interested in having fun, enjoying tourist motives of the respective environment, but we should try to offer them quality services , for which the local self-government and other entities from the field of tourism should engage in this direction. But in order to achieve development and positive economic effects from tourism in Kosovo, it is necessary to put all this development under control and to issue the strategy for the development of tourism at the country level, which will allow orientations in those forms of tourism that respond the most, for which there is a good basis for growth, which will bring benefits to all participants in the "tourist industry" of the Republic of Kosovo.

Taking into account the fact that the country consists of several specific regions for the development of tourism, which, if managed to be interconnected as a whole, will create a tourism offer for which the long-term orientation of Kosovo and regional tourism employees is important. Of great importance is the regional cooperation at the level of the Balkan countries in the field of tourism for the exchange of experiences and complementing the tourist offer. The different geographical regions throughout Kosovo have their own characteristics and traditions, diversity of natural resources, cultural and historical heritage, as a tourist product that will be competitive and complementary with the offer of the Balkan countries and especially will be complementary with the offer of Albania and Montenegro.

Tourist potentials can lead to a change in the role of tourism in its economy, but also to the stabilization and building of a tourist profile, which will enable the economic growth of the region, and thus affect the support of

local businesses, which requires greater promotion of the tourist potential of Kosovo's regions, that is, the tourist offer of the Republic of Kosovo in general. This can be achieved by promoting cultural heritage through traditional local businesses, creating a strategy that will benefit the region of Pec: rich heritage, tourist destination and economic development, increasing the number of accommodation facilities, attracting international donors and investors, raising awareness among the local population, the development of handicrafts and handicraft production, which in conjunction with tourism enables greater economic growth of the country.

Kosovo has a lot to offer, namely the Kosovo geographical regions with their own cultural sites such as Pec with the old Karshi, 10 archaeological sites from the 2nd century BC. to modern times, the Towers as distinctive buildings, the Mosque in the city and 23 other Muslim places of worship, the Patriarchate and 12 Christian places of worship, including monasteries, etc. one can enjoy the cultural heritage in the ethnographic museum of the city. The exhibitions in the Towers, in the manifestations of drama, prose and poetry, the musical events that happen everywhere in different periods of time and seasons. Shar Mountain which offers opportunities to experience the traditional way of life of people with different languages and unique clothes, weddings and cultural activities, combined with mountain tourism during spring-summer and winter tourism during winter longer than five months. Also the extraordinary archaeological sites (Ulpiana city), tourist sites (Spas treatment, ski centers, rivers, lakes, tourist villages).

The connection of these attractions and tourist sites as a whole as a tourist offer of Kosovo can be done with traffic infrastructure that needs to be improved and expanded, as well as the use of airports (Pristina, Gjakova, Kuks) for the arrival of visitors as well as the introduction of new relations is a need and a way that will help in the development of tourism in Kosovo. Cooperation at the national level, but also with the neighboring countries of Albania, Montenegro and the Republic of Macedonia, can position Kosovo as a tourist destination for a large number of tourists. At the same time, care should be taken to maintain the ecological balance in the regions where it is not damaged, urgent steps to repair the damage done to the ecosystem, elimination of environmental pollution throughout the country.

In 2022, 297,000 people visited Kosovo, which shows that Kosovo has potential in the area of both mountain and cultural tourism. The area has good trails for hiking, climbing, cycling and locations suitable for paragliding, and Rugova is one of the most beautiful places in Kosovo, because the canyon and the river are beautiful, but cultural tourism is also developing very well in recent years.

Tourism in all countries, whether developed or undeveloped, is a state priority and is also supported by local businesses, but when we stop from a comparative, research, analytical aspect, we notice a lot of diversity and differences between countries in terms of support development of local tourism, we say that in order for the support to work not only in theory, but also in practice, a special budget must be allocated for drafting standardized and harmonized laws with EU member states, as well as for sharing tips to develop business activities to create cooperative agreements between domestic and foreign businesses, and then to create state capacity to move cheap goods across border lines for the good of the country.

Based on these findings, it is necessary to conduct intensive research on the innovation and development of tourism markets. This should be a broad, well-guided activity in the shaping, preservation and development of historical and cultural heritage, based on information obtained from interdisciplinary analysis and intersectoral cooperation. A well-designed project will show the way to the development of tourism in the geographical regions and at the national level in Kosovo.

### **Specificities of regions in Kosovo**

Kosovo, with its natural values and cultural heritage, is a very attractive place for foreign visitors. However, its presence on the tourist market was noticed after the seventies of the last century as a consequence of the major economic, political and social developments in the Kosovo economy, as well as the weaknesses that existed in terms of tourist facilities and traffic infrastructure. Today, focusing on solving the current problems and situations, more and more attention is being paid to the promotion and development of tourism, which makes Kosovo stand out more and more with its tourist offer in the region.

Although tourism potentials are found throughout the territory of Kosovo, nevertheless, based on the natural attractions and wealth of cultural values, the tourism development of Kosovo is concentrated in a few municipalities.

-The region of Pec includes the municipalities of Yunik, Dečan, Istog, which are rich in archaeological and architectural heritage, which bear witness to history, relief and materials, as well as spiritual heritage, which bears witness to culture, history and tradition.

The region of Pec has 856 monuments of cultural and natural heritage, of which 29 are archaeological sites, 74 sacred monuments, 736 monuments, 7 movable heritage exhibits, 10 examples of spiritual heritage, 1 historical event, 7 natural landscapes and 6 oak trees. Pec, with its enchanting natural resources and tangible and intangible cultural heritage has been the focus of local and international actors over the last decade as an ideal tourist attraction, and carefully managed assets combined with the hospitality of local residents can set a positive example for the rest of the territory and the region.

On the list of numerous tourist offers in Pec, there are still special spaces for tourists who prefer outdoor camping with tents or camping cars. It is of great importance to implement a project to increase this offer for tourists through the municipality, but not even the private sector has shown interest in offering this opportunity to lovers of this type of tourism, with all the necessary infrastructure they require for camping and auto-camping.

Year by year, increasing demands, especially in the summer season from visitors for vehicle and tent camping, which requires infrastructure with electricity, water, sewage and other infrastructure accompanying the campsites, forces businesses to improvise their own car parks. As a business, within the capacities we have, we often offer free services to tourists, allowing them to stay with their vehicles in the business parking lots, where water and electricity were provided free of charge, and they had the benefit of the businesses after they had eaten in the restaurants that offered them those services for free.

In the region of Pec, 60% of hotel owners do not agree with the question that they should contact customers before the tourist season. This is probably due to the fact that Pec, as a mountainous region, has no problem filling the capacities in the winter season, therefore they do not practice contact with customers before each tourist season.

-Prizren is a historic town and a favorite destination for numerous local and international tourists. According to the Kosovo Statistics Agency, Prizren attracts more tourists than any other municipality in Kosovo. However, this flow of visitors is not reflected in overnight stays. The municipalities detected this contradiction and conducted a survey to understand the reason. The survey clarified the reasons: Prizren is a small town so that most of the important cultural sights can be visited in a day or two. Hence, most tourists do not stay longer.

Located at the foot of the Shar Mountain, in addition to its cultural heritage, Prizren has a beautiful natural environment ready to be discovered through skiing and other nature-related activities that, at the same time, represent a motive for tourists to stay longer. But until three years ago, the infrastructure was not developed enough for tourists to enjoy the mountains. The association "Sharri Mountaineers", a non-governmental organization from Prizren, decided to act together with colleagues from another, more experienced, non-governmental organization - the association of alpinists "Marimangat" from Pec, started with plans for marking and marking new hiking trails, as well as developing of a promotional campaign to advertise the region as a natural adventure destination.

Also, according to the municipal authorities, the Jewish Center in Prizren which is being restored can be a point of reference for attracting tourists from the State of Israel, together with all other monuments of the cultural and religious heritage of the old city.

The region of Prizren includes the municipalities of Rahovec, Suhareka, Dragash, Malysheva, Shtime and Mamusha. The administrative and cultural center of this region is the ancient city of Prizren. The city of Prizren has been known since antiquity as a unique place in the Balkans for the values of cultural heritage, civilizations and different religions. Thanks to the favorable geographical position, the harmonious intertwining of cultures throughout history and the numerous monuments of cultural heritage of all times, the city of Prizren rightly bears the epithet "museum city", "open-air museum" or "Dubrovnik of the Balkans", and is ranked as one of the most beautiful cities in Kosovo.

-Pristina was mentioned with this name in the Middle Ages, but the traces of the archaeological settlements around it date back to the Neolithic, like those around the river Grachanka, and it is a beautiful, modern city with features inherited from the ancient culture: Illyrian, Byzantine and Ottoman periods.

Near Pristina is one of the most important settlements in the region, the Roman Ulpiana, built on the foundations of an Illyrian settlement, which later, after the earthquake, became one of the largest Byzantine



centers in the Middle Ages named "Justinianian seconds", and erected the great Roman- Byzantine Emperor Justinian in the 15th century. Also, settlements from the early Iron Age have been found in addition to Taukbashce in the entire complex up to the Germia pool, where the first Illyrian settlements have been confirmed.

Pristina, for more than a century, after the middle of the 17th century, was under the rule of the Albanian feudal family Gjini. The old town of Pristina is located between two rivers: Velusha and Pristina (Pristevka), while the old core of the city with Bezistan, the Lokac Mosque (16th century), the Catholic Church, the Synagogue and the Old Bazaar were destroyed under communist rule in the 1950s.

Pristina in its region consists of 7 municipalities: Pristina, Podueva, Obilić, Drenas, Lipjan, Fuše Kosovo and in the list of cultural heritage for temporary protection a total of 118 objects are listed, of which: 51 profane, 27 sacred and 35 utilitarian.

The organized tourism fair in Pristina is attended by several countries, as well as from the neighborhood, where experiences are exchanged and they participate in the preparation of joint projects with neighboring countries, which enable tourism employees to offer new packages and arouse interest among guests from all over the world. Europe.

-Gjakovica is located in the south-western area of the Republic of Kosovo with its 85 villages and is characterized by a great wealth of monuments of all categories which include: complexes, traditional houses, towers, mosques, churches, tekijas, madrasahs, meitepis, springs, mills and fig. Although as the city most destroyed by the war in the period 1998-1999, Gjakovo managed to largely preserve and restore its cultural heritage. 148 monuments have been identified, of which 38 monuments from the category of archaeological heritage, 1 Complex of the urban complex "Great Bazaar" and 109 architectural heritage monuments of 8 city towers and 23 towers in the villages.

The tourist center for visitors in the Municipality of Decani, a town and municipality in the Gjakovica district in Western Kosovo, is an institution that aims to promote tourism in the Dukagjini region in the Republic of Kosovo. The establishment of this institution was made possible within the framework of the Tourism Development Project "See you in Dukagjin". This project is financially supported by the EU, managed by the Office of the European Union in Kosovo and implemented by the Swedish Foundation Cultural Heritage Without Borders (CHWB) in partnership with the Municipality of Decani. The center's professional team is at your disposal, which makes sure that your stay in Decani is truly an unforgettable experience. This tourist information center is equipped with information materials such as brochures, manuals and other information documents about tourism in Decani. A professional team ensures the organization of a tourist stay in Kosovo, from transportation to accommodation, from traditional food to cultural visits accompanied by guides. Primary target groups are men and women who work or are related to the field of hospitality and tourism. More specifically this group includes building owners, local businesses, female heads of household and family members in general. Secondary target group are representatives of the cultural community (theatre, music bands, etc.), NGOs, religious communities, environmental organizations and animal protection associations, authorities in the target municipalities, regional development agencies and civil society organizations that will benefit from increased cooperation and information sharing. The Info Center is located in a restored Tower, adapted with modern elements and at the same time works as an office and as a tourist center with historical and cultural values, the primary goal of which is to promote tourism in the Dukagjin plain and by informing local and foreign tourists about recreational tourism activities, to help the residents of the region generate income through these activities. This program aims to realize the introduction and promotion of the tourism sector which is on the right path towards environmental conservation, wise use of natural resources and contribution to the community and environmental protection.

-The Mitrovica region originally had Neolithic, Roman, medieval settlements, towns (casabe) from the Ottoman period, which includes the municipalities of Vushtri, Skenderaj, Zubin Potok, Zvecan and Leposavic. This craft-trade city has recently been known as a modern industrial city.

The archaeological and architectural heritage testifies to living in historical periods and the heritage can be found today in the museums and archives of the region. Archaeological, architectural, mobile and spiritual cultural heritage are evidence of the past and sensational political and cultural history, not only as knowledge of the past, but also as a comparison with the present.

The Mitrovica region as a cultural heritage for protection has 39 movable and 125 immovable exhibits, which are archaeological reserves, 8 archaeological ensembles, 78 architectural ensembles, respectively 87 with a vulgar character, 34 of a sacred nature and 4 utilitarian.

The main goal of the Tourist Organization in Mitrovica is the promotion of all tourist potentials and the rich cultural-historical heritage with a special emphasis on the preservation of the site from the ancient period. Also, a program for the development of tourism has been adopted, and informative and propaganda materials and publications, audio and video promotional material, and the internet presentation are also significant. In order to promote and advance tourism, it actively participates in fairs in the country and abroad and provides all the necessary information about the tourist offer of the city. In addition to the cooperation of the tourist organization and agencies in the country and abroad, it mediates in the provision of services in the rental of accommodation facilities and thus directly affects the improvement of the quality of services in tourism.

Archaeological sites with building remains of ancient Sirmijuma are continuously improved and promoted, among which stands out the Imperial Palace, an exhibit of inestimable importance, which ranks Mitrovica among the most important cultural-tourist destinations on the tourist map of the world.

The rich cultural-historical heritage, natural attractions and favorable geographical position enable the development of various types of tourism: cultural, event, sports, excursion, hunting, rural and transit tourism, and the Tourist Organization has the task of promoting all these types of tourism equally and develops.

-The Gnjilane region, like the rest of Kosovo, is rich in cultural heritage. Nine years after the establishment of the Regional Center for Cultural Heritage in Gnjilane, an inventory of cultural objects, which belong to all fields of heritage in the field of spiritual heritage, has been carried out.

Regarding the region of Gnjilane, the cultural heritage, especially the architectural one, has been damaged by time and man, and most of the millennia-old cultural heritage of this region is underground, which means that in order to discover all the wealth, large investments are needed. Also, the Gnjilane region has a small number of towers, which are mainly located in the southeastern part of Kosovo.

Gnjilane includes six municipalities: Gnjilane, Viti, Artana, Dardana, Kacanik and Hani and Elezit, 174 monuments have been placed under temporary protection. Of these, 134 are from the field of architecture and 40 from archaeology, as indicated: sacred 66, secular 86, utilitarian 17 and as environmental value 5.

Emphasis is placed on cross-border cooperation and the implementation of joint projects with neighboring countries, among which is the cooperation with the city of Kumanovo.

-The importance of the Ferizaj region lies in the diversity of the cultural heritage that includes the municipalities of Shtime, Kacanik, Hani and Elezit and Utrpce. All the municipalities covered by the KRCT service of Ferizaj form a series of cultural heritage, belonging to different eras, whether from the Neolithic, such as Varoš, early medieval Kačanik, Nikadin, medieval Nerodimja and Jezerci; the Ottoman period is found in almost all countries covered by this center.

The region of Ferizaj is rich in both movable and spiritual heritage that proves that we live in historical periods, as evidence of the past, but also for comparison with the present time. The Ferizaj region has listed a total of 130 assets in the List of Cultural Heritage for temporary protection, of which 12 are movable and 118 immovable exhibits, of which 19 are archaeological reserves, 27 archaeological ensembles, 72 architectural ensembles, respectively 18 of a secular nature, 51 of a sacred nature and 49 utilitarian.

Ferizaj is the city that combines tourism, religious harmony and youthful spirit and is rich in incredible natural beauty, including its extraordinary landscapes and majestic mountain ranges with the village of Jezerci. Various festivals are held in this city which has a very rich culture with religious tolerance.

Although it may be a relatively new city, the region around it has been inhabited since the 6th millennium BC. Archaeological finds in the village of Varos, which is located only 3 kilometers south of the city, bear witness to the civilization that flourished here in the Neolithic period. From the 18th century BC, until the Roman occupation, Ferizaj and its surroundings were inhabited by the Dardanians. In the region of Uroševac, mounds from the Dardanian cemetery were discovered, including graves dating from the 8th and 7th centuries BC. in Gerlica (Gurez), as well as a necropolis of mounds in Zaskok.

The city has a central position in relation to the territory of the municipality at 580 meters above sea level. Its favorable geographical location is further enhanced by the intersection of ancient roads, such as the Prizren-Anamorava and Pristina-Skopje roads, making Ferizaj an easily accessible center for exploration.

Whether you are an avid history buff, nature lover or just looking for an unforgettable adventure, it offers an experience that will leave an indelible mark on any trip.

### **Management of cultural values and development of historical and cultural tourism**

The management of cultural-historical monuments and their cultural values is of great importance, considering that they transparently show the past of this environment.

In this aspect, a specific commitment is needed, mainly from the local self-government in cooperation with various tourist agencies and institutions that should advocate through their tourism programs that will foresee the revitalization of localities and landmarks, their promotion and finding ways to attract tourists. . The indifferent or indifferent attitude of the travel agencies towards the old cities cannot be justified at all, when it is known that it remains temporary or very little by not offering the real cultural and historical values of these cities to the tourist clientele.

Kosovo is known for its culture and history, as well as for its excellent nature and climate. The cultural and historical goods have awakened the interest of tourists visiting this place. The following recommendations should be considered for the improvement, expansion and development of historical and cultural tourism: Promoting tourist guide books in history and culture, making information available on tourist websites, opening bookstores and travel agencies, providing tourist guides and tourist signals which are translated into English but also in other languages, promoting cultural activities such as sightseeing tours, folk performances, traditional music and dances, as well as leaflets and the Internet, organizing cultural, historical and festival activities at regular intervals , especially aimed at prominent people from the region, hiring tourist guides, organizing courses and trainings to increase the capacity of tourist guides, possibly certifying them, targeting special markets through associations - cultural, historical, handicrafts, folklore, dance, music, etc - and special websites, the improvement of tourism products, cooperation and invitation of tour operators and journalists to see the possibilities available to the region.

The development and promotion of local tourism based on local resources, with local people involved in the decision-making process and benefiting directly from the results and profits. This is achieved by the idea of global thinking and local action, as local traditions and cultural identity are essential for communities in Kosovo.

The constitution stipulates that Kosovo's institutions will "ensure the preservation and protection of its cultural and religious heritage." In the Government Program 2015-2018, the protection of cultural heritage was stated through several plans and concepts. With the adoption of the National Strategy for Cultural Heritage 2017-2027 in December 2016, the Government provided a strategic document for the protection, preservation and promotion of the cultural heritage of International Council on Monuments. When these instruments are implemented by the Kosovo institutions, it will mean the fulfillment of modern heritage management standards. The strategy thus marks a milestone for heritage institutions, as it represents the first comprehensive practical policy document produced through an inclusive consultative process, in line with key international standards.

Other institutions that manage and care for the cultural heritage of the Republic of Kosovo in addition to the Ministry of Culture, Youth and Sports are the Kosovo Institute for the Protection of Monuments, the Inspectorate for Cultural Heritage, the Museum of Kosovo, the Archaeological Institute of Kosovo, regional centers for cultural heritage, local communities, tourist information centers, the Council for Cultural Heritage of Kosovo.

In order to coordinate their general activities regarding cultural heritage, the Ministry of Culture, together with the Liaison Office of the European Commission for Kosovo (EULO) and the Special Representative of the European Union (EUSR) established a Forum for Exchange of Information on Cultural Heritage in the Republic of Kosovo.

### **The intangible cultural heritage**

The intangible cultural heritage of Kosovo, with its rich origins, is going through difficult times, which is partly due to the lack of recognition or acceptance of local cultures at the local level, as well as insufficient knowledge of traditional values, including rituals, dances, folk songs as basic elements of today's society. While society remains indifferent to the destruction of tangible heritage, elements of intangible heritage suffer further due to lack of awareness and education of the general public.

Traditions and folklore are present throughout the history of Kosovo and these two elements have played a key role in transmitting information, history and events between communities and generations. The low level of education and dynamism of the way of life in rural areas limits the possibility to document important developments in written form.

The transmission of cultural values to future generations, such as the old Besa and Kanun for about five centuries, which were created and maintained by a traditional institution called the ode. The concept of "chamber", if considered as a gathering space or traditional institution, is an ingrained value of the intangible cultural heritage of Kosovo. The chamber represents, figuratively, a special space of a house, which is dedicated only to the elderly to discuss important family, common or national issues. The chamber symbolizes the court where men gather to discuss and resolve property problems, blood feuds, etc. This space was also an important square for social and cultural life and entertainment for men, but, after many centuries of existence, the "room" is still alive and valued in certain communities in Kosovo.

Cultural values have always been part of heritage, identity and treating heritage as a collective responsibility has not been the same throughout history, however, in recent decades in Kosovo, attitudes towards heritage preservation have not changed significantly. Recently, as people become more aware of their surroundings, communities are seeing the demolition of buildings of cultural significance. Fortunately, there are still small groups of dedicated citizens and organizations that are trying to protect the existing cultural heritage of the Republic of Kosovo.

In terms of tourism and cultural heritage, usually the two were inextricably linked. People visit places for buildings, stories they offer for their cultural value and heritage, therefore the need to promote cultural heritage would help in the development of cultural tourism. Along with heritage, cultural tourism allows local residents to promote their local traditions, cultural products, rituals, restoring the pride of the people in the country and their traditions.

In the context of Kosovo, cultural heritage is valued based on its aesthetic values and collective memory. However, taking into account the existential and priority needs of the population in Kosovo, where people have to take care of their daily needs, preservation and protection of the cultural heritage is not seen as the main priority of the majority of the population.

At the same time, little has been done in Kosovo to promote the cultural heritage for the development of tourism. Some institutional and independent initiatives have proven to be ineffective, uncreative and as such initiatives have failed to attract tourists to develop local tourism and even less international tourism. On the other hand, international organizations in Kosovo have made significant efforts to create a platform for cultural heritage policy development. Through various projects and initiatives, international organizations have encouraged the production of handicraft products and their distribution and sale regionally. This raised people's awareness of their traditions and to some extent their cultural heritage.

### **Festivals and cultural events**

A large number of cultural events are organized in different cities of Kosovo. These activities are mainly organized by civic organizations and cultural operators and attract local and foreign tourists.

One of the most influential events organized every year is the documentary film festival Dokufest in Prizren, where a large number of guests were foreign visitors. Research conducted by the GAP Institute during the tenth edition of this festival shows that the economic impact of Dokufest on GDP is 3.1 million euros, while this figure is expected to be 21.9 million euro in the next four-year period. At this festival, an exchange of business ideas takes place, and bars, hotels, restaurants, as well as travel agencies, banks and telecommunications companies traditionally participate. The festival has become one of the qualifying festivals for the British Academy of Film and Television Awards ("BAFTA"), and in recent years has been part of the "25 coolest film festivals in the world" list of "Movie Maker" magazine. Veton Nurkolari is one of the founders of the festival. It is said that immediately after the war there was a need to bring cultural energy to the city, so they thought of organizing a film festival, but they had no idea how to do it. Ten people thought and none of them had any experience with organizing a film festival, none of them even visited a film festival at the time, however, they decided to try.

Similar cultural events are organized in other cities of Kosovo, such as Green Fest in Mitrovica, Festival "In the Park" in Pec, Tour de Kosovo in different cities, Anibar in Pec, NGOM Fest in Prizren, Skena UP in Pristina, Green

Fest attractive an event for the Balkan audience, especially for young people, etc. Being organized in Mitrovica, it offers a particularly attractive element for the international audience, given the political specifics of the city. It is one of the few cultural activities offered to foreign visitors in northern Kosovo, which has turned out to be a successful festival. In the park is a festival that aims to promote art, nature and tourism in the region of Pec, so the organizers set the date of the festival every year during the summer season, while the park is used as a performance field. In addition, they offer bike tours and other activities for visitors in cooperation with tour operators in the region.

Tour de Kosovo is another tourist attraction that uses cycling to promote Kosovo's cultural and natural heritage. The number of local and foreign participants in this event is constantly increasing. The number of applications has increased and most of them come from foreign manufacturers. Anibar also offers special tour programs to cultural and natural heritage sites in the region of Pec.

NGOM Festival is a music festival in Prizren, which gathers dozens of music groups and DJs from all over the world every year. It attracts thousands of visitors from Kosovo, the region and beyond, and was also awarded by the local government as the most massive cultural event of the year. In addition, Pristina hosts numerous cultural events throughout the year. One of the most successful events in terms of attracting tourists is the Skena UP film and theater festival, which successfully organized and managed to bring thousands of tourists from all over the world to Pristina.

Some of the main events in Kosovo:

Dokufest Prizren in August, Anibar in Pecs in August, Green Festival in Pristina in July, Diving Competition in Djakovica in July, Freedom Festival in Pristina in June, NGOM in Prizren in June or July, International Festival of Young Musicians, DAM in Pristina in March, Përralla in Gjakovica in May, Meeting of Styles in Pristina in May, Skena in Pristina in November, Jazz Festival in Pristina in November, Into de Park in Pecs in October, Gjakova Marathon Gjakovica in October, Hardh Fest in Orahovac in September. (Source: Profil sektor turizma – KIESA (2014).

### **Ethnography - traditional clothing and folklore of Kosovo, a national treasure**

Clothing is no longer just an object that is interpreted as a survival from antiquity, it is necessary to see what happens to the heritage of popular clothing, the tendency of its inclusion in commercialism and tourism by concretizing this research that helps in the documentation and knowledge of the past, for motifs and colors, through a catalog within the Project "Folk Costumes in Kosovo".

Albanian ethnography has so far recognized about 140 different forms of folk costume. The costumes of that time now continue to live on as a tradition. Much has been written about Albanian national costumes in ethnic areas, especially those in Kosovo, especially by Mark Krasniqi, Drita Statovci, Uka heema, Shpresa Sicecaet, but the greatest connoisseur Rrok Zojzi remains Albanian costume for all time. Andromaqi Jerergi, Aferdita Onuzi, Iqbal Bihiku, Max Velo and many others have also contributed to this ethnocultural field, which characterize different times. Modern times and the influences of population movements towards western countries have significantly reduced the interest in making Albanian folk costumes. Such behavior will surely impoverish the already small fund of folk costumes. In ethnic Albanian areas, at least 140 different forms of folk costumes are known so far, realized in more than 5000 types and variants, which are grouped by gender in different ethnographic areas.

Costume design or folk clothing has always been treated as the main element of the spiritual and material culture of an ethnic group, and folk clothing is the result of a process of development, transformation, evolution and perfection over the centuries. At the same time, the Albanian ethnographic science has achieved significant results, such as structural, morphological, artistic, functional, typological and historical aspects, which means that costumes from different eras continue to live as tradition and culture. The motifs created in Albanian clothing change over time, and the sun in a spiral form was the most prevalent, followed by the double-headed eagle, the snake as a protector of the house, the snake as an enemy, drango, the back of the fish and others. In different historical periods it has been observed when strong colors dominated or were sometimes replaced by lighter colors.

The current Kosovar culture was also influenced by the other ethnic minorities in the region that make them up. Thus, instruments such as Kemenche and traditional dances such as Hora from Turkish culture become a symbol of Kosovo's ethnic identity. Similarly, the instrument known as Cifteli is also a widely used instrument in

Kosovo with origins in Turkish culture dating back to the early Ottoman Empire. Also accepted was the music known as "talava", fast folk music, which has had a great influence in recent years in Kosovo culture.



### **Traditional food in Kosovo**

The national food of Kosovo is cheese burek. Bajrek is a type of baked or filled pastry. They are made from a thin flaky dough known as phyllo dough and are filled with salty cheese (often feta), minced meat, potatoes or other vegetables.

The most famous of all and the most characteristic "flia" is prepared all year round, but is a favorite in the summer. Flia made with "sach" is a specialty of traditional Albanian cuisine, which is mostly prepared in the mountainous regions. It is surely one of the typical Kosovar dishes that all the locals will recommend. Baklava is one of the traditional cakes of Kosovar cuisine, although it is of Turkish origin. Baklasarem is also a traditional food of Kosovo, it is a savory pie with a topping of yogurt and garlic. Kosovo cuisine has developed under the influence of Albanian, Turkish, Serbian, Croatian, Greek and Italian dishes. Meat is well represented in their daily meals. Due to the harsh continental climate, the vegetable blooms seasonally mainly in summer.

### **CONCLUSION**

Heritage is an important element for tourism. The cultural heritage of a country can attract more tourists from all over the world and can become a catalyst for the development of tourism in the country. Culture and heritage, through values, beliefs, art, monuments, buildings and other elements, represent the national identity and integrity of the people.

Kosovo, with its cultural heritage, is attractive for the development of tourism. The cultural and material heritage of Kosovo was created between ancient civilizations and after the new era. Kosovo inherits a rich cultural heritage and is part of the world cultural heritage.

Although it is a small country, the cultural heritage of Kosovo is quite rich. This has influenced visits to cultural-historical monuments not to be absent, as different population groups organize visits to these monuments in different parts of the country for different purposes.

By focusing on the cultural heritage of the cities in the Republic of Kosovo and its historical values not only contribute to their development, but also to the development of Kosovo as a whole, and the numerous remains of the past suggest that this area has been inhabited since ancient times, for which the fact speaks for the most visited places, namely: the Fountain, the Castle, the League of Prizren, the Archaeological Museum and the Sinan Pasha Mosque.

In connection with increasing the development of tourism and cultural heritage in Kosovo is the further promotion of tourist destinations in various ways and the protection of cultural heritage.

Tourism in all countries is a state priority, and it is also supported by local businesses, but we notice a lot of diversity and differences between countries in terms of supporting the development of local tourism, and for this it is necessary to allocate a special budget for the preparation of standardized and harmonized laws with the EU member states, as well as for the implementation of programs for the development of tourism, for cooperation between domestic and foreign businesses, etc. For this purpose, it is necessary to conduct intensive research on the innovation and development of tourism markets. This should be a broad, well-guided activity in the shaping, preservation and development of historical and cultural heritage, based on information obtained from interdisciplinary analysis and intersectoral cooperation.

Well-designed national and local strategies, programs and projects for the promotion and development of tourism will enable a faster development of tourism in the regions and at the national level in Kosovo, from which other projects that are directly or indirectly related to the development of tourism in general will result. and with the economic and cultural development of the regions, but also of Kosovo.

Kosovo has many potentials for the development of many forms of tourism. The best indicators are the many natural potentials and the many values of cultural heritage that are present throughout the country. Tourist movements and circulation are increasing day by day. In a word, a successful tourist product is being created which is in the function of tourists. All tourist regions of Kosovo have conditions for tourism development, somewhere more or less.

Kosovo's cultural heritage and natural beauty are evident in its diverse array of tourist attractions. Pristina, the capital city, offers a blend of Ottoman architecture, modern landmarks, and vibrant cultural scenes. Prizren, captivates visitors with its medieval architecture, Ottoman bridges, and charming Old Town.

Beyond its cities, Kosovo's natural landscapes provide a haven for outdoor enthusiasts. The Sharr Mountains, bordering North Macedonia, offer hiking trails, pristine lakes, and opportunities for winter sports. The Rugova Canyon, Europe's deepest canyon, provides breathtaking scenery and opportunities for rafting and kayaking.

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## Touristic-Environmental Assessment of The Përmet Area (Albania Region) and Its Typical Products

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**Abstract:** This study constitutes a fundamental analysis of the touristic-environmental assessment of the Përmet area and its typical products. Përmet, a city rich in history and culture, offers an excellent natural environment and a rich variety of unique local products. This examination focuses on the touristic and environmental values of this area, utilizing various analytical and evaluative methods. In an era where tourism is a significant economic sector, evaluating the tourism potential of specific areas is crucial for economic development and environmental protection. The analysis of tourism potentials in Përmet will encompass various aspects such as cultural and natural attractions, possible tourist activities, infrastructure, and the involvement of the local community in tourism development. Furthermore, this study will seek to include the analysis of typical Përmet products, examining their role in tourist attractions and their impact on the local economy. Typical products such as traditional foods, handicrafts, and local items have the potential to enhance the attractiveness of the tourist destination and contribute to the sustainable development of the area. This analysis aims to provide concrete recommendations for the tourism development of Përmet and the improvement of promoting local typical products, making it a desired destination for tourists and supporting the economic development of the local community.

**Key word:** Përmet, turism, factor, destination, development. territory,

### INTRODUCTION

#### National Context

Albania is now in transition and has seen significant economic growth in recent years. Following the fall of communism (1991-1992) and a decade of instability, Albania has had a high emigration rate (15-20%), with movement from rural to urban regions. Albanian remittances continue to account for a large share of the country's GDP and are a key driver of economic development and investment. While major cities are constantly developing, the situation remains critical in the north and in some southern areas of the country, including the region of Përmet, where, despite significant interventions from donors, NGOs, and associations, there is still a highly critical situation due to the high proportion of the workforce migrating. One of the reasons for the country's development is the strategic concept of tourism, providing operational directions for assessing tourism values, so that Albania becomes a future destination in the international tourism market attracting foreign tourists. Attracting foreign tourists will influence Albania to utilize its tourism capacities to ensure maximum benefit from the influx of foreign currency, which will contribute to the growth of the tourism sector in Albania with the same principles on which the tourism industry operates globally. Tourism represents a key focus for the economic and social development of Albania, contributing to the generation of higher revenues in many related economic sectors and providing opportunities for employment and self-employment in the country. With abundant natural resources, historical sites, and a rich cultural heritage, Albania possesses outstanding tourism potential that can help establish a recognizable identity for Albanian tourism. This will positively impact international competitiveness and Albania's positioning in the global tourism market, making it a preferred destination at national, regional, European, and global levels. The tourism sector, which constitutes 24% of the Gross Domestic Product (GDP) in Albania, extends as a key component of the national economy and foreign trade, thus demonstrating its significance for the country's economic development.

The contribution of tourism to the economy	2019	2020	2021	2022*
Number of foreign tourists (millions)	6.4	2.7	5.7	7.5
Total tourism contribution (billion euros)	2.9	1.4	2.6	3.6
Estimated average contribution per tourist (eur)	453	519	456	480
Total number of tourism employees (thousands)	244	178.6	226	250
Total contribution to GDP	20.3%	10.7%	17.4%	24.0%

Source: Tourism and Hospitality in Albania 2022, UNDP



Despite historical challenges such as seasonal tourism, lack of services, low average costs and insufficient workforce, Albania has experienced an increase in its position and stability in the global tourism market. More precisely, there was a noticeable increase of about 33% in the number of foreign nationals visiting from other countries compared to the previous year, according to INSTAT.

#### Regional context

The district of Përmet is located in the southeast of Albania, it has an area of 929 km<sup>2</sup> and the city of Përmet is also known as the city of roses. The district of Përmet is inserted into the bay of a valley crossed by the river Vjosa and is surrounded by beautiful mountains with a special flora and fauna of the area. There are also large natural parks with a great natural interest, such as Bredhi i Hotova and the springs of hot sulphurous water in the Langarica valley, which form natural pools and are easy to visit. In addition, there are numerous monuments of great historical interest, including many churches, monasteries of the Byzantine era, archaeological ruins and remains of Turkish rule (castles, bridges, etc.). In addition to the rites of the Christian religion, Muslim ones have also been added in a special way, as well as the movement of Bektashism which is found mainly in the villages of Ali Postivan and Frashër, which are known for their development as well as for pilgrimage. Another aspect that makes this valley famous is the typical agro-food aspect. The typical agricultural products of the area are of high quality and especially the viticulture, especially the autochthonous varieties, Debin e Bardhë, Debin e zeze, Sinanbel, fruit trees such as; cherries, apples, plums, walnuts, etc., as well as flavoring and medicinal plants, wormwood, sage, salep, tea, sturgeon, and herbal products are of a special quality. The wine and brandy of Përmet have always been honored with the best in Albania. Regardless of the many assets, the Përmet District remains underdeveloped in the context of Albania, as a place where the emigration of residents has excluded it from the socio-economic changes of today's Albania. There are no tourism projects and the skills to promote these projects are completely lacking.

## **MATERIAL AND METHODS**

The study methods rely on secondary data obtained from reputable institutions such as the Bank of Albania, Institute of Statistics, and the Ministry of Finance, which provide annual abstracts of statistics. Additionally, data from various publications in economic journals and reports from national and international agencies were utilized. These sources ensure the reliability and accuracy of the data used in the study, allowing for comprehensive analysis and assessment of the tourism sector's contribution to the economy.

### **Aims and objectives of the study**

The main objective of this study is the touristic-environmental assessment of the Përmet area

The aims of this study are:

- (a) the development of this area
- (b) to comprehend the main problems tourism sector in Përmet;

## **ECONOMIC STRATEGIES FOR THE DEVELOPMENT OF THE PËRMET AREA**

Albania has been appreciated by many international operators and visitors for its beautiful nature and landscapes. The natural and rural areas in Albania offer opportunities for the development of rural tourism, mountain tourism, ecotourism and outdoor activities (rafting, parachuting, mountain biking, fishing, trekking, mountain climbing, nature walking-hiking, horse riding, tours study, etc.). Some of these activities are the main motive of visits by foreign visitors to natural areas. As for mountain tourism, there have been positive developments, as a result of which a significant number of organized tours have stabilized in Theth, Vermosh-Lepushë, Valbonë and Tropoja, in the Albanian Alps, Dibër and the area of Bulqiza, the mountainous area of Tirana, ZONE the mountain areas of Elbasan and Librazhdi, the mountain area of Korça, the mountain of Tomori, Llogara and Karabur and the mountain area of Gjirokastra and Përmet. On the other hand, tourism in protected environmental areas is added to this category. The basis of the system of environmental protected areas consists of 15 national parks, several managed nature reserves and protected landscapes, which contain the greatest natural values and biodiversity in the country (Ministry of Tourism 2024). The area of Përmet has an extraordinary tourist potential due to its natural landscape, cultural heritage and thermal springs. Investments in tourism infrastructure, promotion of local attractions and improvement of tourism services can

help increase the number of visitors and income of the tourism sector. The economic development of the Përmet area also affects the development of agriculture and agrotourism, this is related as Përmet is known for its natural beauty and agricultural products which can be attractive to tourists. Investing in the development of sustainable agriculture and promoting agritourism can create new employment opportunities and contribute to the growth of the local economy. The typical products of Përmet such as honey, breast milk, olive oil, and other agricultural and handicraft products have a great potential for domestic trade and export. Promoting these products in the domestic and international market can increase income for local farmers and producers. Improving road, water and energy infrastructure in the Përmet area is essential to facilitate access and connection to domestic and international markets, thus making it more attractive to investors and other businesses. The development of the service sector such as education, health, and information technology can create new employment opportunities and help increase the standard of living in the Përmet area. In addition to the economic aspect, social innovation has an important impact on the social and cultural aspect of the territory. Through innovative community involvement projects, connections between individuals and different groups have been strengthened, promoting cooperation, solidarity and cultural diversity (Minga, A et al 2024).

For the realization of the strategy, are evaluated three guiding principles:

#### • Partnerships

In the conditions of rapid market changes, partnerships at the national and international levels are necessary to be successful with the aim of being competitive ("cooperate to compete"). As one of the high-quality places of nature and culture, Përmeti will seek to position itself authentically as an attractive destination for tourists. These partnerships result in benefits for all participants involved.

The mission of the tourism partners:

- Hospitality of tourists: To improve the experience of visitors, it is important to understand hospitality and ensure a high quality of service. This includes friendly treatment, providing necessary information and helping to solve any problems the visitor may have.
- Environmental protection and development: In order to preserve natural beauty and promote sustainable tourism, it is necessary for the community, businesses and institutions to cooperate to protect the environment. Investments in projects that promote a clean environment and eco-tourism help develop the area in a way that respects nature.
- Supporting cultural heritage: To promote the unique identity of the Përmet area, it is important to create spaces for local culture and traditions. This may include organizing cultural events, exhibitions of local handicrafts, and promoting traditional cuisine to strengthen links with the country's cultural heritage.

Improvement in these aspects will help increase the tourist attractiveness of the Përmet area and create an unforgettable experience for visitors. Undoubtedly, tourism stands out as a significant social and economic force in contemporary society. Initially, during the early 1900s, it was a pursuit largely reserved for a privileged minority, but over time, the opportunity to engage in tourism has become increasingly accessible to a wider audience. Concurrently, distinctions between various tourism destinations and modes of travel, once indicative of social status, have become less rigid, signifying a democratization of tourism (Urry & Larsen, 2011). This evolution has led to tourism being recognized as the largest peaceful movement of people across cultural boundaries in history. Tourism, one of the most developed and fastest growing sectors in the world arena, is often compared with the technology and telecommunications industries as one of the three main engines of the global economy in the 21st century (Aynalem S. Birhanu K, Tesefay S, 2016). This sector stands out for its high labor intensity and its key role in job creation, serving as an important source of employment. Tourism offers many employment opportunities in the areas of accommodation, transport and attractions, making the availability of a skilled and trained workforce an essential factor for the success of any tourism plan or program (International Labor Organization, 2010). However, this industry faces challenges such as unstable employment, low job status, long working hours, and low wages, resulting in difficult recruitment and retention of suitable personnel. In many countries, tourism's contribution to employment is seen as indispensable, and the tourism and hospitality industry is often regarded as a catalyst for local economic development. However, the lack of attention to working conditions and the rights of employees in this sector has been highlighted. Qualified and motivated staff are seen as the heart of an excellent and fast service delivery system in tourism. Regarding the relationship between human resources and tourism, a key part is ensuring an adequate supply of good quality staff and a stable workforce. Managers and consumers must treat employees with fairness and social equity to ensure a quality experience for tourists. In this regard, the professionalism of the employees is

rewarded with a favorable image of the tourist destination. Tourism, although having a positive impact on reducing cyclical unemployment, faces the challenges of seasonality that bring volatility to the sector's income. This makes it important for detailed studies about the impact of seasonality on employment in tourism and research on methods to alleviate these challenges.

#### • Quality

With its history, culture, nature, hospitality and traditional cuisine, it will leave an indelible impression on visitors discovering these special qualities of the country. By continuously offering the right products of the required quality and value to meet the demands of tourists, Përmeti can compete successfully in national markets in the field of tourism. Also, territorial innovation systems increase productivity, direct investments and innovation activities stimulate the development of new business forms and affect the expansion of the existing economic structures. (Minga, A., et al 2023). The absence of the economic structures in the process of collection and distribution of the products has encouraged the development of the direct circuits of commercialization, from rural producers to intermediaries, or from agro-enterprises to regional intermediaries. (Muca E, et al 2018)

#### • Human resource

Employees and entrepreneurs make the difference. They are the most useful resource for meeting the requests of friends and travelers. Only well-trained entrepreneurs who establish appealing structures and educate professional workers who are service-oriented and prepared to accept accountability for their actions will be able to meet the increasing needs of local and international visitors. The link between human resources and tourism may be defined in two ways. First, tourism can only thrive if the business has an appropriate supply of high-quality employees or a sustainable workforce. The third issue is that how employees are handled by management and consumers, and vice versa, should be consistent with social equality and fairness. Equally crucial is the quality.

### Objectives related to the tourist market

#### Quality objectives

- *Ensuring and maintaining a long-term development*
- *Marketing and management of competitive experience*
- *Improving the quality of products and services*
- *Creation of a promotable product at an affordable price*
- *Creating a positive image*

#### Economic objective

The main sources of income in the field of tourism are accommodation, food/drinks, souvenirs/gifts, tourist guides, etc. The increase in the number of overnight stays of domestic and foreign tourists from year to year is not evenly distributed. Growth has been slow in the short and medium term and higher in the long term, mainly from foreign tourists from Western and Southern Europe.

#### Structural objective

- Visitors
- Overnight stays of Foreign Tourism
- Regional development of hotels
- Accommodation structures

### CHALLENGES TO DEVELOPMENT IN THE PËRMET AREA

Përmet has experienced numerous important hurdles in its pursuit of sustainable development. These issues include significant unemployment, particularly among young people, insufficient infrastructure, seasonal tourism, environmental protection, a lack of investment, and little use of technology. To achieve sustainable development, local governments, the central government, and the private sector must work together to create and implement creative policies to boost economic development and enhance living circumstances in the

region. What will be the Përmet area's strategic management challenges? We have picked the following categories for the strategic administration of the Përmet:

1. Development of Tourism:

- Improving the structures and organization of domestic tourism and its offerings.
- Providing the required area for the building of lodging structures in collaboration with governmental entities.
- Concentrating on places with high development potential, such as Gryka e Kelcyres, National Forest of Hotoves, and Thermal Waters of Benjes.

2. Concurrence:

- Using an advantageous pricing strategy to attract domestic and foreign tourists.
- Combining mountain tourism with the use of natural resources to differentiate the tourist product.
- Identifying direct competitors such as Gjirokastra, Korça, and Berati and adapting the strategy accordingly.

3. Customer Orientation:

- Focus on regional and national markets for the short term.
- Market segmentation on approximate basis such as families with children, those who prefer traditional food and local products, as well as youth and long-term sports adventurers.

4. Positioning:

- Using the positioning of the Përmet area as a tourist destination in the south of Albania, with an emphasis on natural beauty, mountain tourism and the flow of the Vjosë river.
- Adaptation of products and services to define a unique and attractive identity for the area.
- These strategic directions help in formulating a short- and medium-term vision for the development of Përmet as an attractive and competitive tourist destination in the tourism market.

## CONCLUSIONS

Përmet area (Albania region) is a destination that has the potential to offer domestic and foreign tourists year-round tourism and this is the main objective of all interest groups related to the tourism and hospitality industry. This destination can increase the number of its tourists by offering a unique product, traditional and inherited hospitality between generations.

The tourism-environmental evaluation of Përmet (Albania) and its typical products focuses on the area's natural beauty, cultural legacy, and traditional items that make it appealing. Përmet, located in the center of Albania, has stunning landscape, a rich history, and a varied selection of locally made items that add to its popularity as a tourist destination. This evaluation evaluates the area's environmental features, including biodiversity, ecological sustainability, and the influence of human activities on the natural environment.

In addition, the tourism potential assessment of Përmet takes into consideration both natural and cultural attractions, as well as available tourist infrastructure and the involvement of the local community in tourism development efforts. By analyzing these factors, the assessment aims to identify opportunities for increasing sustainable tourism while maintaining the environmental integrity and cultural authenticity of the region.

The importance of typical products of Përmet, such as traditional foods, crafts and local specialties, in improving the experience of tourists and in supporting the local economy. The role of products in attracting visitors, contributing to cultural identity and promoting economic development within the region. Overall, this tourism-environmental assessment provides valuable data on the potential of the Përmet area as a tourist destination, emphasizing the importance of sustainable practices, community engagement and promotion of local products in maximizing tourism opportunities while preserving the natural heritage and cultural area.

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## Exploring The Attitudes Towards Entrepreneurship: Insights From Moldovan Entrepreneurs

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**Abstract:** This paper aims to examine societal attitudes towards entrepreneurs and entrepreneurship, drawing insights from the perspective of entrepreneurs in the Republic of Moldova. The primary data collection method was a survey of 204 entrepreneurs in 2022, with the active participation of the author. In addition, an analysis of supplementary data from the Global Entrepreneurship Index revealed Moldova's position in terms of entrepreneurial attitudes in the global context. The results of our study revealed a relatively positive and neutral attitude towards entrepreneurship within society. However, a notable negative perception persists, particularly towards entrepreneurs who have experienced business failure. This phenomenon highlights the importance of taking these nuanced attitudes into account when developing policies and programmes to support entrepreneurs and enterprises.

**Keywords:** entrepreneurship, attitude towards entrepreneurship, business failure, entrepreneurial attitude

**JEL codes:** L26, L53, K29

### INTRODUCTION

Entrepreneurship plays a key role in fostering economic development, competitiveness, innovation and job creation within a nation. Theoretical and empirical studies highlight that entrepreneurship not only stimulates innovation, creates employment opportunities, and increases competition, but also boosts productivity through technological progress (Acs et al., 2008; Audretsch et.al., 2019). As a result, there is widespread recognition that the role of the entrepreneur is central to societal well-being and has the potential to enhance the social status of entrepreneurs (Aldrich & Yang, 2012). Understanding attitudes towards entrepreneurship is crucial for developing effective policies and strategies to support entrepreneurial endeavors.

Societal attitudes toward entrepreneurship can significantly impact a country's competitiveness on the global stage. When a society fosters a positive outlook on entrepreneurship, it cultivates an environment conducive to innovation, growth, and economic development. Individuals with a strong entrepreneurial attitude and intention play a crucial role in driving progress and competitiveness within the business sector (Franco Mario, 2020). Furthermore, by encouraging entrepreneurship, societies can harness the potential of talented individuals to create sustainable businesses that generate employment opportunities and drive wealth creation. This not only boosts the standard of living for citizens but also strengthens the country's competitive position by fostering a skilled workforce and a thriving business ecosystem.

In recent years, the concept of entrepreneurship has received considerable attention from researchers, policy makers and practitioners alike. Success stories of start-ups and innovative ventures have fuelled interest in entrepreneurial activity as a means of driving economic growth and technological progress. However, the propensity for entrepreneurship is complex and influenced by a variety of factors ranging from cultural norms and education to regulatory frameworks and access to resources. It is therefore essential to examine the specific attitudes towards entrepreneurship in individual countries in order to develop strategies that can effectively harness entrepreneurial potential.

This paper aims to explore attitudes towards entrepreneurship and entrepreneurs within Moldovan society, based on the perceptions of entrepreneurs. Through this research, we aim to contribute to the existing body of knowledge on entrepreneurial attitudes in Republic of Moldova. This research can be valuable in formulating recommendations to guide policy makers and stakeholders in fostering a more conducive environment for entrepreneurial activities.

### DATA SOURCES and METHODS

To gain insights into how individuals in Moldova perceive entrepreneurship, data was collected through a survey conducted between June and October 2022, completed by business owners or managers who have a good understanding of the situation within their business. The survey included responses from 204

entrepreneurs in Moldova. The composition of this sample was deliberately designed to reflect the key demographic characteristics that define the broader business sector.

The Statistical Package for the Social Sciences (SPSS) software was used to analyze the data collected. The survey instrument contained questions that allowed participants to select answers from a pre-defined range of options. A Likert scale from 1 to 5 was used to assess people's attitudes towards entrepreneurship. A score of 1 indicated a very negative attitude, 2 indicated a somewhat negative attitude, 3 indicated a neutral attitude, 4 indicated a somewhat positive attitude and 5 indicated a very positive attitude.

In order to measure society's perception of entrepreneurship, the questionnaire included three different groups of indicators under this thematic pillar, including:

- i) Society's attitude towards successful entrepreneurs.
- ii) Attitudes towards entrepreneurs who have experienced business failure or bankruptcy.
- iii) The general attitude of the population towards entrepreneurs and entrepreneurship.

In addition to the primary survey data, this study includes complementary information from the Global Entrepreneurship Index, an internationally recognized ranking developed by the Global Entrepreneurship and Development Institute. This additional data source not only serves as an external validation of the findings, but also enhances the research by providing additional insights that go beyond the scope of the questionnaire, thus offering a comprehensive perspective on the broader landscape of attitudes towards entrepreneurship.

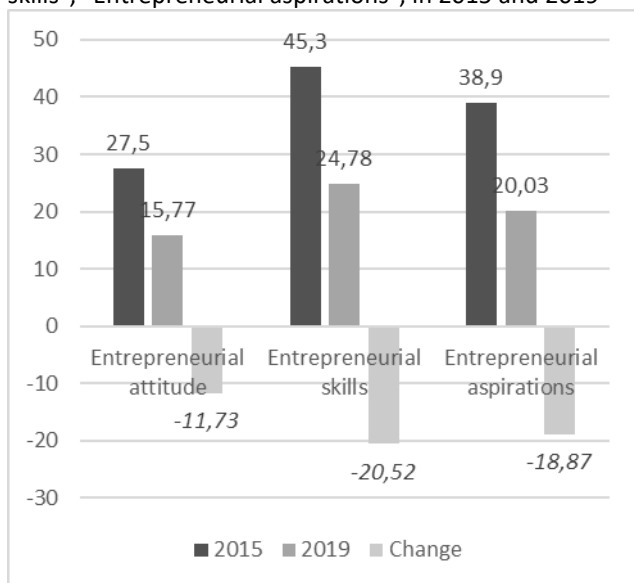
## RESULTS and DISCUSSIONS

**Assessment of attitudes towards entrepreneurship in the Republic of Moldova based on the Global Entrepreneurship Index.** The Global Entrepreneurship Index is a comprehensive composite index developed by the Global Entrepreneurship and Development Institute that assesses entrepreneurial attitudes, skills and aspirations at the individual and institutional levels in some 120 countries. Within this index, the Entrepreneurial Attitudes sub-index is specifically designed to measure individuals' attitudes towards entrepreneurship. An individual with a positive attitude towards entrepreneurship is more likely to choose self-employment over alternative career choices (Acs, Z.J., et.al., 2019).

The values of the sub-indices within this framework range from 0 to 100, with 100 representing optimal performance. The components of the Entrepreneurial Attitudes sub-index focus on society's perception of entrepreneurship. This includes the general attitude of the population towards the recognition of entrepreneurial opportunities, personal acquaintance with entrepreneurs, the recognition of entrepreneurs with high status, the acceptance of risks associated with starting a business and the possession of the necessary skills to start a successful business. In essence, this sub-index reflects the general population's attitude towards entrepreneurs and entrepreneurship.

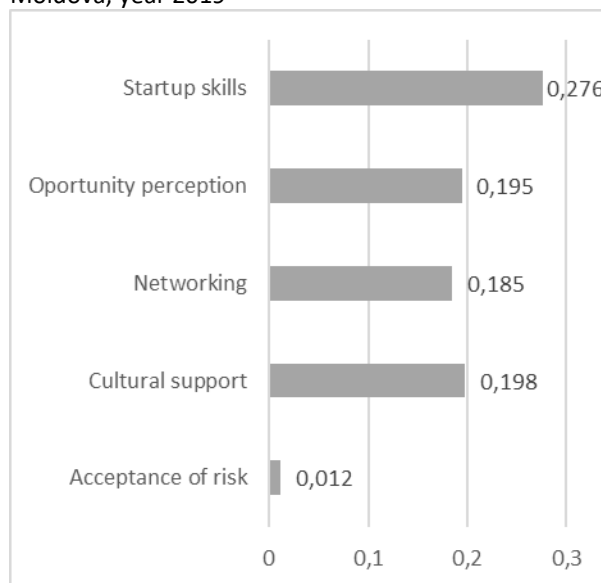
In the "Entrepreneurial Attitudes" sub-index, our country secured a low position - 117th out of 137 countries, with a progress score of only 15.77 out of a possible 100 points (as of 2019). It is worth noting that the sub-index "Entrepreneurial attitudes" has lagged significantly behind the sub-indices "Entrepreneurial skills" and "Entrepreneurial aspirations" throughout the analysis period. This underlines the important role played by cultural factors, as reflected in the Entrepreneurial Attitudes sub-index, in the Moldovan entrepreneurial ecosystem. The lower score in the 'risk acceptance' pillar reflects the high level of risk aversion in Moldovan culture. These cultural aspects appear to pose a significant challenge for improvement in a relatively short period of time. It's also worth noting that all three sub-indices show a significant decline between 2015 and 2019. The sub-index characterizing society's attitude towards entrepreneurship registered a significant decrease of 11.73 points over the period.

Figure 1. The Republic of Moldova's results for the sub-indices: "Entrepreneurial attitudes", "Entrepreneurial skills", "Entrepreneurial aspirations", in 2015 and 2019



Source: (Acs, Z.J., et.al., 2019)

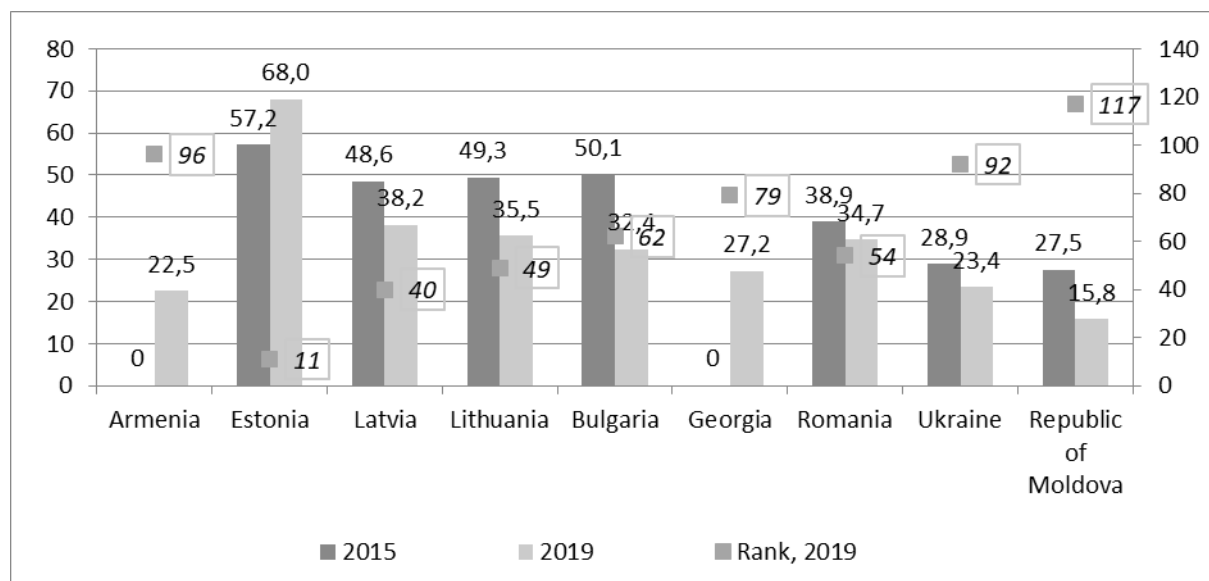
Figure 2. Pillar values of the sub-index "Entrepreneurial attitude" for the Republic of Moldova, year 2019



Source: (Acs, Z.J., et.al., 2019)

Compared to other countries in the region, Moldova ranks lowest in the sub-index "Entrepreneurial attitudes", at 117th. Ahead of Moldova in this sub-index are Estonia (11th), Latvia (40th), Lithuania (49th) and Romania (54th) (Fig.3).

Figure 3. Ranking and scores of Moldova and reference countries in the sub-index "Entrepreneurial attitudes", 2019



Source: (Acs, Z.J., et.al., 2019)

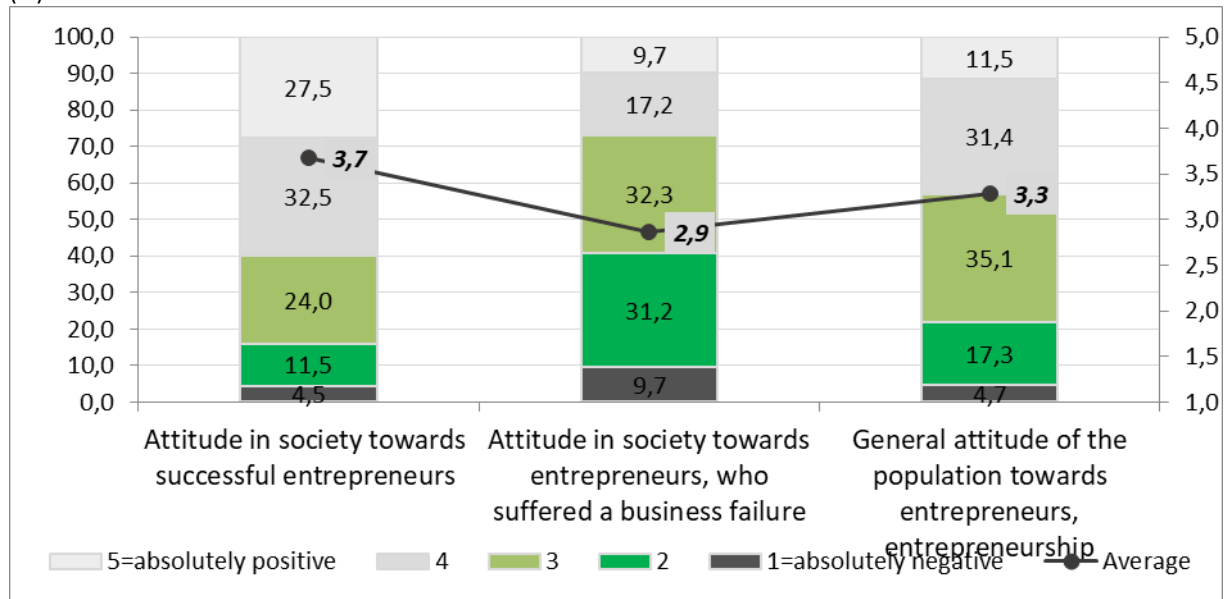
**Assessing attitudes to entrepreneurship: entrepreneurs' opinions.** In order to assess society's views on entrepreneurship, the questionnaire included three different sets of indicators under this thematic pillar, including

- Attitudes towards successful entrepreneurs;
- Attitudes towards entrepreneurs who have experienced business failure/bankruptcy;
- The general attitude of the population towards entrepreneurs and entrepreneurship.



The overall assessment of society's attitude towards entrepreneurship is mixed: over a quarter of respondents perceive it as either totally negative or negative, around a third as neither positive nor negative, and around 44% of respondents rate this indicator positively.

Figure 4. Evaluation of the indicators characterizing the attitude of society towards entrepreneurship (%)

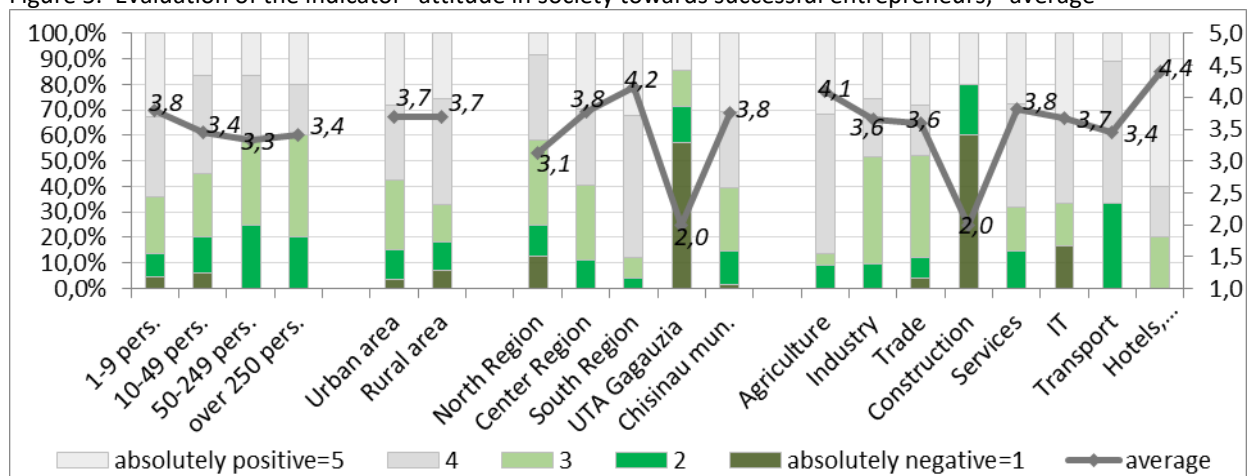


Source: developed by the authors based on the survey of entrepreneurs, 2022.

Characterising societal attitudes towards entrepreneurship, the indicator measuring society's attitude towards successful entrepreneurs received the most favorable ratings within the analyzed factor. In particular, 60% of respondents gave the highest scores of 5 or 4, with an average score of 3.7 (Figure 4). The most positive ratings of attitudes towards successful entrepreneurs were given by entrepreneurs in the following enterprise categories:

- By size - micro enterprises (average = 3.8).
- By region - those located in the Southern Region (average = 4.2), in the Central Region and in Chişinău (average = 3.8), in contrast to the ATU Gagauzia, whose entrepreneurs expressed a predominantly negative attitude towards successful entrepreneurs (average = 2.0).
- By the main type of activity - hotels and restaurants (average = 4.4), agriculture (average = 4.1), services (average = 3.8), compared to those in construction, who evaluated this indicator negatively (average = 2.0) (Figure 5).

Figure 5. Evaluation of the indicator "attitude in society towards successful entrepreneurs," average



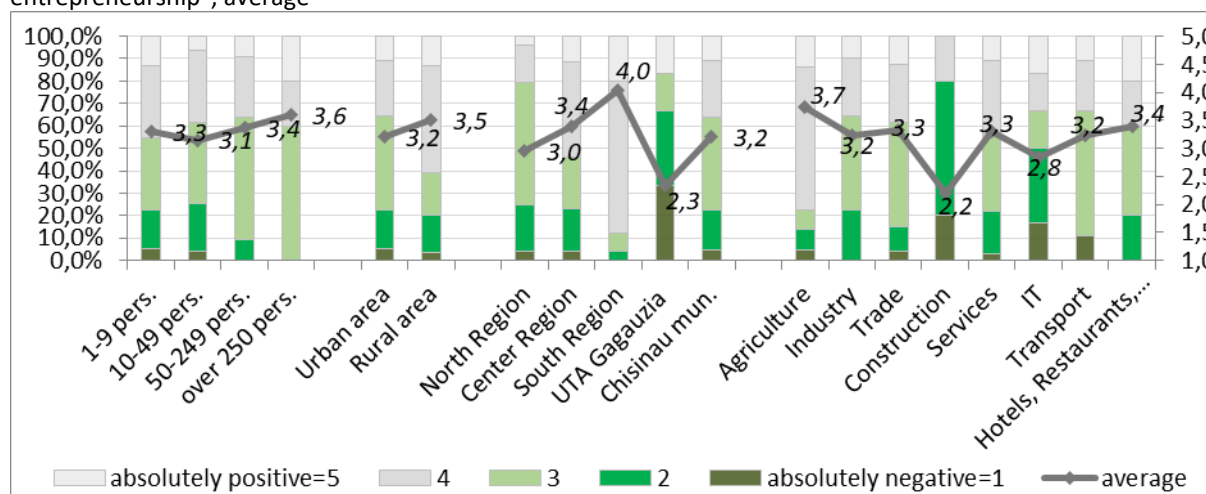
Source: developed by the authors based on the survey of entrepreneurs, 2022.

Similarly, the general attitude of the population towards entrepreneurs and entrepreneurship is considered quite positive by a relatively large number of respondents (42.9% of entrepreneurs gave the highest scores of 5 or 4; average = 3.3). At the same time, a significant proportion of entrepreneurs perceive a negative perception of entrepreneurship in society, which is an obstacle to the development of the entrepreneurial ecosystem (22% of respondents gave the lowest scores of 1 and 2) (Figure 4).

More positive assessments of the general attitude of the population towards entrepreneurs and entrepreneurship were given by entrepreneurs from the following enterprise groups:

- By size - large enterprises (average = 3.6).
- By region - those located in the South region (average = 4.0), in contrast to those from the ATU Gagauzia, whose entrepreneurs indicated a predominantly negative attitude of the population towards entrepreneurship and entrepreneurs (average = 2.3).
- By type of activity - enterprises with the main type of activity - agriculture - also indicated a more positive attitude of the population towards entrepreneurs and entrepreneurship (average = 3.7), compared to those in the construction sector, which evaluated this indicator negatively (average = 2.2).
- In particular, enterprises located in rural areas rated this indicator higher (average = 3.5) than those in urban areas (average = 3.2) (respectively 61.1% and 35.8% of respondents indicated a more positive attitude of the population towards entrepreneurs and entrepreneurship) (Figure 6).

Figure 6. Evaluation of the indicator "general attitude of the population towards entrepreneurs, entrepreneurship", average



Source: developed by the authors based on the survey of entrepreneurs, 2022.

The indicator that was rated most negatively by respondents was 'attitude towards entrepreneurs who have experienced business failure/bankruptcy' (40.9% of respondents gave the lowest scores of 1 or 2; average = 2.9). It is also important to note that around a third of respondents rated this indicator as having an insignificant (neutral) impact on business development.

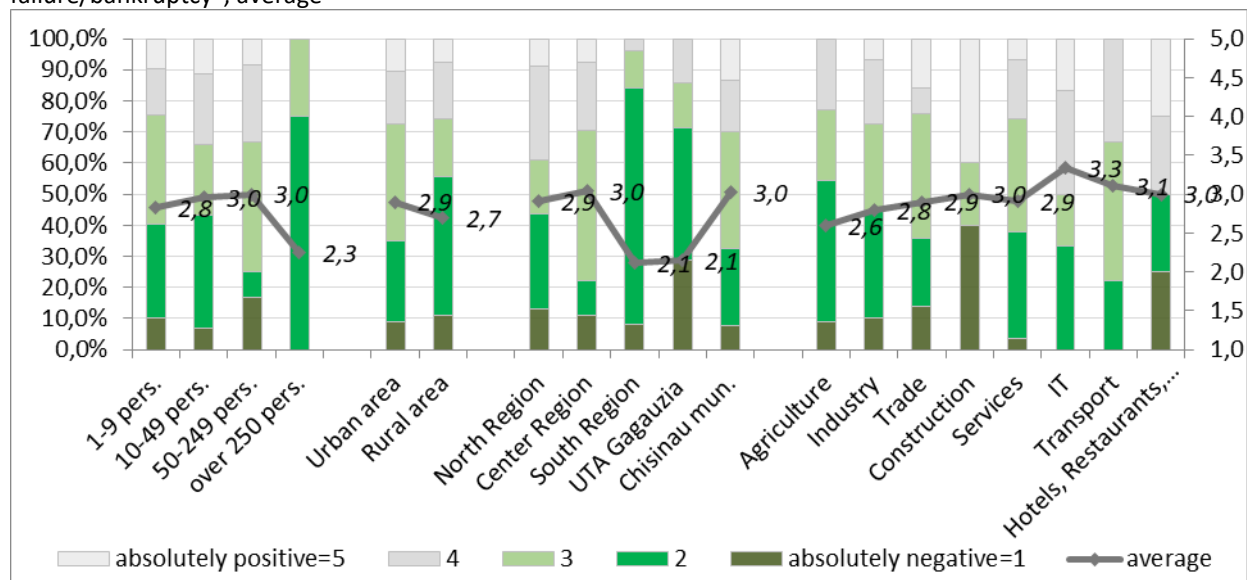
More negative evaluations regarding the attitude towards entrepreneurs who have experienced business failure/bankruptcy were given by entrepreneurs from the following enterprise groups: by size - large enterprises (average = 2.3); by region - those located in the Southern region and in the Gagauzia ATU (average = 2.1), in contrast to the Chişinau municipality and the Central region, whose entrepreneurs indicated a neutral attitude towards entrepreneurs who have experienced business failure (average = 3.0). Moreover, enterprises with agriculture as their main type of activity also indicated a more negative attitude towards entrepreneurs who have experienced business failure (average = 2.6), compared to IT enterprises, which evaluated this indicator neutrally (average = 3.3). It is worth noting that there are significant differences by place of residence: a significantly higher proportion of entrepreneurs from rural areas reported negative attitudes of society towards entrepreneurs who had experienced business failure (55.6 % of rural entrepreneurs compared to 34.8 % of urban entrepreneurs) (Figure 7).

The causes of discrepancies in the evaluation of the population's attitude towards entrepreneurs who have experienced business failure in relation to residential areas (urban and rural) in the Republic of Moldova can be complex and may be influenced by various factors, such as:

- Cultural perceptions: Rural areas may have a more traditional or risk-averse culture where business failure is stigmatised or seen as a personal failure. In contrast, urban areas may have a more progressive outlook that recognizes the potential for learning and growth from business failure.
- Exposure to entrepreneurship: Urban areas tend to have more exposure to entrepreneurship and business ventures, leading to a better understanding of the risks and challenges involved. In rural areas, where entrepreneurship may be less prevalent, there may be a lack of awareness and understanding, leading to more negative attitudes when businesses fail.
- Economic factors: Rural areas in Moldova often face economic challenges and limited employment opportunities. In such an environment, business failures may be seen as more damaging as they can affect the local economy and livelihoods. Urban areas may have more diverse economic opportunities, reducing the impact of individual business failures.
- Specificity of the community: In rural areas, communities tend to be smaller and more close-knit. Business failure may have a more pronounced impact on social relationships and reputation in such environments. Urban areas, with larger and more diverse populations, may offer greater anonymity, reducing the social impact of business failure.
- Access to education and information: Urban areas tend to have better access to education and information resources. This may lead to a more informed and nuanced perspective on entrepreneurship and business failure among urban residents, whereas rural residents may rely more on traditional beliefs and limited sources of information.

These factors interact in complex ways and contribute to the observed differences in attitudes towards entrepreneurs who have experienced business failure in urban and rural areas of Moldova. Understanding these factors can inform strategies to bridge the gap in perceptions and promote a more supportive environment for entrepreneurship, particularly in rural areas.

Figure 7. Evaluation of the indicator „society's attitude towards entrepreneurs who have experienced business failure/bankruptcy”, average



Source: developed by the authors based on the survey of entrepreneurs, 2022.

## CONCLUSION

The findings from the entrepreneurs' perspective underline a generally positive and neutral attitude towards entrepreneurship in society. However, there is a notable negative perception in society towards entrepreneurs who have experienced business failure. This negative sentiment is a potential obstacle to the growth of the

entrepreneurial sector and the promotion of new business ventures. This, in turn, could impact the country's ability to innovate, attract investment, and compete with other nations.

In addition, there are significant differences in societal attitudes towards entrepreneurs who have experienced business failure by region of residence and region of development. Enterprises from the South and Gagauzia, as well as those located in rural areas, tend to be more pessimistic about society's attitude towards entrepreneurs facing business failure or bankruptcy.

Understanding the multiple factors that influence these attitudes towards entrepreneurs and entrepreneurship can serve as a basis for developing strategies to bridge perception gaps and cultivate a more supportive entrepreneurial environment, especially in rural and regional contexts. In order to promote better attitudes towards entrepreneurship and to change society's perception of entrepreneurs who have experienced business setbacks, it is crucial to raise awareness of the central role of entrepreneurship, the opportunities it brings to society and the valuable lessons that can be learned from failure. Instead of viewing failure as a stigma, it should be seen as a stepping stone towards growth and innovation. Entrepreneurs who have experienced failure firsthand can serve as role models, inspiring others to persevere in the face of business challenges and to embrace the entrepreneurial spirit.

Supporting this positive perception requires widespread education on the multiple benefits of entrepreneurship. Such increased awareness will not only encourage more individuals to start or develop a business, but will also cultivate a more robust entrepreneurial culture in institutions, communities and enterprises. In this regard, specific promotional initiatives and materials should be developed to raise awareness of new business opportunities among different demographic segments, including women, youth, the unemployed, people with special needs and adults. These efforts will serve as catalysts for changing societal attitudes towards entrepreneurship and foster a culture of innovation and risk-taking, which are essential for enhancing competitiveness.

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## After twenty years: The impact of the EU accession on Hungarian agriculture

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**Abstract:** The accession to the EU on 1 May 2004 was one of the most significant events for Hungary in recent decades. The 20th anniversary gives us the opportunity to reflect and assess the impacts of the accession on agriculture and rural development from a broader perspective. In Hungary, too, accession was awaited with great anticipation, especially in the case of agriculture, as Hungary is one of the countries with strong agricultural potential. However, the decade of the 1990s brought a serious decline in production. The change of regime fragmented and counterproductivised the various stages of the production chain (agricultural production - processing - marketing) and in many cases placed them in the hands of foreign competitors and national financial investors who had no interest in the long-term sustainability of Hungarian agricultural production beyond immediate profit-making. The article will look at the sectoral impacts of the accession and try to understand the direct reasons behind the changes. It points to the positive developments, but also to the unintended consequences and dysfunctions that were the result of the regulations and the support system in Hungary. It looks at the difficulties that farmers encountered in applying for EU grants and the institutional arrangements that have supported or hindered the agricultural policy in achieving its objectives. This study is part of a comprehensive research project which aims to review and summarise the experiences and lessons learned on the agricultural and rural policy in the countries that joined the EU in 2004.

**Keywords:** agriculture, EU, CAP, rural development, agricultural policy

### 1. INTRODUCTION

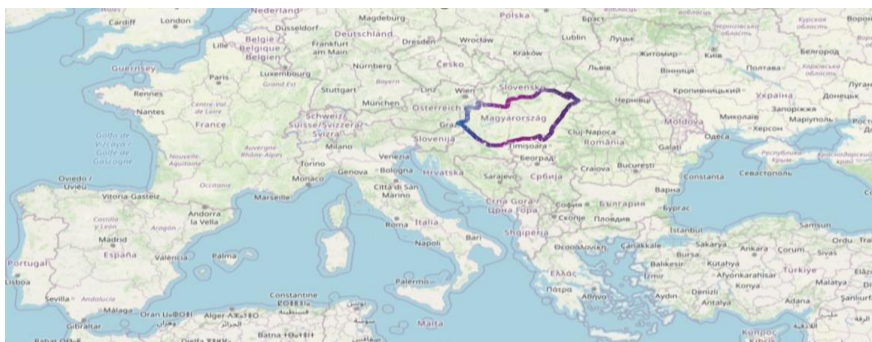
For centuries, agriculture has been an essential part of Hungary's cultural and economic fabric. With abundant natural resources and a long-standing agricultural tradition, it is important to ensure the sector's competitiveness.

Hungary's accession to the European Union (EU) in 2004 marked a significant turning point for the agricultural sector. The period leading up to this event, starting with the Association Agreement in 1991, was characterised by significant efforts to harmonise legislation and develop institutions in preparation for EU integration (Losoncz, 2014). It is worth noting that before accession, Hungarian agriculture faced challenges resulting from the transition following the political and economic regime change. However, with the support of the EU, the sector was ready for development by the turn of the millennium. Since its implementation, the Common Agricultural Policy (CAP) and European integration have had a significant impact on the direction and dynamics of Hungarian agriculture.

The EU accession presented both opportunities and challenges. While increased competition from domestic and international markets posed a significant hurdle, the EU's vast internal market also opened doors for growth, with EU member states becoming the primary destination for Hungarian agricultural exports.

This paper explores Hungary's agricultural journey within the EU, including the pre-accession context, sector state, and existing challenges. The achievements and remaining difficulties faced by Hungarian agriculture in the two decades following accession are analysed, providing valuable insights into the sector's future development.

Map 1. The map of Hungary (Magyarország) in Europe, 2024



Source: <https://OpenStreetMap.org>

## **2. PRE-EU ACCESSION: A STORY OF CHANGE AND CHALLENGES**

To gain a comprehensive understanding of Hungary's agricultural journey, it is important to examine the state of the sector before and during the EU accession process. The 1990s were a time of significant social, economic, and political transitions that had a profound impact on the rural landscape (Schlett, 2023).

One of the most notable changes was the restructuring of land ownership, which replaced state and collective farms with private ownership. However, the process was slow and fragmented, resulting in a disconnect between ownership and land use. At the time of accession, the majority of the land was owned by small farms, which, however, cultivated less compared to the larger farms that held and used most of the land. This resulted in a 'dual structure' that persisted over time (Kováč, 2012).

The traditional markets were disrupted due to the regime change, which led to a significant loss of Soviet trade. Furthermore, the crisis was exacerbated by the lack of access to new markets and low state support. The food processing industry plays a crucial role in the agro-vertical system. However, it also faced challenges, with rapid privatisation leading to international dominance and neglect of local development. This further strained the rural economy and contributed to depopulation (Schlett, 2014).

The agricultural sector underwent internal restructuring, internal restructuring, resulting in increased specialization, particularly in intensive cereal production. Livestock production underwent a significant decline due to longer income realisation times and limited capital availability, which resulted in an overall drop in agricultural production. Livestock production underwent a significant decline due to longer income realisation times and limited capital availability, which resulted in an overall drop in agricultural production. The lowest point was reached in 1993. A slow recovery began in the mid-1990s, mainly due to internal market improvements and some access to Western markets. However, production levels remained well below pre-transition levels even at the time of the EU accession (Antal, 2005).

Hungary became a member of the EU in a challenging agricultural landscape. There were concerns about the sector's ability to survive in the European market due to its decline. This paved the way for significant changes and lessons learned in the following decades.

## **3. HUNGARY'S ROAD TO EU ACCESSION: PREPARING FOR THE INTEGRATION**

### **3.1. Challenges and Tasks**

Hungary's path to EU accession was not without obstacles. The country encountered lower economic development and structural setbacks, particularly in agriculture, which employed and generated a significant portion of the income, compared to the EU average. The EU had to ensure that Hungary could comply with regulations and adapt its support system. This involved addressing two significant short-term issues:

1. Compliance with EU rules and standards: Joining the Common Agricultural Policy (CAP) meant Hungarian production had to meet stricter EU regulations, even though temporary exemptions (derogation) were granted during the process.
2. Institutional and capacity building: Both the Hungarian state and farmers needed to be prepared to receive and manage EU aid effectively.

Hungary's pre-accession period, though marked by difficulties, served as a crucial stepping stone for its integration into the European Union and its agricultural sector's future development within the EU framework (Vásáry, 2020).

### **3.2. Hungary's Preparation for EU Accession: Challenges and Support**

#### **3.2.1. Pre-Accession Assistance Programmes:**

The country overcame significant hurdles and seized opportunities for growth and development. Despite lower economic development and a larger share of agriculture in its economy compared to existing members, Hungary successfully adapted to EU regulations and standards. Hungary's accession to the EU in 2004 was a challenging process that required a lengthy preparation period involving institutional changes, legislative adjustments, and farmer training.

The EU provided crucial support through various pre-accession programmes, particularly the PHARE and SAPARD programs. PHARE, launched in 1990, offered financial assistance for sectoral reforms and institutional development, including modernising land registries and veterinary services.

Following PHARE, the SAPARD program specifically focused on agricultural and rural development. Launched in 1999, SAPARD provided funding for various measures, including:

- **Agricultural structural development:** Supporting investments in agricultural enterprises, processing and marketing of agricultural products, and vocational training for farmers.
- **Rural development:** Investing in village development, infrastructure improvement, and rural heritage preservation.

SAPARD faced initial delays due to disagreements regarding the implementation structure. However, it ultimately proved effective, contributing to:

- **Modernization:** Upgrading agricultural infrastructure and technology.
- **Competitiveness:** Enhancing the competitiveness of Hungarian agriculture by aligning with EU standards.
- **Economic stability:** Maintaining the viability of the Hungarian economy by supporting its transition to the EU market.

### 3.2.2. Challenges and Resolutions:

- **Institutional changes:** Establishing separate agencies to manage EU funds, as opposed to utilizing existing institutions, fulfilled EU requirements but deviated from Hungary's initial proposal.
- **Delays in program implementation:** Delays in finalizing program documents and establishing necessary institutions initially hampered access to funds.
- **Co-financing requirements:** Successful applicants were required to contribute financially to projects, potentially limiting participation for those lacking resources.

Following the regime change in Hungary, the agricultural sector encountered a challenging period due to market losses, a disorganized land structure, and declining investment. As a result, there was a decrease in production, an increase in unemployment, and financial losses in rural areas. Additionally, the sector's recovery was further impeded by obstacles in accessing Western markets. Foreign investment, intended to modernise the economy, had unintended consequences such as corporate acquisitions and closures of local production facilities, which unfortunately exacerbated the struggles of rural communities. Additionally, the rapid expansion of supermarkets and hypermarkets further shifted power dynamics within the retail sector, which unfortunately squeezed profit margins for farmers due to the increased bargaining power of large retailers (Beke Lisányi, 2014).

However, this experience taught several valuable lessons. It is important to acknowledge that rural development encompasses more than just agriculture. Given the distinct agro-ecological characteristics and cultural traditions of each locality, a diversified approach is necessary to fully realize its potential. Additionally, separating land ownership from land use may hinder efficient agricultural development. Ideally, those who are actively managing the land should also have ownership of it. Moreover, it is worth emphasizing the vital importance of knowledge and information in agriculture. A lack of comprehension regarding market dynamics and best practices can considerably impede the competitiveness of agricultural actors, particularly in swiftly evolving environments.

To promote a more seamless transition, the EU has introduced a gradual process for direct payments to farmers, which permits additional domestic top-up support. Pre-accession programs such as SAPARD provided essential financial assistance and aided in the preparation of the sector for the implementation of EU regulations. Despite Hungary's negotiation and temporary exemptions (derogations) from certain EU regulations, the EU's position ultimately prevailed in many areas, requiring significant adjustments from Hungary (Halmai, 2020).



### 3.3. The impact of the EU budget cycles and reforms on Hungarian agriculture

This chapter examines the impact of the European Union's programming periods (budget cycles) and reforms on Hungarian agriculture following the country's accession in 2004. It focuses on three key periods:

1. 2007-2013: This period marked a significant shift from Hungary's pre-accession support system, with the introduction of direct payments phased in gradually. The EU Agricultural Guarantee Fund (EAGF) and the European Agricultural Fund for Rural Development (EAFRD) replaced the previous system, focusing on competitiveness, young farmers, environmental protection, and rural development through four main axes outlined in the chapter.

2. 2014-2020: This period saw a focus on refining the direct support system based on experience from the previous period. Key changes included "greening" payments through environmentally friendly practices, fairer distribution by reducing payments for larger farms, and targeting support to young farmers and those facing difficulties. Objectives also included combating climate change, protecting the environment, and promoting modernization.

3. 2023-2027: The current period places a high priority on sustainability, with the Strategic Plan for Hungary addressing both environmental and competitiveness concerns. Funding is aimed at achieving a more equitable distribution, with a preference for small and medium-sized farms as well as young farmers. Controls based on compliance are being replaced by evaluations based on results. The chapter outlines several measures, including the replacement of the previous system with Basic Income Support for Sustainability (BISS) and increased allocation towards agri-environmental measures and organic farming (Juhász, 2023).

### 3.4. Assessment of the EU accession

Hungary's accession to the EU in 2004 had a multifaceted impact on its agricultural sector. While the country experienced national-level benefits, such as a stronger economy and an improved trade balance, the effects on individual organizations and producers were more complex. It is worth noting that well-organized crop producers were among the winners, which emphasizes the importance of cooperation in securing access to EU support measures. Although there were some challenges in navigating administrative procedures, the support structure is now operational. However, there is still room for improvement in terms of simplicity, transparency, and ease of access for farmers. To fully capitalize on its potential, Hungary could benefit from strengthening and professionalising its export and marketing activities.

While gross agricultural production initially grew in the accession year, it experienced some fluctuations before exhibiting a gradual increase. Hungary's production efficiency is currently below the EU-15 average. This is due to a distorted production structure and insufficient technological development. The shift towards crop production was further amplified by EU accession, while livestock farming declined due to factors such as favourable common market measures for crop producers and stricter EU animal husbandry requirements. Despite these changes, the sector's contribution to Hungary's GDP remained relatively stable.

The impact on specific sectors varied. Crop production, especially of cereals and oilseeds, increased due to area payment obligations and favourable market conditions. However, yields of key crops such as wheat and maize fluctuated, and sugar beet production significantly declined following EU sugar reform. The livestock sector has faced a decline due to multiple factors, including the EU's Common Agricultural Policy (CAP) favouring crop production, increased imports, stricter and expensive animal husbandry requirements, rising feed prices, and a lack of investment capital. As a result, there has been a growing separation between livestock and crop production, further exacerbating the existing imbalance (Kapronczai, 2010).

One of the most significant effects of EU accession was on farmers' income. After accession, farmers' income more than doubled in 2004 compared to 2003. This growth can be attributed to two key factors: reduced dependence on unpredictable crop yields and volatile market prices due to EU subsidies, and an increased share of subsidies in farm income, acting as a stabilizing element.

Hungary's experience provides several important lessons. The importance of well-organized producer groups and cooperation cannot be overstated when it comes to accessing support measures successfully. It is imperative to consistently simplify, streamline, and enhance the transparency of support structures for farmers. Infrastructure and market access are critical, particularly for sectors that are competing with foreign producers (Lisányi, 2018). Finally, achieving a more balanced production structure by supporting both crop production and revitalising the ailing livestock sector remains a major challenge. As Hungary continues its



journey within the EU, it is necessary to continuously evaluate and adapt its agricultural policies to ensure the long-term sustainability and competitiveness of the sector.

The sector was identified as needing modernisation as it had fallen behind the EU average in terms of technology and infrastructure. Prior to accession, there was a significant increase in investment in fixed assets such as buildings and machinery, but this growth slowed down afterwards. It is important to continue investing in order to improve efficiency and competitiveness, especially considering the reduced availability of investment aids after accession and the slow start of EU rural development support.

EU membership brought significant changes to Hungarian trade. The opening of markets to foreign products increased imports and competition, but also offered new export opportunities. However, initial expectations of a substantial export boom were not fully met. This can be partially attributed to the pre-existing association agreement with the EU, which already provided access to a large share of the market, limiting the additional export-boosting effect of full membership. It is important to note that internal EU trade, particularly for agricultural products, has experienced a significant increase. This highlights the growing importance of the single market for Hungarian agriculture (Hegedüs & Kiss, 2015).

Despite the support of both the EU and the Hungarian government for digitalisation, the utilisation of information and communication technologies (ICT) in Hungarian agriculture remains low. Currently, only a small fraction of farms employs digital tools, primarily for basic purposes such as e-banking and e-government. The adoption of advanced precision farming tools, such as yield mapping and automatic steering, appears to be limited due to a combination of factors, including limited knowledge among farmers and high investment costs. It is important to address this low adoption rate to avoid a potential gap with developed countries in the future, which could have an impact on competitiveness (Bazsik et al., 2022).

The rural development programme of the EU aims to support Hungarian agriculture by diversifying farmers' activities and improving access to local services and infrastructure. However, it is important to note that successful implementation of rural development strategies requires long-term planning, active stakeholder involvement, and a focus on trust-building within communities. Challenges are still present in Hungary when it comes to effectively promoting rural development due to a strong focus on the agricultural sector and an overly cautious administrative approach. Additionally, the LEADER programme, which was initially intended to facilitate community-driven development from the bottom-up, became excessively bureaucratic, which limited its original impact (Beke et al., 2024).

#### 4. CONCLUSION

The history of the development of the European Union's Common Agricultural Policy shows that it is a policy that is constantly changing, adaptable, flexible and, in this context, extremely valuable. In terms of the changing trends in the policy over the last 20 years, there has been a trend towards a greener approach, a preference for environmentally friendly and sustainable farming, a more landscape-oriented approach and the introduction of measures to offset the adverse effects of climate change on agriculture. In addition, the policy aims to ensure a secure and affordable food supply, to maintain and increase the competitiveness of agriculture and, last but not least, to support farmers, especially young farmers. Achieving these objectives benefits all Member States, including Hungary, and it is, therefore, in Hungary's interest to continue and further develop the policy.

In conclusion, while EU membership has brought significant benefits to Hungarian agriculture, the sector still faces challenges in modernising its infrastructure, adopting new technologies, and implementing efficient rural development strategies. Addressing these challenges effectively will be crucial for ensuring the long-term sustainability and competitiveness of Hungarian agriculture within the evolving landscape of the European Union.

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## Legal Regulations Regarding Common Property in The Republic of Moldova

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**Abstract:** The right of joint ownership remains, until now, the most discussed topic of civil law in the field of the institution of property, emerging from the stages of its considerable development history. In the Republic of Moldova, which is going through the stages of accession to the European Union, the spirit of the times is agitated by the issue of property. This is understandable, because in recent centuries the attitude towards property and its existence, as a phenomenon and as a legal institution, has changed radically: from reflecting the feudal peculiarities of regulating property relations - to ensuring the lasting stability of common property under the conditions the market economy. Thus, the new requirements of social development explain the increased interest in common property rights.

Constitutionation, which represents not only a simple totalization of the victories and achievements of society, but also proposes new development perspectives for society and the state, representing a program of activity, establishing the fundamental principles of the entire economic, political, social and legal life of the state, not the subject of property is left silent. Moreover, in any society, common property, as part of production relations, represents a fundamental institution that defines its economic and social system.

The research of the common property right involves a study of the regulation of the legislation in force on the territory of the Republic of Moldova. At the moment, the legal norms that regulate this institution are found in the Civil Code of the Republic of Moldova and other normative acts, the fundamental being of course represented by the Constitution of the Republic of Moldova

On the internal level, the Constitution of the Republic of Moldova, adopted on July 29, 1994, (hereinafter the Constitution of the Republic of Moldova) includes private property in the fundamental human rights, which proclaims the fundamental principles regarding property, namely - according to art. 9 of the Constitution of the Republic of Moldova: property is public and private. It consists of material and intellectual goods; property cannot be used to the detriment of human rights, freedoms and dignity.

As a rule, the property right is presented as a simple right, belonging exclusively to a single owner, but in certain situations this right belongs simultaneously to several people. In this case it is about the common property. The grounds for the emergence of the common property right are diverse. Joint ownership can result both from the law (Law no. 913 on the condominium in the housing fund, CF of the Republic of Moldova, CC of the Republic of Moldova other normative acts, as well as from conventions, etc.

Property rights as well as claims on the state are guaranteed. No one can be expropriated except for a cause of public utility, established according to the law, with the right and prior compensation.

In any system where the right to property is guaranteed by the Constitution, the crucial moment that constitutional adjudication faces is the selection from a variety of regulatory decisions of a redistributive nature, as they directly or indirectly affect the right to property.

**Keywords:** property, Property right, common property, legal institution.

### INTRODUCTION

The research of the common property right involves a study of the regulation of the legislation in force on the territory of the Republic of Moldova. At the moment, the legal norms that regulate this institution are found in the Civil Code of the Republic of Moldova and other normative acts, the fundamental being of course represented by the Constitution of the Republic of Moldova

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- the property is public and private. It consists of material and intellectual goods;
- property cannot be used to the detriment of human rights, freedoms and dignity.

### DISCUSSIONS

As a rule, the property right is presented as a simple right, belonging exclusively to a single owner, but in certain situations this right belongs simultaneously to several people. In this case it is about the common

property. The grounds for the emergence of the common property right are diverse. Joint ownership can result both from the law (Law no. 913 on the condominium in the housing fund, the Family Code of the Republic of Moldova, the Civil Code of Republic of Moldova) other normative acts, as well as from conventions, etc.

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In any system where the right to property is guaranteed by the Constitution, the crucial moment faced by constitutional adjudication is the selection from a variety of regulatory decisions of a redistributive nature, as they directly or indirectly affect the right to property.

The concept of joint property rights has not been uniformly interpreted and understood during various historical periods. This state of affairs finds its explanation first of all in the fact that there is a very wide spectrum of problems that must be solved as a premise for the formulation and determination of a concrete vision on the common property right, vis-à-vis the socio-economic development of the country.

It is clear that the search algorithm for the answers to the questions that concern the field specialists, as well as the content and character of the answers found, depends on the interpretation of the norms in force.

On June 6, 2002, the Parliament of the Republic of Moldova approved a new Civil Code of the Republic of Moldova, in force from 12.06.2003, thanks to which this institution, through the common property, received a wider regulation. By Order of the Minister of Justice no. 519 of December 3, 2013, the Working Group for the amendment and completion of the Civil Code of the Republic of Moldova was created. It includes various legal specialists, both theorists and practitioners – university professors, judges, notaries, lawyers, as well as officials of the Ministry of Justice. Thus, on 01.03.2019, the changes were introduced and updated Civil Code of Republic of Moldova. Changes and additions Civil Code of Republic of Moldova represents an important step forward and a large-scale effort towards the modernization of the national legal infrastructure and bringing it in line with the most modern regulations used internationally, while also taking into account the problems of interpretation and application of the current wording of Civil Code of Republic of Moldova.

Civil Code of Republic of Moldova it is the most voluminous and detailed legislative act in matters of private law in the Republic of Moldova. Having the power of organic law, it regulates the status of persons, property, obligations, inheritance and private international law. In the second book, chapter III of Civil Code of Republic of Moldova the regulations regarding common property are included: *"The property is common if two or more owners have the right of ownership over an asset"*. Joint ownership may arise under the law or under a legal act. The right of joint ownership is considered the main form of the right of ownership (art. 543 of the Civil Code of Republic of Moldova).

According to the current regulations, the new wording of art. 550 Civil Code of Republic of Moldova provides for the acts of administration and disposition regarding the goods jointly owned by shares. In particular, with regard to administrative acts regarding the common good, the unanimity rule is switched to the rule of the majority of the parties' quotas for taking the decision to conclude the respective act.

In particular, art. 551 Civil Code of Republic of Moldova from which it follows that each co-owner can stand alone in court, regardless of the procedural quality, in any action regarding the co-ownership, including in the case of the claim action.

The legislator in art. 561 Civil Code of Republic of Moldova states that if the shared ownership asset is indivisible or is not conveniently divisible in kind, the division is made by:

- a) the assignment of the entire good, in exchange for a suit, in favor of a co-owner, at the request or, in in favor of several co-owners, at their joint request. In the case of several award requests that contradict each other, the court applies the provisions of art. 561 Civil Code of Republic of Moldova. Thus, the previous confusion is removed which could be interpreted that the asset is assigned in kind only if all co-owners request it.
- b) if none of the co-owners requested the assignment of the entire property, the sale of the property in the mode determined by the co-owners or, in case of disagreement, at the auction and the distribution of the price to the co-owners in proportion to the share of each of them. One of the ways in which the co-owners can agree to make the sale is the internal auction, without the participation of third parties (art. 561 Civil Code of Republic of Moldova).

A novelty for the civil legislation of the Republic of Moldova is the inclusion of art. 575-580 which regulates periodic ownership - a variety of joint ownership, used especially in vacation products (timesharing). Periodic ownership is the type of ownership that appears whenever several people (co-owners) successively and repetitively exercise the attribute of use specific to the right of ownership over a movable or immovable asset, in determined time intervals, equal or unequal.

Since the periodic property is only a variety of the common property in shares, the legal provisions regarding the common property in shares apply accordingly to the periodic property to the extent that they do not contradict the provisions of this chapter (art. 575 para. (3) Civil Code of Republic of Moldova).

In Romanian legislation, joint ownership is regulated in the Civil Code of Romania in book III "Goods", title I, "About goods and real rights in general", chapter IV, "Joint property".

The definition of common property contained in art. 631 of the Civil Code of Romania is not immune to criticism, as the plurality of owners, although it is a necessary feature, is not sufficient to define this form of ownership.

If we were to apply only the criterion of the plurality of owners of the right of ownership to discover the forms of joint ownership, then we could consider that they are forms of joint ownership and conditional ownership or revocable ownership, because in these cases there are several owners of the right of ownership exercising, in a particular way, attributes specific to this right. However, by regulating art. 632 of the Civil Code of Romania, the legislator presents us as forms of joint ownership only joint ownership in shares (co-ownership) and ownership in commune. From the way the text is drafted (using the articulated form of the plural "forme"), it follows that no other types of common property are allowed apart from these. Or, under these conditions, the definition included in art. 631 of the Civil Code of Romania is not sufficiently precise, because it is not able to differentiate joint ownership from other forms of ownership. Inspiration from art. 1010 the CC of Quebec that defines co-ownership, would have been, in this case, opportune (Pop, L. 2006).

In our view, what is essential to joint ownership is the ability of the holders of ownership of the same asset to have qualitatively identical prerogatives in the manifestation of their ownership of the asset. Thus, all co-owners, regardless of their share of the property right, have the opportunity to exercise the same attributes of the right of ownership over the asset (for example, each will have the capacity of co-owner over the entire asset, will exercise the use over the entire asset in materiality his, he will have the right to harvest the fruits according to his share of the ownership right, he will be able to conclude acts of disposition on his own share of the ownership right, and the obligations stemming from the capacity of co-owner of the same property will also be the same for each of them.

By this, common property differs essentially from other forms of property rights in which the existence of several holders of private property rights would be admitted. For example, in the case of conditional or revocable ownership, some attributes of the right of ownership can be exercised simultaneously, but not together, but disparately, in a manner specific to each holder.

Thus, in the case of conditional ownership, the right of ownership is simultaneously exercised by two owners, one of whom is the owner under a suspensive condition, and the other under a resolutive condition, the same event having the value of a suspensive condition for one part of the act and a resolutive condition for the other. The owner under a suspensive condition has only a virtual right of ownership, which he can protect through preservation acts and which can be the object of the legal provision. The right of ownership under a suspensive condition turns into a right simply upon fulfillment of the condition. At the same time, the revocable owner effectively exercises the attributes of ownership, as if he had a right simply, and by fulfilling the condition, his right is retroactively abolished and the owner's right is consolidated under a suspensive condition.

The suspensive or resolutive nature of the condition event means that only conservation and administration acts, insofar as they are useful to the asset, are considered profitable to both owners. In reality, the owner under suspensive condition can only exercise acts in order to protect his suspensive right. He does not have effective possession of the asset. He can dispose of his conditional right to the same extent as any other right holder can alienate his patrimonial right. The suspensive owner cannot convey more than he has himself, so the acquirer also receives a suspensive right. As for the owner under resolutive condition, the exercise of the attributes of his property is qualitatively different from that under suspensive condition.

He may exercise all legal acts in respect of the property as if it were his right simply. The finality of the concluded acts is under the sign of the fulfillment of the condition. If his right to be abolished, then the deeds of disposition and those of administration, if they were unprofitable, will be abolished in their turn. Regarding the conclusion of administrative and disposition acts, the Civil Code of Romania through the prism of art. 641 regulates the conclusion of the acts of administration and disposition regarding the common good. The rule is that the administrative acts can be concluded with the consent of the majority of the co-owners and the share parties. The co-owners can ask the court to supplement the consent of the person who is unable to express his will or who abusively opposes the performance of an administrative act indispensable to maintaining the utility or value of the asset (para. 3 art. 641 of the Civil Code of Romania). Acts of disposition must respect the rule of unanimity. Acts concluded with non-compliance with these rules are unenforceable to the co-owner who did not consent, expressly or tacitly, to the conclusion of the act. He has opened the possessory action against the third party who came into possession of the common property following the conclusion of the act. Regarding the exercise of procedural rights by co-owners, art. 643 of the Civil Code of Romania provides that each co-owner can stand alone in court, regardless of the procedural quality, in any action related to co-ownership, including in the case of claim action. It is also expressly stated that the court decisions pronounced in favor of co-ownership benefit all co-owners, and those against one co-owner are not opposed to the others.

Therefore, the civil legislation expressly admits the promotion of the claim action by a single co-owner. The problem that arises is whether the current legislation expressly prohibits it. We have seen that the legal regime of co-ownership is not now organized by law, it is built by doctrine and practice. The solution to reject this action was established by practice starting from the rules of the legal regime of the exercise of co-ownership. It can be observed, however, that this solution can sometimes even harm the interests of the co-owners, so that, under these circumstances, it is wrong. Compared to the arguments presented in the doctrine (Ciocină-Barbu, I. 2019) for one or another of the solutions, compared to the current legislative proposals, it can be considered that the traditional solution of rejecting this action should be reconsidered. A solution in accordance with the current constitutional status regarding the protection of property and the specific legal content of the common property right does not necessarily exclude the claim of a co-owner directed against a third party who possesses the common good without right. So, such an action can be admitted without waiting for the modification of the civil law in the sense of its express regulation (by virtue of the principle that in the private legal space what is not prohibited is allowed).

*In Germany* the legislator (Otgon, A. 2015) joined the Prussian system in terms of the right of common property and considered it welcome and necessary to make available to its citizens, as in the French system, the following regime of common property of goods obtained in common.

Joint ownership occurs when two or more subjects acquire an indivisible thing (for example, a statuette, a single real estate complex) or a thing that cannot be divided according to law (for example, a land is divided according to the general rule, but its division is impossible if the lands formed as a result of such a division are smaller than the minimum maximum size established in the manner prescribed by law).

In the research plan in the field of other states than the Republic of Moldova, we can say with certainty that the topic analyzed is a subject of fierce disputes among specialists in the field, thanks to its specificity. Among them, we will mention with priority the studies of Russian, Romanian researchers, etc.

In the regulation of the Civil Code of the Republic of Moldova, there is no definition of the notion of common property, just as there is no definition of co-ownership, so the task of configuring these concepts has fallen to the doctrine.

As for the national researches, the local specialized literature initially based its achievements on the Soviet juridical science, which, unfortunately, did not draw special attention to the conflicting issues in the matter of common property. However, with the adoption of the Civil Code of the Republic of Moldova in force from 12.06.2003, some research attempts were made in the given field.

The narrow angle of research in this field served as an impetus for the achievement of the objectives of the given work regarding conflicting issues regarding the forms of common property, the grounds and the effects that common property produces.

In the local specialized literature (Otgon, A. 2014), the necessary attention is not paid to the theoretical and practical aspects of common property. The publications are with reference to shared ownership or shared ownership – as forms of joint ownership.

And from these considerations we can conclude that the topic of the proposed master's thesis is a current and important one.

A precursor work on the analyzed topic is the one developed by Băieșu S. and Otgon A. (2014) *"The legal regime of the co-owner's right of pre-emption when selling a share of the common property by shares"*. In particular, the authors mention that the researched topic, through its specific approach to property rights, remains relevant, a conclusion arising from the enormous importance of property rights in social life. And its novelty consists in a detailed analysis of the legal regime of the right of preemption in the context of shared property, highlighting the main problematic aspects that have arisen in judicial practice (Otgon, A., Băieșu, S. 2019).

The article is interesting *"Overview of Termination of Common Property by Partition"* by A. Otgon dated 2015, where the author performs general look at the sharing as a way to terminate the right of common ownership in shares, we distinguish several important assumptions, namely:

- the notion of sharing is to be used in the context in which it is desired to divide the assets, which constitute common property in shares;
- to distinguish between the term definitive sharing and usage sharing;
- to apply the general provisions regarding the division of the common property into shares and in the case of the division of the common property in commune and in the case of the division of the inheritance property;
- to take into account the possibility of invoking absolute or relative nullity, when the conditions provided by law for the conventional division are not met;
- to make a distinction in the application of the legal provisions regarding the sharing of common assets amicably and judicially (Otgon, A. 2015).

Another article, by the same authors A. Otgon what deserves attention *"Peculiarities of the termination of joint property in shares by division"* dated 2015. In particular, the author analyzes the possibility of relinquishing the right to joint ownership over joint partitions, situation regulated by the Civil Code of the Republic of Moldova, unfortunately the author states, that we do not have detailed regulations regarding the rights and obligations of the co-owners regarding common partitions, but in practice we observe the necessity of the obligation regarding the maintenance and repair expenses of the common property, which is the object of the partitions common. Thus, for various reasons, usually one of the co-owners renounces his right of ownership over the common partitions, which can constitute a wall, ditch or other partition between two plots of land located within the town. Also, the mentioned article also provides for the accessory nature of the share in the property right over the assets that constitute joint partitions. Mentions the author, two conditions necessary to be met for the renunciation to produce effects. This should be effective, i.e. in the future the co-owner who has borne the maintenance and repair expenses will become the exclusive owner of the property that is the object of the common partitions and these obligations should be correlative, belonging to both co-owners and not personally to one of the co-owners. Concluding on what was researched, the author mentions the need to complete the legislative provisions with regulations related to the procedure of relinquishing the co-ownership right, the legal effects that may occur, who are the subjects who can acquire shares of the co-ownership right, as well as with aspects related to the obligations established by law regarding jointly owned assets and the consequences that occur when the asset is relinquished (Otgon, A. 2015).

In the list of Ms. Otgon A.'s works dated 2015 we also find *"Peculiarities of the termination of co-ownership by relinquishing the property right"*, as well as *"The Legal Nature of Periodical Property"*, *"The concept and legal characteristics of the right of common ownership in shares - parts"*. In these works the author established the most discussed interpretations regarding the concept of shared ownership, resulting from a multitude of contradictory opinions and a varied interpretation. Both national and international legislation use the concept in question under different aspects and, most of the time, admitting confusion in the exact rendering of the researched notion. It is important to mention also the performance of a comparative analysis, with other terms close in meaning and concept to the notion of shared ownership, and determining the main differences between them. Also, the emphasis was placed on the treatment of the terminological specifics, useful in carrying out an in-depth analysis on the given subject and an attempt was made to determine and establish the main legal characteristics of the shared ownership starting from the current regulations and the specifics of the given institution (Otgon, A. 2014).

The concept of periodic ownership, the author mentions (Otgon, A. 2015), also known as ownership in the "time-sharing" system or spatio-temporal co-ownership, led to the emergence of numerous doctrinal opinions regarding its legal nature, namely from the contradictory reason regarding its applicability and regulation in international law. The most important assumptions regarding the legal nature of periodic ownership agree that it represents a modality of ownership, a timeshare right, a variant of joint ownership or a form of forced co-ownership. The periodic property does not know an express regulation in the current Civil Code of the Republic of Moldova, nor in another special law, considering that it has a wider applicability in the states where tourism and real estate investments know a more significant development, and in the Republic of Moldova there is no the prerequisites for the emergence of such an institution are created. The essence of periodic ownership consists in the fact that we are in the presence of several holders, who exercise their attribute of use successively and repeatedly in determined time intervals. Thus, analyzing the evolution of the emergence of periodic property, the international judicial practice in the matter as well as the way of implementing the legal regulations, the author (Otgon, A. 2015) comes to the conclusion that there is no unanimity regarding its legal nature, and more precisely that there are discrepancies regarding the framing periodic ownership and whether the latter constitutes a modality or variety of ownership. The most significant aspects regarding the legal nature of periodic ownership were analyzed in the form of a comparison with other modalities and forms of ownership, reaching the conclusion that this, in the context of the legal regulation, constitutes a form of forced co-ownership, but under the aspect it theoretically presents itself as a modality of property rights.

Next, we will give a separate space to the examination of scientific materials on the topic of the work published in Romania. Following the research of the scientific materials, published on the subject analyzed in Romania, we identify a set of studies, varied, that reflect joint ownership, shared ownership as well as periodic ownership in the content of civil law manuals and monographs but sharing several opinions.

One of the publications of the Romanian doctrinaires Fl. A. Baias, E. Chelaru and R. Constantinovici, I. Macovei is: "Commentary on articles", in which the regulations regarding joint property are also commented on. Although the Code also regulates property in shares separately - parts and the periodic one, the regulations regarding the rules appreciated by specialists who make comments are of particular interest (Baies, Fl. et al. 2014).

Without multiple nuances of interpretation E. Mocanu in the article "forced and perpetual property: past, present and future" (2012), mentions that "The role of reason is to discern the needs that nature imposes; the authority's role is to ensure compliance with the legislator's will." We are in the period, when the needs have been identified, the will of the legislator has been exposed in the text of the law. It is time to express respect for the law, to intervene in the defense of the owners' rights.

In the author's opinion, at the current stage, state intervention is necessary to regulate:

- the legal nature of the common property in the condominium, making it clear that the forced co-ownership must belong exclusively to the owners of isolated rooms;
- the deadlines and competent bodies to adopt decisions regarding the calculation, the assignment of shares in the condominium to the owners of privatized apartments, as well as the registration of these rights in the Real Estate Register;
- the mandatory registration of ownership in the condominium for the blocks under construction and the forced transfer, together with the sale of the rooms, of the share-parts of the common property as an accessory to the ownership of the apartment or other isolated room; the delimitation at the project level of the rooms that are part of the common property in the condominium and the establishment of the mechanisms for changing the destination so that they cannot be alienated, seized or pledged to the detriment of realizing the right of ownership over the isolated rooms (Mocanu, E. 2012 ).

Aa more diverse and critical characterization of common property can be found in the work of I. Ciochină-Barbu (2019). "Shared ownership forced on common parts in multi-story buildings or apartments in the regulation of Law no. 196/2018". In all cases of joint ownership, the right holders do not form a legal entity. If a group of persons benefits from legal personality, the right of ownership is found in the patrimony of the legal person, and not in the patrimony of each of the persons who joined to give birth to the legal person. The property right in the patrimony of the legal entity is simply a property right, and not a common property right. Whenever different holders exercise the attributes of the right of ownership over certain material fractions of an asset, we are not in the presence of a common ownership right, but in the presence of several exclusive



ownership rights. In this case it is said that the right of each owner is pro division, that is, it has a different material object from the others.

## CONCLUSION

In the context of our study, the analysis is of more pronounced interest the provisions contained in Law no. 196/2018 on the establishment, organization and operation of owners' associations, which lead to the conclusion that these provisions add to the general regulatory framework of forced co-ownership from the Civil Code of Romania, especially with regard to:

- organizing the exercise in the best possible conditions of the rights and obligations of the co-owners in the case of buildings with several floors or apartments or in the case of residential complexes consisting of individual homes, located isolated, connected or connected, in which there are common properties and individual properties by setting up owners' associations, but also tenants' associations, regarding the administration of common spaces within the condominiums; the obligation of the owners' associations to set up the annual repair fund, as well as the working capital; the establishment of the obligation that the rehabilitation works of residential buildings with several sections/stairs should be done unitarily and not on building segments, and in the case of condominiums of the type of multi-story collective buildings, the modification of the appearance of the facade can only be done unitarily on the whole the condominium regardless of the number of owner associations established on the stairs; the possibility that the owners' associations can conclude contracts on behalf of the owners with natural persons, authorized natural persons or with legal persons whose object of activity is the administration of condominiums, in order to administer and maintain the condominium; the obligation of the owners/developers of the residential complexes as sellers to inform the buyers at the time of alienation about the need to set up owners' associations;
- the introduction of the right of preemption at an equal price of the local public administration authorities, on the foreclosed homes, for the recovery of the owners' debts to the association's contribution quotas. These homes will later be used only as social housing, the foreclosed owners having priority in their distribution, only if they meet the conditions established for access to social housing.

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## The comparative study on the defense of patrimonial rights

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**Abstract:** The topicality of the article convinces us that heritage is a complex phenomenon, which implies an undeniable state of progress and social stability. The notion of stability, if it does not give rise to the very existence of patrimonial property, ensures in any case the respect given to this right. The defense of patrimonial relationships is today the foundation of any social order, at the same time representing the essential task of all legal systems. Thus, the patrimonial right, the most important of the real rights, as well as its dismemberments, is defended by a diversity of legal means, regulated by different branches of the legal system.

The purpose of this article consists in carrying out a broad theoretical analysis combined with some practical situations of the institution of the defense of patrimonial rights through the comparative study of the national civil legislation with that of other states in this field, simultaneously making rigorous generalizations and conclusions. In order to achieve this goal, we proposed to appreciate the contribution of the predecessors in the matter of property contained in the doctrinal monuments of the civil law classics and to adjust these investigations to the current regulations in order to be able to offer some solutions to improve the national legal framework in the field.

Currently, the comparative analysis of the situation in the field of property rights protection, according to international law, differs a lot compared to a few decades ago. And here the situation can be viewed from two aspects: in terms of national research and in terms of research in other countries.

In the research plan in the field of other states than the Republic of Moldova, we can say with certainty that the defense of patrimonial rights is a subject of fierce disputes among specialists in the field, thanks to its specificity. Among them, we will mention with priority the studies of Romanian, French, etc. researchers.

As for the national researches, the local specialized literature initially based its achievements on the Soviet juridical science, which, unfortunately, did not draw special attention to the conflicting issues in the matter of the defense of patrimonial rights.

However, with the adoption of the Civil Code of the Republic of Moldova in force since 12.06.2003, and with its modernization on 01.03.2019, some attempts were made to research the given field according to private international law. The narrow angle of research in this field served as an impetus for the achievement of the objectives regarding conflicting issues regarding the specific legal means of defense of patrimonial rights, as well as the non-specific legal means of patrimonial defense.

**Keywords:** property, defense of property rights, law, legal means.

### INTRODUCTION

Currently, the comparative analysis of the situation in the field of property rights protection, according to international law, differs a lot compared to a few decades ago. And here the situation can be viewed from two aspects: in terms of national research and in terms of research in other countries.

In the research plan in the field of other states than the Republic of Moldova, we can say with certainty that the defense of property rights is a subject of fierce disputes among specialists in the field, thanks to its specificity. Among them, we will mention with priority the studies of Russian, Romanian, French researchers, etc.

### DISCUSSIONS

As for the national researches, the local specialized literature initially based its achievements on the Soviet juridical science, which, unfortunately, did not draw special attention to the conflicting issues in the matter of the alienation of assets with the condition of lifetime maintenance. However, with the adoption of the Civil Code of the Republic of Moldova in force since 12.06.2003, and with its modernization on 01.03.2020, some attempts were made to research the given field according to private international law. The narrow angle of research in this field served as an impetus for the achievement of the objectives regarding conflicting issues regarding the specific legal means of defending the right of ownership, as well as the non-specific legal means of defending the right of defense.

In the local specialized literature, the necessary attention is not paid to the theoretical and practical aspects of the defense of property rights. Publications are with reference to property in general, and from these considerations we can conclude that the topic of the proposed master's thesis is a current and important one.

A pioneering work on the defense of property rights regulated by the legislation of the Republic of Moldova is the one developed by M. Rusanovschi (2001) "The main ways of defending property rights in the Republic of Moldova". Here, a general characteristic of the right of ownership is made, referring to the legal means of defending the right of ownership. The author mentions (Rusanovschi, M. 2001), that "the claim action is used only by the owner of the asset against the one who has it or who holds it without right. In other words, the non-possessing owner requests the non-possessing possessor to return to him the asset that he possesses without right". Proof of ownership over time has presented practical and theoretical difficulties.

The practical difficulties were generated by the fact that the owners did not have written titles, the difficulties from a theoretical point of view due to the insufficient evidence of the property owners. In conclusion, he mentions that proof of ownership cannot be absolute on the basis of all translational titles, ownership should be established "from author to author to infinity" and with written titles ((Rusanovschi, M. 2001).

We continue our analysis with the paper elaborated by Baieş S., Roşca N. "Civil law. The main real rights", dated 2005. From the examination of the content of the work, it can be seen that, unlike the old legislation, the CC of the Republic of Moldova from 2002 also provides for the claim action as a means of defending the right of ownership.

According to the authors' opinion, starting from the essence, legal nature and destination of the defense of property rights, *act he claim is, for the first time in our legislation, legally enshrined by general rules and qualified as a means of defending property rights. Under the rule of the previous regulation, the doctrine distinguished between the specific means of defending the right of ownership (claim action, limitation action and negative action) and non-specific means tending to the same result: actions based on contracts; the action to repair damages caused by illegal acts; the action resulting from unjust enrichment, etc.* (Baieş S., Roşca N. 2005).

Extensive and successful analysis of the defense of property rights in the Judge's Manual for examining civil cases Băieşu S. (2006) "*Peculiarities of the examination of disputes related to property rights*". In this detailed article, the author analyzes in comparative terms the legislation of the Republic of Moldova that regulates the defense of property rights, referring to characters, notions, particularities, exposing the point of view on its legal nature vis-à-vis the regulations of other states. He mentions that the current Civil Code of the Russian Federation dedicates a separate chapter to property relations, also regulating the defense of property rights. From the content of the respective chapter, it would seem, the independence of the legal means of defense can be deduced, which can be direct and indirect (Băieşu S., 2006).

Another work, which deserves attention, by the same author, Băieşu S. "The second book. Real rights" (2006). In this work, the author has thoroughly analyzed each article, interpreting in detail all the means of defense of property rights. He mentions that the defense of property rights is achieved through a series of legal means. By means of defense of the right of ownership are understood those actions, through which the owner tends to remove the infringements brought to his right and ensures its exercise under normal conditions. Depending on the nature of the property right violations, the civil means of defending the property right are of two types: non-specific (or indirect) legal means and specific (or direct) legal means (Băieşu, S. 2006).

The specific or direct legal means of defending the right of ownership consist of those actions that have their foundation directly on the right of ownership. In case of direct violation of the right of ownership (for example, the theft of the owner's goods), the absolute defense against any attack comes into force, which, like the right of ownership, has an absolute character. Having as the basis the right of ownership itself, as a real right, the shares in this category are real shares. Among these actions, the claim action occupies the central place. Apart from the claim action (art. 581 - 584 Civil Code of the Republic of Moldova), our legislation also recognizes the negative action (art. 585 Civil Code of the Republic of Moldova), as a real action with the help of which the right to property is defended (Băieşu , S. 2006).

The claim action is one of the most common means of defending the right of ownership, by which the owner, who has lost possession of his property, demands the restitution of this property from the non-owner possessor.

So, the claim action is the action, by which a person asks in court to recognize the right of ownership over something that he was dispossessed of. The action of the non-possessing owner against the non-possessing possessor (claim action) is aimed at restoring the right of possession that belongs to the owner and of which he was deprived. The owner always has the right of possession over his property, but he cannot exercise his powers, because the property is in the possession of other persons. Precisely by virtue of this power of attorney (the right to possess), the owner has the right to file a claim. If the action is satisfied, the property is returned to the owner (plaintiff), thus removing the violations of the right of possession. Along with the defense of the right of possession, the claim also defends the right of use and disposal, since the owner, not having possession of the asset, does not have the possibility to use it and dispose of it (Băieșu S., 2006).

The works of Ms. Cojocari E. "Civil law. Real rights. Course Notes" (2003), Cojocari E. and Dandara L. "Civil Law: Dismemberment of Property Rights" (2005), as well as Cojocari, E. and Perederco, V. "Dismemberment of Property Rights" (2014). In all of these works, the author analyzes property rights, examining in detail the defense of property rights and other real rights. The conducted study convinces us that the social relations regarding the violation of property rights have a well-established foundation by law, as well as that legally acquired wealth cannot be confiscated, no one can be expropriated except for a cause of public utility, established according to the law, with right and prior compensation, and the right to private property obliges to comply with the tasks regarding the protection of the environment and ensuring good neighborliness, as well as to comply with the other tasks that, according to the law, belong to the owner (Cojocari, E., Dandara, L. 2005).

Next, we will give a separate space to the examination of scientific materials on the topic of the work published in Romania. Following the research of the scientific materials, published on the subject analyzed in Romania, we identify a set of studies, varied, which reflect the alienation of goods with the condition of lifetime maintenance in the content of civil law manuals and monographs but with direct reference only to the maintenance contract, sharing several opinions.

In particular, we mention the work "*Property rights and other real rights*", of Ungureanu O. and Turianuc (2002). This work includes complex structure (judicial doctrine and practice), which presents - both to beginners in the career of legal sciences, as well as to theoreticians and practitioners in the branch of civil law - as a solid proposal for reflection on the treated matter.

The theorizations in the three volumes are supported by a judicial practice section, focused on the most important judicial decisions of the supreme court in the field of property rights, but also of other real rights, going through, for their exemplary power, also solutions pronounced by other courts (courts of appeal, tribunals, judges). The selection made on the casuistry with the incident is completed by clarifications on the opinions from the specialized literature, the most significant of them being strengthened by notes that make references to the bibliography of the case or to the opinions of the authors.

One of the publications of Romanian doctrinaires Dumitrache, B., Marian, N., Popescu, R. "*Civil law institutions. Selective undergraduate course 2001-2002*" (2001), which also comments on the regulations regarding the defense of property rights. Mention the authors, that the owner may bring an action to claim the property subject to restitution under the terms Art. 563 The Civil Code of Romania, respectively an action for the purpose of abolishing "subsequent acts concluded by the debtor of the restitution obligation with third parties, regarding the property subject to restitution, according to the principle of *resolute iure dantis resolvitur ius accipientis*, in which the request for restitution of the property against the third party has an accessory character (Dumitrache, B., Marian, N., Popescu, R. 2001).

In another context, we also mention the work of the authors Dogaru I., Cercel S. "*Civil law. The General Theory of Real Rights*"(2013). The work represents a first tool for approaching the matter of real rights, both from a theoretical and practical perspective. Also here we find several cases related to the defense of property rights through legal means of defense.

Another scientific publication on the subject of the present work is his Pekete Gh. entitled "*Civil law. Real rights*" (2015). Of particular interest is that part of that study that concerns property. Property is of the greatest interest because it is the basis of the social edifice, because since ancient times property has played an essential role in economic life, becoming a driving factor in the production and circulation of goods. The book Property Law begins by making a history of the evolution of property law in Romania and internationally, continuing by analyzing the place of this branch of law in the general legal system. Analyzing the metamorphoses of property rights, the author finds that property represents the most eloquent example of

man's connection with reality, with his material and spiritual existence, that man is more than Aristotle's political animal or Hobbs' wolf and that he is and has always been a social being (Pekete, Gh. 2015).

In particular, we mention the work "Civil law. Real rights", by Joba C. and Ciochina-Barbu I. dated 2019. The current real rights course, in its 3rd edition, wants to provide useful information regarding institutions specific to this part of civil law, the authors aiming to bring new elements from the doctrine and judicial practice and to update the content of the course in relation of the legislative changes that have occurred.

The authors considered the regulations of the current Civil Code of Romania and, when it was considered necessary, a comparative analysis was carried out between the current regulation and that contained in the Civil Code of Romania from 1864. Also, some elements of comparative law were presented, at some of the studied institutions.

The authors have carried out a thorough study of legal institutions in the matter of real rights, the course being an important study tool.

We emphasize that the authors sought to highlight those aspects considered to be of great importance in the matter of real rights for the correct application of legal regulations, but also for the purpose of improving the current legal framework. It should be remembered that the authors' opinions and points of view can be subject to scientific discussions and debates, can constitute elements of analysis in order to improve the legislation (Joba, C., Ciochina-Barbu, I. 2019).

The authors sought to provide information on heritage and its functions, heritage rights, possession, private and public property rights, the legal regime of the circulation of goods, the legal modalities of property rights, the dismemberment of private property rights, the ways of acquiring the right of ownership, the limits and restrictions of the right of private ownership, the defense of the right of ownership, the cadaster and real estate advertising (Joba, C., Ciochina-Barbu, I. 2019).

A more recent publication is also by Mr. Bîrsan C. "*Civil law. Main real rights*", dated 2020. Under the well-known signature of Professor Corneliu Bîrsan, this course analyzes in detail the legal regime of goods, regulated by Book III of the Romanian Civil Code in force.

In the sequence indicated by the Civil Code of Romania, all the important aspects regarding real rights are treated: concept and classification, delimitation from claim rights, acquisition of real rights, the legal regime of private property and that of public property, legal modalities and the defense of the right to property, surface, usufruct, use and habitation, servitudes, possession and publicity of real estate rights (Bîrsan, C. 2020).

This 4th edition of the work was revised and updated at the level of the beginning of 2020, taking into account the latest changes to the special legislation mentioned in the course, but also the doctrine and recent solutions from judicial practice (Bîrsan, C. 2020).

Researching the evolution of the defense of property rights has not only a historical, purely theoretical importance, but also a practical one, as its knowledge contributes to a better understanding of the rules that govern this matter in modern law. From these perspectives, we consider references to the existing regulations in the field of property rights protection both domestically and internationally to be inherent.

At the moment, the legal rules governing the defense of property rights are found in the Civil Code of the Republic of Moldova and other normative acts, the fundamental one being of course represented by the Constitution of the Republic of Moldova.

Internally, the Constitution of the Republic of Moldova, adopted on July 29, 1994 (1), (hereinafter the Constitution of the Republic of Moldova) includes private property in the fundamental human rights, which proclaims the fundamental principles regarding the right to private property and its protection - according to art. 46 of the Constitution of the Republic of Moldova:

- the right to private property, as well as claims on the state are guaranteed;
- no one can be expropriated except for a cause of public utility, established according to the law, with fair and prior compensation;
- lawfully acquired wealth cannot be confiscated. The lawful character of the acquisition is presumed;
- goods intended for, used or resulting from crimes or misdemeanors can be confiscated only under the law.

- the right to private property obliges to comply with the duties regarding the protection of the environment and ensuring good neighborliness, as well as the compliance with the other duties that, according to the law, belong to the owner;
- the right to inherit private property is guaranteed.

In any system where the right to property is guaranteed by the Constitution, the crucial moment faced by constitutional adjudication is the selection from a variety of regulatory decisions of a redistributive nature, as they directly or indirectly affect the right to property.

In the Republic of Moldova, social relations regarding the defense of property right were initially regulated by the Civil Code of the Moldavian Soviet Socialist Republic adopted on December 26, 1964 (hereinafter the Civil Code of the SSR).

On June 6, 2002, the Parliament of the Republic of Moldova approved a new Civil Code of the Republic of Moldova, in force since June 12, 2003, and modernized on March 1, 2019, which regulates the defense of property rights in book II - Real rights, section 2, Chapter V - Defense of property rights, through the prism of art. 581-585 of the Civil Code of the Republic of Moldova.

The new wording of the chapter simplifies the claim action regime (the action of the non-possessing owner against the non-possessing possessor), establishing in art. 581 that the owner of a good has the right to have his right of ownership recognized and to obtain or recover his possession from any person who actually owns it, in the following cases:

- 1) that person has a right to possess the good, opposed to the owner.
- 2) if, under the conditions established by the law, through the effect of acquisition in good faith, usufruct, accession, the application of the provisions regarding the regime of found property or any other basis provided by law, the owner has lost the right to ownership, and the possessor or his predecessor at acquired (art. 582 CCRM).

Norm art. 583 Civil Code of the Republic of Moldova provides disclosure of the asset after acquisition under the legal act hit by absolute or relative nullity or ineffectiveness. Thus, if the asset was acquired on the basis of a legal act hit by absolute or relative nullity or an ineffective legal act on the part of the acquirer's right, the owner can exercise the claim action subject to the provisions of art. 581 and 582 of the Civil Code of the Republic of Moldova. And if, according to the law, the owner who claimed has an obligation to return the price or rent received or another correlative obligation towards the acquirer, and this correlative obligation must be executed simultaneously, the acquirer, pursuant to art. 914 of the Civil Code of the Republic of Moldova, may suspend the execution of the obligation to return the asset until the owner offers to execute or executes the correlative obligation that falls to him.

In the context of our study, the negative action included in art. 585 Civil Code of the Republic of Moldova, where did the owner's right is disturbed otherwise than by usurpation or deprivation of possession, the owner is entitled to ask the court to be defended. He can also claim compensation for the damage caused. Compensation may also be requested in the event that the termination of the infringement is not requested or the execution of this requirement is impossible. The court may order the defense of the owner, depending on the circumstances, by prohibiting the imminent disturbance, prohibiting the current disturbance, as well as removing the consequences of the past disturbance.

The modern legislation of many foreign countries contains provisions on the defense of property rights.

The protection of property in the continental system received the deepest and most serious scientific development in the German Civil Code of 1896 and the French Civil Code of 1804. The modern civil codes of a large number of foreign countries have their own special sections and chapters devoted to property institutions and the protection of property rights, where the acquisition and termination of property rights are regulated in detail, and special property claims are indicated together with claims for the protection of property rights and other property rights.

*In Romanian legislation*, the defense of property rights is regulated by the current Civil Code of Romania from 2011, by means of the legal norms that separately regulate the claim and negation action. In the Civil Code of Romania, the defense of the right to property has its own regulation in TITLE II - Private Property, Chapter I, Section 2 - Defense of the right to private property.

Resulting from the content of art. 563 Civil Code of Romania, the co-owner of an asset has the right to claim it from the possessor or from another person who holds it without right. He is also entitled to damages, if applicable. The right to claim action is imprescriptible, except in cases where the law provides otherwise. The property right acquired in good faith under the law is fully recognized. The court decision admitting the claim brought against the possessor is also enforceable against the person who holds the asset for the possessor, and can be executed directly against him (Urs, I., Carmen, I. 2003). The court decision by which the claim action was admitted against the person who holds the thing for the possessor is not opposable to the possessor, if he was not brought into the case.

In the same way, the owner can file a negative action against any person who claims to be the owner of any real right, other than ownership, over his property (art. 564 Civil Code of Romania). In the case of real estate registered in the land register, proof of ownership is made with the land register extract. The defendant will be obliged to return the asset or to compensation if the asset was lost through his fault or was alienated. Under the same conditions, the defendant will be obliged to return the products or their equivalent. In all cases, compensation will be assessed in relation to the time of restitution (art. 566 Civil Code of Romania).

The German legislation is the forerunner of the respective type of introduction of the defense of property rights. Such a defense method, as a claim for the restoration of possession against a person whose possession is vitiated in relation to the plaintiff, allows the owner to request the restitution of the property (§ 861 CCG). If the possession consists in creating obstacles to the possession caused arbitrarily, but at the same time does not end the possession, the owner, of course, can demand the elimination of such violations of his legitimate rights and interests (art. 862 CCG).

Following the German tradition, Swiss civil law establishes two types of property claims - claims for the return of things and claims for the removal of possession violations, which are provided for in Articles 927 and 928 of the Swiss Civil Code.

In the Italian Civil Code, two types of property claims are fixed - for defense (maintenance) and for restoration (reintegration).

At the same time, the French Civil Code distinguishes three main property claims: a claim for the legal or real termination of actions not related to the deprivation of possession (*la plainte*), a claim for the restoration of forced possession (*la reintegrande*) and a claim for the suspension activities of the defendant that endanger possession (*la denonciation de nouvelle oeuvre*) (Baies, S., Ugo, M., Roşca, N. 2000).

It should be noted that the Anglo-American legal system does not contain claims identical to the possessory claims of the continental legal system. The defense of property there is carried out within the framework of tort law with the mandatory use of the main categories of violation of common law (crime expressed in the invasion of another's property) (Turianu, C., Turianu, C. 1998).

## CONCLUSION

The main purpose of the present study consists in carrying out a broad theoretical analysis combined with some practical situations of the institution of property rights defense through the comparative study of the national civil legislation with that of other states in this field, simultaneously making rigorous generalizations and conclusions.

Analyzing the historical evolution of the defense of property rights, we came to the conclusion that property is one of the consistent access codes used in deciphering historically constituted human societies. The institution of the defense of the property right appeared as an imperative of the time, because only it was and is able to fight, with this magistracy that kept silent about it, turned it into a political tool of current use, with the chameleon power of to explain everything, both good and bad, in a reductionist perspective in which it becomes the beginning and the end of any social given. In this study, we have tried to look at the institution of the defense of property rights stripped of these ornaments, narrowing down strictly to its legal physiology. Following the research carried out on this issue, studying the legislation and specialized literature, at the same time being practically confronted with some situations that required the application of the legal provisions that guarantee the protection of property rights, I have identified some aspects that I think we need to pay more attention to .

At the same time, it is making a comparative analysis regarding the protection of property rights with the legislation of other states, we can conclude that the legislator has armed the owner with a wide range of means and procedures so that he can defend his property from any violation would be out of the question.

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## Optimization of Marketing Tools with the Use of Artificial Intelligence: Prospects and Challenges

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**Abstract:** The purpose of the present research is to explore the prospects and challenges arising from the utilization of artificial intelligence (AI) in optimizing marketing tools. In recent years, AI has emerged as a pivotal force in reshaping the marketing landscape, offering both promise and complexity. With technological advancements continuously influencing business dynamics, understanding how AI can enhance marketing effectiveness has become imperative. The study aimed to investigate how AI applications could improve the efficacy, flexibility, and precision of marketing tools. By leveraging AI algorithms, businesses can gain deeper insights into consumer behaviors, tailor campaigns on an individual level, and enhance overall marketing strategies. However, alongside these opportunities, ethical considerations surrounding AI implementation in marketing practices have surfaced. The need for transparency, fairness, and accountability in data usage and decision-making processes has become paramount. Through structured interviews with marketing professionals and analysis of the international literature, insights into AI's role in shaping organizational marketing strategies were obtained. Additionally, the study identified key challenges hindering the seamless integration of AI into marketing practices. These challenges encompassed issues such as data privacy concerns, algorithm bias, and the delicate balance between automation and human intervention. In addressing these challenges, the research aimed to propose potential solutions to foster the responsible and effective utilization of AI in marketing. By offering recommendations grounded in empirical findings and ethical considerations, this study aimed to contribute to a deeper understanding of leveraging AI for marketing optimization in contemporary business environments. Ultimately, the research endeavors to illuminate both the transformative potential and the ethical complexities associated with integrating AI into marketing strategies, providing insights to navigate these challenges effectively.

**Keywords:** Artificial Intelligence (AI), Marketing Optimization, Ethical Considerations, Practical Applications, Challenges

### 1. INTRODUCTION

The evolution of technology has brought revolutionary changes to the organizations (Paganou et al., 2023). In this context, this research chooses to focus on optimizing marketing tools using artificial intelligence. Artificial intelligence (AI) has become an indispensable part of marketing, as it is already used in many sectors. However, the application of AI in marketing also introduces challenges, such as the need for transparency in data usage and maintaining human communication (Huang & Rust, 2021). This research aims to contribute in two significant ways: firstly, by addressing a gap in the literature, particularly in Greek (Gkikas & Theodoridis, 2019), and methodologically, as the topic has mainly been explored through literature reviews (Valtakoski, 2020) with limited qualitative or quantitative approaches. The findings of this research can be useful for executives and marketing companies to integrate AI and "protect" their organizations from the challenges it brings. The optimization of marketing tools through the use of artificial intelligence was chosen as a topic because, in recent years, AI has played a particularly significant role and directly affects the field of marketing (Vlačić et al., 2021). Technological advancements have significantly influenced how businesses perceive, process, and ensure their competitiveness. The use of AI in marketing can yield substantial benefits, such as improving the accuracy of consumer behavior perception, customizing marketing campaigns at an individual level, and increasing the effectiveness of marketing strategies, making this topic particularly important for investigation (Mitić, 2019; Xanthopoulou & Sahinidis, 2022). However, the use of AI also presents several challenges, such as the need for transparency and ethics in data usage and finding a balance between automation and human intervention (Hermann, 2022). This subject is entirely relevant to the field of study of the author, who is marketing, as marketing utilizes AI technologies in various functions, such as in making automated decisions based on data collection, data analysis, and additional observations of the public or economic trends that may affect marketing efforts.

The purpose of this study is to explore the prospects and challenges arising from the use of artificial intelligence (AI) in optimizing marketing tools. The study specifically aims to understand how AI can improve

the effectiveness, flexibility, and accuracy of marketing tools and how it can affect a business or organization's marketing strategy. Through this purpose, the study's objectives involve investigating ethical issues regarding the use of AI in marketing, documenting and analyzing the practical application of AI in companies' marketing, and identifying the main challenges faced during the application of AI and determining possible solutions. In summary, the research objectives are as follows:

1. To investigate ethical issues regarding the use of artificial intelligence in marketing.
2. To record and analyze the practices of applying AI in companies' marketing.
3. To identify the main challenges faced during the application of AI and determine possible solutions.

The research questions chosen to be answered in this study are as follows:

1. How can the application of artificial intelligence improve the effectiveness of marketing tools?
2. What are the main challenges faced during the application of AI in the field of marketing?

These research questions will be answered in conjunction with the analysis of data and studies from international literature and through conducting structured interviews with marketing executives in Greece. As mentioned, these research questions will be approached through literature review and primarily qualitative research. This method was chosen because it is very important in social science research, as it addresses the "how" and "why" questions and allows for a deeper understanding of experiences, phenomena, and contexts. Qualitative research enables the researcher to ask questions that cannot easily be quantified to better and more substantially understand the human experience. Therefore, as both research questions refer to "causes" and an "in-depth" understanding of causes and challenges, this research method is deemed most appropriate. Additionally, given the originality of the research and the lack of a large number of companies in Greece that have adopted AI, conducting quantitative research would not be feasible and valid due to the limited sample and population.

## **2. LITERATURE REVIEW**

### **2.1 Conceptual definition of Artificial Intelligence (AI)**

Artificial intelligence as a term was first appeared in the decade 1950s, when scientists and engineers began to explore the possibility of creating machines capable of performing common human logic (Natale & Ballatore, 2020). Since then, artificial intelligence has advanced dramatically, finding widespread use in a wide range of scientific and industrial fields. The interest and use of artificial intelligence in many different fields has increased in recent years, highlighting the tremendous value of the technology to modern society (Chowdhary, 2020). Artificial intelligence refers to the field of computer science that aims to create computer systems that can perform tasks that require human intelligence. It includes capabilities such as learning, cognition, language processing and decision-making (Janet, 2020). Natural language processing, robotic technologies, intelligent systems and many other subcategories fall under the umbrella of artificial intelligence. It aims to develop computational systems that are capable of performing tasks with greater autonomy and intelligence, essentially mimicking human intelligence.

AI has advantages, disadvantages and challenges that can change depending on its use case and application. According to Davenport (2018) the advantages of AI include improved performance, automation of actions and the ability to learn. Initially, one of the main advantages is the improved performance in terms of the ability of artificial intelligence to perform tasks faster and more accurately than humans, often even outperforming them (Bhbosale et al., 2020). Continuing, task automation is related to the fact that AI can now automate tasks that previously required human intervention, increasing productivity and efficiency and finally a another advantage is the ability to learn which relates to the ability of systems to adapt to new data and gradually improve the their effectiveness (Khanzode & Sarode, 2020). One of the main disadvantages of artificial intelligence is that some of its methods lack common sense. Algorithms can give results that are difficult to interpret, which raises questions about trust and transparency (Xanthopoulou, 2020). The reliance on huge volumes data can also be difficult because it requires the collection and collection and management of significant amounts of data. Finally, the recklessness of some artificial intelligence systems can lead to judgments that are inappropriate or biased. However, AI also faces some important challenges mainly related to ethical issues concerning security and privacy. In addition, the automation brought about by AI can contribute to contribute to unemployment. Finally, there are concerns about security in the cyber security and the possibility of misuse of the technology

resulting from development of artificial intelligence. In order to ensure responsible and safe adoption of AI, these concerns need to be addressed carefully. In addition, machine learning is a subset of artificial intelligence. Many people confuse artificial intelligence with machine learning and do not know the differences between them. The main distinction between the two concepts is that machine learning deals with the development of methods that allow computers to learn from data, whereas artificial intelligence is the more general field of creating computer systems capable of performing tasks that require human intervention intelligence (Jakhar & Kaur, 2020). Machine learning is at its core a branch of artificial intelligence that deals with the way in which computer systems can learn from data to perform better on a given task (Alpaydin, 2020). The algorithms used in the machine learning techniques often allow models to predict outcomes or automatically adapt to new data (Jo, 2021).

## **2.2 Artificial intelligence in marketing and digital marketing**

Literature suggests that the advent of artificial intelligence (AI) has catalyzed a revolutionary transformation across the marketing landscape, introducing sophisticated tools and methodologies that significantly enhance the efficiency, efficacy, and adaptability of marketing strategies. This paradigm shift is prominently illustrated in the realm of consumer analytics, where AI's capability to swiftly analyze voluminous datasets unveils invaluable insights into consumer behaviors and preferences, thereby enabling marketers to make informed decisions bolstered by predictive analytics. These advanced analytical processes facilitate the anticipation of future consumer trends, thus providing a strategic edge in market responsiveness (Chintalapati & Pandey, 2022). In the domain of customer interaction, AI-driven technologies such as chatbots and virtual assistants have emerged as pivotal tools, offering immediate, personalized support and significantly enriching the customer service experience across digital platforms. This evolution underscores the profound impact of AI on personalizing consumer engagement, enabling the tailoring of content, recommendations, and promotions to individual user preferences and behaviors, thereby enhancing consumer satisfaction and loyalty (De Bruyn et al., 2020). Furthermore, AI's contribution to content creation and optimization is noteworthy. By leveraging user data analysis, AI facilitates the generation of content that resonates deeply with target audiences, ensuring content relevance and engagement, and thereby optimizing marketing strategies to align with consumer interests (Feng et al., 2021). In the context of email marketing, AI's role in automating and personalizing campaigns showcases its ability to enhance communication effectiveness through improved delivery timing, precise consumer segmentation, and targeted content personalization, ultimately increasing the impact of marketing efforts (Hermann, 2022). Moreover, the application of AI extends to search engine optimization (SEO), where its analytical prowess aids in identifying optimal keywords and recommending strategies for content enhancement, thus improving web content visibility and search engine ranking (Huang & Rust, 2021). AI's influence also permeates social media management, optimizing content strategies, and enabling real-time monitoring and analysis of campaign effectiveness and consumer sentiment, thereby offering unprecedented insights into online engagement patterns (Davenport et al., 2020). In the advertising sphere, AI has revolutionized practices by facilitating advanced audience targeting and segmentation, enabling the delivery of highly personalized advertising content. Predictive analytics, powered by AI, play a crucial role in predicting advertising performance, thus allowing advertisers to make more strategic decisions (Mustak et al., 2021). However, the integration of AI in advertising also raises significant ethical concerns related to data privacy, transparency, and user consent, highlighting the importance of navigating these challenges with care and integrity. In sum, the integration of artificial intelligence in marketing and advertising represents a significant leap forward, offering unparalleled opportunities for enhancing strategic insight, operational efficiency, and consumer engagement. As AI technologies continue to evolve and mature, their role in shaping marketing communications is expected to grow, further advancing the capabilities for delivering personalized, timely, and relevant messages to consumers (Guzman & Lewis, 2020). This ongoing evolution underscores the dual imperative of leveraging AI's potential to transform marketing practices while conscientiously addressing the ethical considerations that accompany its widespread adoption.

## **3. METHODOLOGY**

The study utilizes a qualitative approach to comprehensively explore the impact of AI on marketing optimization, addressing both the opportunities and challenges inherent in AI's integration. Data collection was based on semi-structured interviews with marketing professionals who have direct experience with AI-driven marketing campaigns. The interviews aim to gather in-depth insights into the practical applications, perceived benefits, and challenges of AI in marketing, with a purposive sampling strategy ensuring a diverse and

representative selection of participants. The total sample consisted of 15 interviews which were conducted by leveraging online communication platforms to facilitate participation across geographical locations. Data analysis was implemented using thematic analysis. Ethical considerations were paramount, with informed consent obtained from all participants, ensuring anonymity and confidentiality in handling and reporting data. The anticipated outcome of this research is a detailed exploration of how AI technologies can enhance marketing effectiveness, flexibility, and precision, alongside a critical examination of the ethical and practical challenges involved. By offering empirically grounded recommendations, the study aims to contribute valuable insights for businesses seeking to navigate the complexities of AI integration in marketing practices, informed by both the literature and the experiences of marketing professionals. This methodology draws on the insights of prior studies (e.g., Bode et al., 2015; Kim et al., 2018), integrating theoretical approaches with empirical data collection to address the research objectives outlined in the abstract. Through this approach, the research endeavors to illuminate the transformative potential of AI in marketing while addressing the ethical considerations and challenges that accompany its implementation.

#### 4. RESULTS

The detailed analysis of interviews regarding the impact of artificial intelligence (AI) on marketing strategies unearthed four primary themes. Firstly, AI's role in crafting highly tailored marketing approaches was underscored, significantly enhancing understanding and prediction of customer behavior for personalized content delivery. Secondly, the automation capabilities of AI were praised for streamlining operations, notably in customer segmentation and email marketing, thereby boosting operational efficiency. Ethical and privacy issues emerged as significant concerns, highlighting the need for careful consideration around the use of consumer data. Lastly, challenges in integrating AI into existing systems were identified, pointing to both technical and cultural hurdles that organizations must navigate to fully leverage AI's potential. More specifically, regarding the **“Personalization and Consumer Insights”**, the interviews revealed a significant shift towards the use of AI in developing highly personalized marketing strategies. This shift is largely attributed to AI's capacity to dissect and understand consumer behaviors in unprecedented depth. As noted by a marketing director, AI's influence extends beyond mere data analysis to enabling the creation of content that deeply resonates with diverse consumer segments, thus elevating the personalized marketing to new heights. Next, regarding the **“Efficiency and Automation”**, the operational benefits of AI emerged as a prominent theme, with participants acknowledging AI's role in streamlining tasks that traditionally consumed substantial time and resources. A digital strategist highlighted how AI's automation capabilities, particularly in segmentation and email campaigns, have liberated marketing teams to allocate more time towards strategic thinking and creative processes, thereby enhancing overall productivity and innovation. **Ethical and Privacy Concerns were also mentioned.** Specifically, participants expressed apprehensions about the potential misuse of consumer data, emphasizing the dual-edged nature of AI as both a revolutionary tool and a source of ethical dilemmas. This sentiment underscores the pressing need for stringent ethical guidelines and transparent practices in AI's application. The last theme emerged referred to **“Integration Challenges”**. The interviews shed light on the practical challenges in embedding AI technologies within existing organizational frameworks. According to an IT manager, the transition to AI-driven operations entails navigating technical compatibility issues with legacy systems and addressing the AI literacy gap among staff. These insights underscore the multifaceted challenges organizations face in harnessing AI's full potential, necessitating a holistic approach to integration that considers both technological and human factors. Overall, the results provided a comprehensive overview of the prevailing sentiments and observations regarding the impact of AI on marketing, highlighting the transformative potential of AI alongside the complexities and ethical considerations it introduces.

#### 5. CONCLUSIONS AND SUGGESTIONS

The analysis of the interviews regarding the impact of artificial intelligence (AI) on marketing strategies revealed four main themes. First, the role of AI in shaping personalized marketing approaches was strongly highlighted, significantly improving understanding and predicting customer behavior to deliver personalized content. Secondly, AI's automation capabilities received positive feedback for simplifying operations, particularly in customer segmentation and email marketing, thereby increasing operational efficiency. Ethical and privacy issues emerged as major concerns, highlighting the need for careful thought around the use of consumer data. Finally, challenges emerge in integrating AI into existing systems, indicating technical and cultural barriers that need to be overcome to fully realize the potential of AI. The analysis also revealed a significant shift towards using AI to develop highly personalized marketing strategies, thanks to AI's ability to

analyze and understand consumer behaviors with unprecedented depth. The operational efficiency benefits of AI emerged as a prominent theme, with the automation of tasks that traditionally required significant time and resources. Furthermore, concerns were raised about the potential misuse of consumer data, highlighting the need for strong ethical guidelines and transparent practices in the implementation of AI. Practical challenges in integrating AI technologies into existing organizational frameworks were highlighted, necessitating a comprehensive approach to integration that takes into account technological and human factors.

As mentioned above, there is still a lot of space for research on organizations' need to invest in advanced AI systems that can analyze large amounts of data to identify consumer preferences and behaviors, enabling the development of more targeted and personalized messaging. Based on the findings, suggestions for future research focus on the need for a deeper understanding of the dynamics and challenges associated with the application of AI in marketing. Specifically, it is suggested that in-depth studies be conducted to assess the impact of AI on personalization and automation across different industries and cultural contexts, seeking insights into how organizations can overcome the technical and cultural challenges presented. In addition, research should consider the ethical dimensions of AI use, especially in relation to the management and use of consumer data, highlighting the need for transparency, fair use and accountability. Finally, future studies should explore approaches and models for integrating AI into marketing, identifying best practices that will allow companies to fully exploit the potential of AI in marketing. Specifically, it is suggested that in-depth studies be conducted to assess the impact of AI on personalization and automation across different industries and cultural contexts, seeking insights into how organizations can overcome the technical and cultural challenges presented. In addition, research should consider the ethical dimensions of AI use, especially in relation to the management and use of consumer data, highlighting the need for transparency, fair use and accountability. Future studies should explore approaches and models for integrating AI into marketing, identifying best practices that will allow companies to fully exploit the potential of AI while managing the challenges it raises.

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## The Helpfulness of Hotel Online Reviews: Using Linguistic Analysis to Decode their Meaning

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**Abstract:** This research focuses on examining the language devices and linguistic styles employed in interpreting the meaning within online reviews, particularly emphasizing their relevance to hotel managerial staff. The practical utility of decoding online reviews lies in its assistance for service-oriented businesses, urging management to pay close attention to how they linguistically adapt and craft their responses. The language found in online reviews requires close examination as it is evolving into a distinctive language variety with its own singular vocabulary, grammar, and syntax. Additionally, the study delves into the textual and graphical elements present in online reviews that hold sway over tourists, warranting this content analysis. To conduct this study, word extraction techniques and built-in tourism dictionaries were utilized to scrutinize reviews gathered from two hotels in the Vlora region (Albania). A random sample of 200 reviews spanning a 9-month period (January-September 2023) was collected without differentiation based on factors such as location or hotel ratings. The research revealed that reviewers employ different linguistic styles and language devices (grammatical and syntactical) based on three primary groups: (1) positive reviews, (2) negative reviews, and (3) neutral reviews. In terms of language being employed, a linguistic style match was identified between reviews, with variations primarily seen in the richness of lexical items between users of English as a first (F1) and second language (F2). Regarding review length (number of words), positive reviews were observed to be shorter than negative reviews, but they exhibited a higher usage of linguistically-rich lexical items. Throughout the analysis, various characteristics emerged that were relevant to one or another of the three groups, such as polarity of words, the valence of positive and negative adjectives, figurative, concrete and abstract language, as well as personal and impersonal styles. The findings will help hotel management build on the strengths of online reviews to attract potential tourists and deal with negative ones which indicate primarily a service gone wrong that needs to be fixed.

**Keywords:** tourists, hotel, service, online reviews, responses, factor, language.

### 1. INTRODUCTION

Over the last decade or so several factors have led to tourism becoming a major contributor to Albania's GDP. Albania surpassed popular European destinations like Greece, Italy, Spain, Croatia, and France, claiming the top spot on the continent. The tourism industry in Albania reached its peak in 2023, with approximately 7.2 million visitors visiting the country in the first nine months of the year (Euronews, 2023).

The growing presence of online travel agencies like Booking.com and TripAdvisor has brought about a surge in online reviews on Albanian tourist destinations. Tourists increasingly read online reviews to shape and inform their purchase decisions as they are a paramount information source: the second after traditional word of mouth (WOM) (Mariani & Predvoditeleva, 2019).

The tourism and hospitality sectors use these reviews as part of their new marketing plans to either boost their competitiveness, or help improve a service encounter that has gone wrong for tourists (King et al., 2014, Cantalops & Salvi, 2014). When travelers express their reviews they tend to use an authentic, sincere language since they want to convey the message as clearly as possible, regardless of the fact if the review is intended to be read by the hotel management or possible customers (Eyisüren & Karatepe, 2023). The categorization of a review as positive, negative, or neutral, with the latter situated between the extremes, depends to a large extent on the language styles and devices including semantics, which are actively utilized by reviewers.

It is important to undertake a textual analysis of online reviews to capture the real information and content embedded in the online reviews, because most of these reviews consist of unstructured comments that are not amenable to direct analysis by using only evaluation scores. Individual reviews vary from length of reviews, choice of words, polarity and valence of word as well as sentiment weights and themes (Han et al., 2016).

Research suggests that text reviews affect recipients' decisions and behaviors more powerfully than numerical ratings (Mudambi et al., 2014). Hence our study will focus on text reviews to help us understand the language used in online reviews. There are various reasons why we will be focusing on the texts of the online reviews. First of all, texts contain a wide range of sentiment expressions, so consumers' feelings are even more explicitly expressed through online reviews than face-to-face communication (Derks et al., 2008). Secondly, text reviews are an important source which reflects consumers' feelings in more detail and provide a specific explanation about customer's evaluations.

Moreover, delving into the language style of online reviews is pivotal for this study as it allows managers to gain deeper insights into customer sentiments and preferences. The linguistic analysis not only deciphers the emotional undertones, but also unveils the underlying attitudes and expectations of customers. This in-depth examination of language helps managers identify patterns, discern repeated themes, and uncover areas of improvement or satisfaction within the services offered. By putting online reviews under the language lens, the study aims to empower managerial teams to tailor and adapt their responses to the online reviews, make informed decisions, enhance customer experiences, and refine marketing strategies. In essence, understanding the intricacies of language in online reviews is a valuable tool for understanding the workings of tourism and hospitality sectors.

## 2. Literature review

More and more tourists are considering online reviews when choosing a hotel destination. Online reviews along with the rated scores, which appear on the online travel agencies, are deemed to be an important indicator of hotel's performance and reputation and they do influence tourists' purchasing decisions. No matter what types of reviews are posted by tourists, be they positive, negative or neutral, they are perceived as important tools since potential tourists rely on them for booking intentions after existing tourists' post-service encounters. In tourism studies, the positive, negative or neutral sentiment refers to personal feelings, perceptions, evaluation, or satisfaction about services (Gitto & Mancuso, 2017) as well as to the tourist's characteristics such as identity-descriptive information, gender, and expertise (Forman et al., 2008; Lee et al., 2011). Positive reviews help hotels attract existing and new tourists, foster tourist trust and loyalty and increase competitiveness of hotels. Empirical studies show that positive online reviews can significantly increase booking intentions and the number of bookings for a hotel (Mauri & Minazzi, 2013; Sparks & Browning, 2011).

Tourists use social platforms and online booking agencies to also describe their disappointing experiences in online reviews, or their helpfulness in preventing a bad experience from happening like a service gone wrong, or a service failure. Negative online reviews not only help tourists make informed decisions about their final hotel destination, but they are also a solid source of information for service recovery since hotel managers can monitor, act and improve the quality of services based on the contents of such reviews.

Some authors have gone a step further by elaborating on the merits of each review. According to Lee et al., (2017) negative online consumer reviews provide more diagnostic, sensitive and credible information of the hotels, and are therefore perceived as more helpful than positive online consumer reviews.

Other researchers, while working on points of departure between positive and negative online reviews, have examined linguistic features like words, word associations, choice of lexical items etc. Online hotel reviews are helpful for different fields, and many researchers study them for various reasons because reviewers have specific expectations when they assess the service, making the reviews valuable data. Discourse analysts focus on how messages are conveyed and what writers do when crafting reviews (Cenni & Goethals, 2017). Moreover, Mudambi & Schuff (2010) found out that review extremity, review depth, and product type affect the helpfulness of the review, especially with review depth affecting the helpfulness of the review positively.

Along the same lines other studies have dealt with many qualitative characteristics such as the review quality, review valance (positive, negative, or mixed), reviewers' writing style, the length of a review, as well as dependent variables such as helpfulness (Fang et al., 2016; Forman et al., 2008; Lee et al., 2011). With increasing interest in hotel responses among linguists, recent studies have examined hotel responses from a cross linguistic perspective. Textual analysis of online reviews focuses on prediction of helpfulness of reviews in determining the polarity of consumer opinion on services as well as the impact of reviews on (re)-bookings.

Online reviews differ in terms of content, length and number of words depending on the reviewer's language and linguistic backgrounds. Some studies have shown that culture of origin is identified to affect vocabulary use



in online reviews (Buzova et al., 2018). Moreover, studying hotel reviews’ textual components by language could reveal more than each guest’s opinion; it could explain the opinions of groups (Cantallops & Salvi, 2014).

More recently, researchers have started focusing on understanding how the two inseparable components of text content, the review sentiment and the linguistic style (Huffaker et al.,2011) play a significant role in consumer decision-making (Gundecha & Liu, 2012; Ludwig et al., 2013). Online reviews, beyond the emotional aspects which they depict, since tourists write them after their service encounter have a lot more to offer than words written in a text. This textual analysis will reveal much more than just sentiment, it will show us all the intricate ways about how such reviews are written in the first place.

### 3. Methodology & Data Collection

We gathered a considerable dataset of 200 reviews from two distinct Vlora hotels spanning nine months, from January to September 2023. The total number of words sorted and analyzed was 16.000. Vlora city is quite a sight in southern Albania, renowned for its rich cultural heritage, traditions, folklore and blue waters. It sits right on the edge of the Adriatic and Ionian seas and serves as a magnet that attracts tourists from far and wide. Most tourists use online travel agencies to book their holidays in Vlora. Vlora boasts around 920 properties registered with Booking.com and 469 properties found on Tripadvisor.

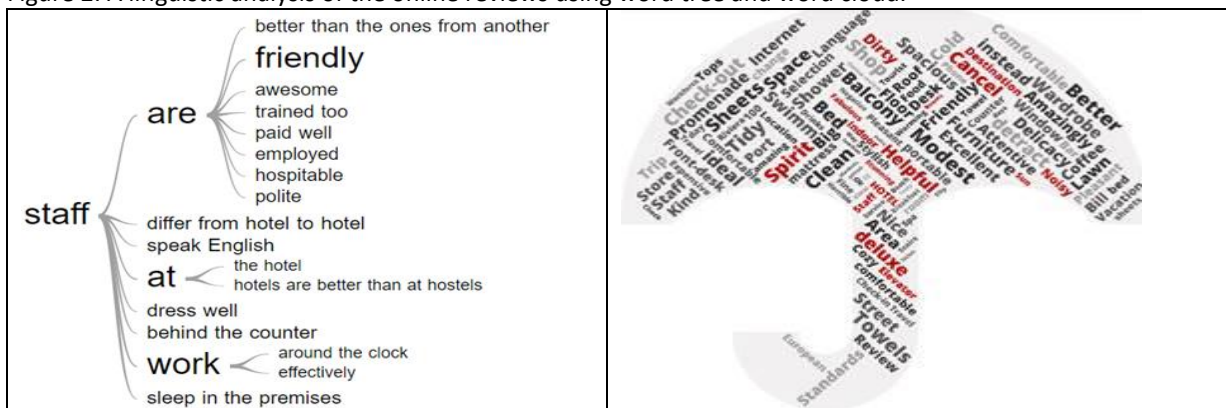
Employing the method of text and opinion mining, we examined the language devices in these reviews. For the purposes of analysing the text corpora we used the software AntConc, which provides various tools for analyzing and exploring the linguistic patterns and structures within a given text corpus. Some of the features of **AntConc** include word frequency analysis, collocation analysis, keyword analysis, and more. The software will help us gain insights into the usage of words and phrases, identify patterns, and explore language-related phenomena within a collection of texts.

Figure 1: A view section of the analysis using Antconc software to analyse texts

N-Gram	Collocate	Word	Keyword	Wordcloud
1 to 8 of 8 hits				
Left Context	#Hit			Right Context
mins away. The breakfasts are very good. Design of the	hotel	is	beautiful	and the staff was helpful at all
or sitting area which was how deluxe room was priced.	Hotel	is	brave Marina	development which means n
of every day, but make it clean, seriously. Overall, the	hotel	is	not bad,	but definitely not 4 stars, 2.5 stars t
nice but be careful at the stairs at pool. The	hotel	rooms	had	all you could need for holidays, it'
all guests could use the sunbeds. The bed in the	hotel	rooms	is	spacious and really comfortable to sle
Breakfast was huge, did not eat other meals at the	hotel	as	so many	eating places locally Had to ask
there are some ruins and dirty, poor beach surrounds this	hotel	but	government	has plans to modernize this an
but government has plans to modernize this area, so the	Hotel	for	this time	has low prices and U must

In addition, we used **Word Tree** and **Word cloud** which are commonly employed in various fields, including data analysis, information retrieval, and text mining. The former depicts multiple parallel sequences of words. The software could be used to show which words most often follow or precede a target word (e.g., "hotel staff are ..") or to show a hierarchy of terms (e.g., a hotel tree).The latter works with large text data to emphasize frequency or importance of words and word associations within a body of text, to provide a quick and intuitive way to identify patterns, trends, or the most significant terms within a given text dataset.

Figure 2: A linguistic analysis of the online reviews using word tree and word cloud.



#### 4. Analysis and Results

Through qualitative content analysis as yielded by the content-based softwares, the data were examined at the word and sentence level to make sense of descriptions and understand the intended message. However, it is essential to focus on certain textual components that reflect the argumentation and system of persuading tourists to visit or not visit a tourist destination. Below is a representation of online reviews (positive ones) which have been analysed from different angles starting with lexical strategies to argumentation all the way to causes, effects and details. The same logic might apply to negative online reviews, which have not been examined as thoroughly for they do reveal the same logic operating on their analysis.

Table 1: Framework for analyzing persuasive/not persuasive appeals to tourists

Means of persuading (+)	Lexical strategies and/or techniques <i>Verbs of Perception + adj</i>	Lobby feels <i>warm</i> with <i>comfy</i> chairs Food <i>tastes</i> delicious and fresh
	Argumentation through facts	This hotel has a <i>solid</i> five-star rating and <i>happy</i> guests, <i>proving</i> its <i>great</i> service and comfort
	Justification/warrants	<i>Choosing</i> this hotel <i>is</i> <i>right</i> choice/ <i>it's</i> worth it.
	Evidence (examples)	The rooms are <i>big</i> and have everything you need – TV, Wi-Fi, and <i>even</i> a coffee maker.
	Claims:	Trust me, this is the <i>best</i> hotel around.
	Linguistic (Temporal Transition): <i>initially later, finally</i>	<i>At first</i> , we weren't sure, <i>but later</i> we came to enjoy it.
	Suggestions:	Recommend it! Definitely will come back!
	Cause and effect:	<i>Since</i> there's no other hotel nearby, we <i>ended up</i> staying here, <i>and it turned out</i> to be a great choice.
	Details:	Modern, new, comfortable place, Albanian-style delicious food with fresh ingredients.
	Explanation of ideas:	The <i>pool</i> was not <i>clean</i> because the power had been <i>cut off</i> and it was end of peak season.

Based on the linguistic analysis of online reviews we ran the collected dataset on the AntConc software. Through such an analysis we were able to establish variations in the prominence and distribution of the analyzed terms for the following attributes: hotel, pool, service, staff and view as shown in the table below.

Table 2: Frequencies and distribution of hotel attributes

Attribute	Token_count	Freq	Norm._freq	Dispersion
Hotel	15667	317	20233.61	0.874
Pool	15667	106	6765.813	0.882
Service	15667	38	2425.48	0.813
Staff	15667	118	7531.755	0.906
View	15667	79	5042.446	0.805

Based on the above analysis, we do notice that the attributes "hotel" and "staff" come up quite frequently across all online reviews, with the attribute "staff" displaying a far more concentrated presence in reviews. The term "hotel" appears 317 times in the corpus, with a high normalized frequency of 20,233.61 per 10,000 words and a dispersion value of 0.874 followed closely by "staff" with mentions standing at 118 times, and a high normalized frequency of 7,531.755 per 10,000 words. The dispersion value for staff at 0.906 suggests a concentrated presence, possibly indicating specific sections or contexts where "staff" is frequently discussed. On the other hand, the attributes "pool" and "view" show a more even distribution of mentions at 106 and 79 and normalized frequencies at 6,765.813 and 5,042.446 respectively, with the attribute "service" being less frequent, but quite spread across the corpus. Based on the linguistic analysis of textual corpora by using the software Word Tree and Word Cloud we were able to extract the most common adjectives that went with each of the key hotel attributes as indicated in the table below.

Table 3: Frequency of adjectives that associate themselves with hotel attributes

HOTEL				
Room	View	Pool	Staff	Service
<p><b>Adjectives</b>                      Ok                      Nice                      Great                      Lovely                      Small                      Large                      New                      Spacious                      Modern                      Comfortable                      Cozy                      Clean                      Calm                      Furnished                      Stylish                      Cheap                      Inviting</p>	<p><b>Adjectives</b>                      OK                      Nice                      Great                      Fine                      Lovely                      Amazing                      Stunning                      Breathtaking                      Exceptional                      Wonderful                      Pleasant                      Majestic                      Spectacular                      Serene                      Tranquil                      Idyllic                      Picturesque</p>	<p><b>Adjectives</b>                      OK                      Nice                      Great                      Fresh                      Fine                      Tasty                      Delicious                      Lovely                      Amazing                      Traditional                      Stunning                      Breathtaking                      Exceptional                      Wonderful                      Pleasant                      Typical-                      albanian</p>	<p><b>Adjectives</b>                      OK                      Nice                      Kind                      Attentive                      Pleasant                      Polite                      Friendly                      Helpful                      Welcoming                      Amazing                      Reliable                      Available                      Considerate                      Amazing                      Hospitable                      Efficient</p>	<p><b>Adjectives</b>                      OK                      Alright                      Nice                      Great                      Fine                      Lovely                      Amazing                      Excellent                      Superb                      First-rate                      Top-tier                      Exceptional                      Enjoyable                      Impeccable                      Exemplary                      Reliable</p>

On the basis of the above table, the adjectives corresponding to the key hotel attributes are arranged in a descending order. The top 7 adjectives in each of the attributes above emerge as the most frequently used adjectives in online reviews. Notably, the choice and utilization of these adjectives exhibit disparities, particularly among English native speakers, including individuals from the UK, Canada, and the USA. This linguistic diversity can be attributed to the enriched lexical repositories these speakers possess. By going through the text, it is evident that the English native speakers contribute to the reviews with a more nuanced and varied vocabulary when compared with English non-native speakers.

Their proficiency in employing an extensive lexicon is indicative of their language affinity, resulting in reviews that transcend the ordinary. This linguistic richness manifests in expressions like "*brand-new hotel*" "*portraying a sense of novelty*"; "*massively cheap rooms*," emphasizing "*the exceptional affordability*"; and "*admittedly beautiful*," indicating a candid acknowledgment of the hotel's aesthetic appeal. In addition, the native speakers tended to use adjectives that showed a higher valence or degree of positivity, or structures of the type "*super/quite/pretty + adjectives*).

By analysing the adjectives patterns we could argue that reviews written from English-speaking native tourists present a higher ratio of positive sentences than those written by non-english speaking tourists, who tend to write mostly negative and neutral sentences. This is also supported by Schuckert et al.'s (2015) whose findings reveal that English reviews give higher ratings than non-English reviews.

In essence, the linguistic choices within the reviews not only reflect individual preferences, but also serve as a testament to the diverse ways in which individuals perceive and articulate their experiences with the hotel attributes. Such text analysis unveils the intricacies of language usage and sheds light on the nuanced cultural and linguistic backgrounds that shape the discourse surrounding these accommodations.

With reference to table no. 3 above, we understand that the evaluative dimensions combine both the "*appraisive aspect*" and the "*descriptive aspect*". The first *metric*, positive sentiments (*is + adjectives and/or feel + (to describe tactile sensations or emotions)* ) is the percentage of terms that represent feelings and moods with positive polarity (e.g., *amazing, great, never disappoints, and pleasant*). The second metric, negative sentiments (*is not + adj and/or does not feel + adj*), is the same percentage in case of negative polarity. Since the opposite words were few and far between (*dirty, horrible, ugly, unfeeling, inhospitable*) negative polarity was used by using structures like "*There is no.....// It is not...../ I don't feel*":

e.g. The hotel (it) *is* amazing. → *I feel* good after eating the meal.

The pool *is* cold. → The pool *feels* cold when you swim.

Another interesting aspect of online reviews is that sometimes when people write online reviews, which extend to an entire paragraph, the overall sentiment they share might not match exactly with the individual constituent parts of any given paragraph. The sentiment of the entire paragraph is the total sum of various degrees of sentiment as carried by each constituent part of the paragraph. Each clause/sentence may express a different sentiment, as shown below:

Table 4: Overall sentiment in a paragraph vs. Sentiment in constituent parts

“(1)Everything in the hotel was **perfect**, (2) the bed was **super comfy** and (3) the food was **lovely** (4) the staff was **very kind** and helpful ....(5) the pool was **good** too.”

This paragraph contains a number of clauses (*numbered 1-5*). The paragraph as a whole conveys a positive sentiment. Yet, within the paragraph there are 2 clauses which express a higher degree of positive sentiment: (*bed*) and (*staff*). The calculation of the entire paragraph missed the sentiment scores for (*bed*) and (*staff*). So, in our opinion splitting sentiment on constituent clauses performs far better.

Another important finding relates to the fact that reviews revolving around concrete attributes such as *room/balcony/food/beach/ bar/ restaurant* tend to be lengthier when compared with reviews that relate to abstract attributes like: *view/service/stay/experience, atmosphere*. Concreteness describes how much a word refers to an actual, tangible, or “real” entity, describing objects and behaviors in a manner that seems more specific, familiar, and perceptible to the eye or mind (i.e., imaginable or vivid; Lexical concreteness as language that is more detailed and context specific (Miller et al. 2007). Specifically, concrete language can suggest that employees are paying attention to, and understanding, customer needs.

Table 5: Analytical comparison between concrete and abstract reviews.

Hotel attribute	Review content	Number of words
Concrete attributes	The room was <i>big</i> and the hotel is <i>beautiful</i> . Breakfast had plenty of options. The swimming pool is big, but not heated. The hotel is right at the beach.	29 word
Abstract attributes	The view from the balcony was stunning.	7 words

Two often successive reviews posted on the same page tend to be a somewhat exact copy in terms of the content, valency of words and sentiment expressed with the adjacent reviews. This is confirmed also by Chartrand & Bargh (1999) who found that a reviewer could influence the following reviewer’s language or could be influenced by the prior reviewer’s language at the word level in natural conversation. This is known as the same semantic representation of online reviews, or linguistic style matching (LSM).

Table 6: Analytical comparison of 3 adjacent reviews on the same page

Review	Review contents	No of words
Review 1	Despite a weak Wi-Fi signal, my recent hotel stay was enjoyable with friendly staff and a clean, comfortable room, making it a recommended choice.	24 words
Review 2	I had a pleasant experience at this hotel, with welcoming staff, a clean and cozy room, and despite a minor Wi-Fi issue, I would recommend it for a comfortable stay.	31 words
Review 3	During my recent hotel stay, the friendly staff, well-maintained room, and central location made it easy to explore nearby attractions, although the Wi-Fi signal was a bit weak, it remains a recommended choice.	34 words

Based on LSM, we predict that reviewers seek to match the language use of prior reviews they are exposed to. In such a case people will mimic words on the broader conversational level (Cappella, 1996). Previous studies suggest that customers rarely read online comments beyond the first or second page, giving thus preference to recent reviews (Pavlou & Dimoka, 2006).

Furthermore, customers who are not happy with a service or product tend to leave a negative review. Negative reviews tend to be lengthier than positive ones. This is because reviewers want to “rant, to shout against the service, .. to vent their anger so as to take it out on the hotel”.

Table 7: Comparison in terms of word length between positive and negative reviews

Reviews	Review content	No of words
Review (+) Positive	Spacious room and very clean and modern. The hotel is close to the sea.	14 words
Review (-) Negative	There were no hangers in the room to hang anything, even a jacket. In the bathroom, there was also nowhere to hang a wet towel after bathing. It would be nice if there were also some glasses, a kettle and a table on the	82 words

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balcony. There is also internet to improve, the power in the room was very weak. These are just details, but still very annoying. One more thing. The beach behind the hotel isn't the most attractive for relaxing.

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Negative reviewers know that complaining publicly creates attention for them and pain for the business that “wronged” them (Linkedin, 2023). They indicate that tourists as consumers know the service well, they are more diagnostic in what they describe and sound more convincing to others.

#### 4.1. Linguistic Analysis used to write reviews.

Reviews employ linguistic techniques and writing styles to convey emotions, highlight crucial aspects, and enhance communication. Travelers utilize these methods to enhance services, ensure customer satisfaction, and address issues that may have arisen. Individuals who have experienced a particular place employ these techniques to express their intention to revisit or to persuade others to either consider or avoid the location. Telling positive reviews apart from negative ones is quite an easy job. Words that encode a desirable state (e.g., “great” and “good”) have a *positive polarity*, while words that encode an undesirable state have a *negative polarity* (e.g., “bad” and “awful”). The following are common approaches used in crafting positive, negative, and neutral reviews.

##### A. Positive reviews

These reviews say good things about the hotel. They make the hotel look better and help people decide if they want to stay there. The reviews show that other people had a good time, and they want more people to try the hotel. They also use certain words a lot when writing good reviews.

###### 1. Positive Adjectives:

e.g. “The service was *perfect*.”

###### 2. Intensifier + Adjectives:

e.g. “The food was *very good*.”

###### 3. Comparative Structures:

e.g. “This hotel is *better than* most in terms of service and comfort.”

###### 4. Superlative Structures:

e.g. “Undoubtedly, this is *the best* hotel I've ever stayed at.”

###### 5. Emphatic Statements:

e.g. “I *absolutely loved* everything about this hotel!”

###### 6. Exclamation Sentences:

Example: “Wow! What an amazing experience at this hotel!”

###### 7. Positive Comparisons:

e.g. “Compared to other hotels, this one is perfect in every aspect.”

###### 8. Conditional Sentences:

e.g. “If you're seeking a hotel that combines luxury with warmth, this is the perfect choice.”

###### 9. Subordinate Clauses

“*While* the exterior is charming, *it's the interior design* that truly captivates guests.”

###### 10. Parallel Structure

e.g. “The hotel *not only* provides exceptional service *but also* ensures a relaxing atmosphere.”

###### 11. Inversion

e.g. “Rarely have I seen a hotel with such a winning mix of comfort and style.”

###### 12. Imperative Sentences (Direct Commands):

e.g. “Experience once-in-a-life time experience at this hotel

###### 13. Figurative language

e.g. This hotel is your shine and diamond on the map. The hotel is like a jewel nestled on a hilltop.

###### 14. Personal style vs impersonal style

e.g. “We loved the hotel. The staff was friendly, and our room had a fantastic view.”

e.g. “The hotel offers a welcoming atmosphere. Staff members are efficient, and rooms are well-furnished.”

##### B. Negative reviews

There are several definitions in the literature for negative comments, such as, any comment that contains a negative component (Heinemann & Traverso, 2009), the expression of displeasure directed at the person or

thing that was seen as unfavorable (Boxer, 1989). These reviews usually talk about when someone is not happy. Negative reviews can be different – some may really point out big problems with a hotel, while others might just be one-time issues or personal opinions. Hotels listen to these comments and try to make things better. They want to keep guests happy and are always trying to improve. This helps hotels keep the trust of their guests and shows that they care about making customers happy all the time.

**1. Negative Adjectives:**

e.g. "The hotel was *disappointing*."

**2. Intensifier + Adjectives:**

"The hotel was very unsatisfactory."

**3. Comparative Structures:**

e.g. "This hotel is worse than most in terms of service."

**4. Superlative Structures:**

e.g. "Undoubtedly, this is the worst hotel I've ever stayed at."

**5. Emphatic Statements:**

e.g. "I absolutely disliked everything about this hotel!"

**6. Exclamation Sentences:**

e.g. "Oh no! What a disappointing experience at this hotel!"

**7. Negative Comparisons:**

e.g. "Compared to other hotels, this one falls short in every aspect."

**8. Expressing Displeasure**

e.g. "I want to express my deep disappointment with the hotel's services."

**9 Conditional Sentences (Hypothetical Situations):**

e.g. "If you're looking for a stress-free vacation, this hotel is not the right choice."

**10. Parallel Structure**

e.g. "The hotel *not only* lacks essential amenities *but also* fails to provide even basic comfort."

**11. Inversion**

e.g. "Rarely have I encountered a hotel with such a combination of negligence and neglect."

**C. Neutral reviews**

Writing a neutral review involves using language that is balanced and objective. Neutral reviews try to share information in a fair way without sounding too happy or too upset. In a neutral review, the person usually talks about both the good and not-so-good parts of the service or experience. These reviews help people get a better and more detailed picture of what's good and not so good about something. That way, tourists can decide what's important to them and make smart choices.

**1. Objective Adjectives:**

e.g. "The hotel was *average*."

**2. Adverbs for Moderation:**

e.g. "The hotel was *reasonably good*."

**3. Comparisons:**

e.g. "This hotel is on par with others in terms of service and amenities."

**4. Superlative Structures:**

e.g. "This is the best hotel I've stayed at."

**5. Exclamation Sentences:**

e.g. "Well, our stay at this hotel was quite okay."

**6. Neutral Comparisons:**

e.g. "Compared to other hotels, this one has its own set of pros and cons."

**7. Use of Passive Voice:**

e.g. "Mistakes *were made* in our reservation, but they *were eventually rectified* by the hotel staff."

**8. Qualifiers:**

The hotel was *reasonably* expensive.

**9. Conjunctions**

e.g. "The room was clean *but* a bit dark",

## 5. Implications

The research emphasized the importance that reviews carry in being more explicit in their feedback. Tourists should actively participate in greater numbers to share their sentiments about each hotel attribute. Such detailed reviews assist potential guests in making informed decisions about their hotel choices. Simultaneously, hotel management should diligently analyze negative reviews in cases of service failures by taking appropriate actions towards service recovery. Positive reviews are equally valuable for hotel managers, providing insights to enhance their marketing strategies and continually improve service effectiveness. It is of utmost importance for hotel management to utilize negative reviews effectively and efficiently. Hotel management should take immediate action to address reviewers' distressed emotions before they become increasingly disillusioned. The hotel management must develop review management strategies by categorizing and/or prioritizing the reviews by their importance or helpfulness from the eyes of customers; for example, negative reviews, in general, first, positive reviews, and then negative reviews with intense emotional expressions.

## 5. CONCLUSIONS

In conclusion, our methodology involved collecting a substantial dataset of 200 reviews from two Vlorë hotels over nine months, analyzed through text and opinion mining using **AntConc** software, **Word Tree**, and **Word Cloud**. The linguistic analysis revealed a concentration of terms related to "hotel" and "staff" in online reviews, with English native speakers contributing a more varied and nuanced vocabulary. Positive sentiments were predominant in reviews from English-speaking tourists, while negative and neutral sentences were more common among non-English speakers. Additionally, our analysis explored the evaluative dimensions combining commendatory and descriptive aspects, showcasing the richness of language shaping hotel experiences. The study unveiled that concrete attributes such as room and food tend to generate lengthier reviews than abstract attributes like view and service. Moreover, linguistic style matching was observed, as adjacent reviews often exhibited similar content and sentiment. Negative reviews were found to be lengthier, possibly reflecting the tendency of dissatisfied customers to vent their grievances. Overall, our linguistic analysis sheds light on the intricate ways individuals do express their perceptions and experiences in online hotel reviews, emphasizing the role of language in shaping opinions and influencing potential tourists.

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## The impact of WOM (word of mouth) on Buying Behavior

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**Abstract:** This research paper will walk you through the importance of WOM and how it affects buying behavior in general, but the main goal on which the paper focuses on is to empirically find out its impact on the people of North Macedonia. The methodology used in this paper is the quantitative method through questionnaire, where the data was collected online, through social media.

The sample consists of 284 responses and is analyzed with SPSS program. A regression analysis was done to see the impact of WOM consumer behavior on the people of the specific region and the findings of the study show that WOM has a positive impact on buying behavior.

This research paper will firmly contribute in the extension of the literature of Word of Mouth and buying behavior and will additionally have a practical contribution to the marketers and managers to better understand the influence that WOM has on consumers, how important and powerful it is in the field of marketing and how it affects the buying behavior, which will definitely help them increase sales and maintain loyal consumers.

**Keywords:** WOM(word of mouth),buying behavior, consumers ,marketers, experiences

### 1. INTRODUCTION

Considering the world we are living in today, we can certainly encounter the huge influence of other people's experiences, words, impressions or reviews on us. Remarkably, with the increase of the social media use within all the age groups and them inevitably being part of our everyday life, it has to be considered that everything we see or hear online has a great impact on us, willingly or unwillingly. An apparent example of how people's words on a specific topic or even product affect us is when we see someone online sharing a review about something they used and had a positive experience with, we're immediately eager to hear more about it or even want to try it, especially if we're interested in those type of products. Also, vice-versa if we hear someone sharing a negative experience about a product, we tend to remember this information so that we're aware if we want to try it in the future or so on. This, and more situations like this, including not only online reviews but also daily conversations, is where we come across the WOM and its importance on customer behavior. While WOM might seem as a casual conversation to someone, it has actually grown to be a very powerful marketing tool, especially in this digital world, as we tend to believe recommendations from other people way more than an actual commercial or any other type of marketing. Sometimes, we are suspicious of the effects of a product because we know that brands often like to exaggerate the details in the ads they use so we're not pretty sure that ad is telling the truth, whereas, someone telling us the exact things they experienced while using a product seems way more believable to us.

Word of mouth is the oldest method to transmit information (Dellarocas ,2003) and according to Arndt,(1967) is a a communication method that means person to person where they receivesinformation about one product or service. WOM is considered as the most impactful method for decision making for a specific product (Daugherty and Hoffman,2014; Jalilvand and Samiei, 2012; Cheung and Thadani, 2010). Word of mouth can be positive or negative, those customers that had negative experience will spread their word and those that are happy with the product will continue to buy that product and spread positive words (Richins,2009)

In summary, this study tries to analyze if people in North Macedonia wants to tell their personal experience with any product even if they had bad experience or higher expectations for the product. After that the aim of the study is to see if customers's behavior will change after they receive any information and have an impact on their buying behavior.

#### 1.1 Research Question

The research paper will try to analyze the impact that WOM (word of mouth) that can have on their buying behavior.

The study tries to answer this question:

- Does WOM have an impact on Buying Behavior

Here is presented the conceptual framework based on the research objective, where WOM is independent variable and Buying behavior dependent variable.

Fig.1. Research Model



The paper is organized as follows: Abstract, then literature review where other studies and concepts are written, follows with research methodology ,after that results are presented and in the end conclusion is given.

## 2. LITERATURE REVIEW

Many definitions were given by different authors about WOM and WOM is a method of sharing information to other people (Katz and Lazarsfeld ,1964; File et al.,1994; O'Leary and Sheehan ,2008). According to Arndt (1967);Buttle (1998) WOM is a person to person communication method where consumers receives information for a specific product, Singh (1990) said that WOM is telling a negative story to other people and is the oldest way for sharing information (Dellarocas, 2003; Huete-Alcocer, 2017).

Every customer can have different experience, someone can have a positive experience and someone a negative one and even though they will share their experience with others. According to Rosen (2000) those that have negative experience and are dissatisfied with the product will spread their experience to many people than those that had positive experience. Arndt (1967) ; Silverman (2011) and Herr et al.,(1991) pointed out that negative Word of mouth have more impact on buying decision than the positive Word of Mouth. Additionally, WOM is considered as an important form of promotion (Sweeney et al.,).

A bulk of papers have been studied about the impact of WOM on buying behavior. Farooq (2020) investigated the effect of WOM on buying behavior and through linear regression analysis and he showed that WOM affect the consumer buying decision. Ahmad et al., (2014) did a study about the impact of WOM on buying behavior and the study used primary data collected through areas of Karachi city of Pakistan, the sample consisted of 100 respondents and analyzed the data through Frequency distribution and ranking. The results of the study concluded that there is an impact of WOM on consumer decisions from close friends, families and associates. Another study was done by Al-Samydai et al.,(2020) with the goal to investigate the impact of word of mouth on buying behavior of shares in the Amman financial exchange market. The study had 125 clients of the Amman financial exchange market and analyzed with the SPSS. The study revealed that the word of mouth have a significance effect on buying behavior.

Similarly many studies confirmed an impact of WOM on buying behavior (Hossain and Rezvi, 2017;Ahmed and Saleem, 2019; Aslam and Gondal,2011; Lee et al.,2017; Soelasih and Sumani,2021; O'Reilly and Marx ,2011;Richins,1983).

### 2.1. Consumer buying behavior

In this crowded market with many similar products companies should find ways to be always on top with their products and find the best strategies to be ahead the competition. Yakup & Jablonsk (2012); Prabhu, (2020) said that is very crucial to understand the consumer behavior and also factors that lead to that behavior.

Consumer behavior is a broad topic and according to Solomon,(2011) consumer behavior is the process of customer and the buying decision, based on Anderson and Golden (1984) the consumer behavior is the psychological process that consumer will identify their needs and then make a purchase.

Kotler & Keller (2012) a prestigious marketing authors developed a model of decision making process :

- **Problem need recognition** – this phase starts when customers are conscious that they need a product.
- **Information search** – when consumers know that they need a product and start to collect information about that product.

- **Evaluation of alternatives-** here consumers have all products available and start to compare the benefits with other products.
- **Purchase decision** – finally after analysis they decide to buy that product.
- **Post purchase decision-** after they buy a product they can evaluate if they are satisfied or not.

### 3. METHODOLOGY

The main goal of this study was to investigate the impact of WOM on buying behavior. The primary data were collected from 284 respondents . The questionnaire was structured like this: in the first part were questions for demographic data with :gender,age,education,status and other questions were with Likert scale (1 = ‘completely disagree’ and 5 = ‘completely agree’) for the variable WOM and Buying Behavior.

The secondary data also were included in the study collected from books and journals.

In the study Cronbach alpha was used to test the reliability of the results, also Correlations analysis and regression analysis was performed.

### 4. DATA ANALYSIS

Data analysis is given in this section and valuable insights are given. The first test was performed cronbach’s alpha to check the reliability of results and based on the values give we can say that they have reliable results.

Table 1.Cronbach’s alpha results

Variables	Cronbach’s alpha	No.item
WOM	0.584	3
Buying Behavior	0.548	4

#### 4.1 Descriptive statistics

In the Table 1 are presented the demographic information. From the results we can see that 213 (75.0%) are females and 71 males (25.0 %).According the age, to 30 years are 150 (52.8%), 31-40 years are 76 (79.6 %), then 41-50 years are 38 (93.0 %) and over 51 years are 20 (100.0%). Regarding the education 46 (16.2 %) are in High school, 153 (53.9 %) are in Faculty, 63 (22.2 %) are with Master degree and 22 (7.7 %) with Doctoral. The status of work of the sample differ, 167 (58.8 %) are with no work, 37 (13.0%) are students, 22 (7.7%) have private business, and 58 (20.4%) are employed.

Table 2. Demographic data of respondents (284 participants)

Descriptive Statistics			
		Frequency	Percent
Gender	Female	213	75
	Male	71	25
Age	To 30	150	52.8
	31-40	76	79.6
	41-50	38	93.0
	Over 51	20	100.0
Education	High School	46	16.2
	Faculty	153	53.9
	Master	63	22.2
	Doctorate	22	7.7
Status	No job	167	58.8
	Student	37	13.0
	Private Business	22	7.7
	Employed	58	20.4

#### 4.2 Regression Analysis

A regression analysis have been performed to see the relationship of the dependent variable with the independent variable, the results are given in table 3. The R value represents the correlation with 54% and

the R square is 0.292 and adjusted R square is 0.289 that means that the independent variable WOM is related to the dependent variable Buying Behavior by 28%.

Table 3. Regression Analysis

Model Summary						
Model		R	R Square	Adjusted R Square	Std. Error of the Estimate	
1		.540 <sup>a</sup>	0.292	0.289	2.91413	
ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	985.644	1	985.644	116.065	.000 <sup>b</sup>
	Residual	2394.789	282	8.492		
	Total	3380.433	283			

a. Dependent Variable:  
BuyingBehavior

b. Predictors:  
(Constant), WOM

Moreover, the ANOVA analysis is given to see the significance of the model and the results revealed the significance level of 0.000 and the p value is <0.5 we can conclude that the model is significant and there is a significant impact of WOM on buying behavior.

Table 4. Beta coefficients Analysis

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std.Error	Beta		
1	(Constant)	5.413	0.762		7.106	0.000
	WOM	0.691	0.064	0.540	10.773	0.000

a. Dependent Variable:  
BuyingBehavior

In table 4 the beta coefficient is given which indicates the percentage of independent variable that has on the dependent variable. The WOM has the value of R square 0.54 indicating 54% effect on Buying Behavior.

Table.5 Correlation Analysis

Correlations			
		WOM	BuyingBehavior
WOM	Pearson Correlation	1	.540**
	Sig. (2-tailed)		0.000
	N	284	284
BuyingBehavior	Pearson Correlation	.540**	1
	Sig. (2-tailed)	0.000	
	N	284	284

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Correlation analysis was performed in table 5 to see at what extent the two variables are correlated. The results of the analysis show that WOM and Buying Behavior are positively correlated and the value is (0.54\*\*).

## 5 CONCLUSION

Finally, we can say that WOM is an important method of marketing, by having a positive WOM companies can increase their revenues, increase loyalty, gain more market share. Thus, it is very important to have in mind creating always positive experience to customers and making sure to meet their needs.

The purpose of this study was to see the impact of WOM on buying behavior and the study was done with 284 respondents from North Macedonia that were with different age, education, status and the results showed that there is a significant impact of WOM on buying behavior. This study will be useful for marketers to give attention to the word of mouth and the positive experience that will leave to their customers.

As mentioned before the results of the study are in line with other studies where concluded a positive impact of WOM on Buying Behavior (Ahmed and Saleem, 2019; Aslam and Gondal, 2011; Hossain and Rezvi, 2017).

The study will also contribute to the literature gap of this field by also adding empirical results.

Future research would be considered the impact of WOM with the brand experience and brand loyalty on Buying Behavior, so it will be an interesting topic to include more variables.

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## Tarım Sektöründe Dijital Teknolojilerin Rolü Artan Talep Karşısında Ekolojik Dengenin Korunması

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**Özet:** Bu makale, küreselleşme, nüfus artışı, beslenme alışkanlıklarının değişmesi gibi süreçler sonucunda tarım sektöründe üretilen ürünlere olan talebin artması üzerine yapılan bir çalışmadır. Çalışmada dünyada sıralanan yönlerdeki mevcut durum analiz edilmiştir. Makalede akademik makaleler, uluslararası kuruluşların raporları ve diğer çevrimiçi kaynaklardan alınan bilgiler kullanılmıştır. Ayrıca makale, tarım alanının genişlemesinden kaynaklanan ekolojik ve diğer yeni ilişkileri de tanımlamaktadır.

Makalede, bölge nüfusunun istihdamının sağlanması, ekolojik dengenin korunması, gıda güvenliğinin desteklenmesi, ihracat coğrafyasının genişletilmesi, derin işlemenin teşvik edilmesi ve ortak faaliyetin desteklenmesi gibi tarım sektörünün dijitalleşmesini önemli kılan faktörler ele alınmıştır. endüstrinin çeşitli alanları değerlendirilmektedir. Tarım alanında çok yönlü dijitalleşmenin sağlanması için kapsamlı bir yaklaşımın önemi ve sektörler arası etkileşimin güçlendirilmesi için atılabilecek adımlar atıldı.

**Anahtar Kelimeler:** Tarım endüstrisi, dijitalleşme, tarım, ekoloji, küreselleşme

### GİRİŞ

Günümüzde tarım endüstrisi küresel ekonomik sürecin ayrılmaz bir parçası olarak hareket etmektedir. Artan dünya nüfusu ve iklim değişikliği karşısında, gıda güvenliğinin sağlanması ve tarımsal kaynakların etkin yönetimi konuları her geçen gün daha da önem kazanıyor. Modern teknolojinin gelişmesiyle birlikte dijital dönüşüm, tarım sektörü için yeni fırsatlar vaat ediyor. Modern bilgi teknolojilerinin, çeşitli sensörlerin ve veri analitiği gibi diğer dijital çözümlerin uygulanması, tarım sektörünün çeşitli zorluklara karşı verimliliğini, rekabet gücünü ve dayanıklılığını önemli ölçüde artırma yeteneğine sahiptir. Tarım endüstrisinin faaliyet alanı sadece nüfusa gıda sağlamak değil, aynı zamanda ekonomik kalkınmayı desteklemek olarak da değerlendirilmelidir. Dijital teknolojilerin uygulanması üretim süreçlerini iyileştirebilir, bu da ülke ekonomisinin ve bölge nüfusunun ekonomik refahının artmasına katkıda bulunarak sosyo-ekonomik kalkınmayı destekler. Günümüzün tarım sektörü iklim değişikliği, kaynakların verimli kullanımı, değişen tüketici tercihleri ve ürün kalitesi gereksinimleri gibi çeşitli zorluklarla karşı karşıyadır. Dijital dönüşüm, bu zorlukların üstesinden gelmek ve tarım endüstrisini geliştirmek için geniş fırsatlar sunuyor. Küreselleşen dünyada tarım sektöründe dijital teknolojilerin uygulanması, üretilen ürünlerin uluslararası pazarlarda daha rekabetçi olmasını sağlamaktadır. Dijital yeniliklerle zenginleştirilen tarımsal sanayi ürünlerinin ihracatı, ülke ekonomisinin büyümesine katkı sağlamanın yanı sıra küresel konumunu da güçlendiriyor. Makalede gıda ürünlerine olan talebin artmasıyla birlikte tarım sektörünün genişlemesi ve bu genişlemenin getirdiği yeni zorlukların çözümünde dijital çözümlerin rolü araştırılarak önerilerde bulunuldu.

### Araştırma Metodolojisi ve Materyaller

Makalenin hazırlanmasında Birleşmiş Milletler (BM), Hükümetlerarası İklim Değişikliği Paneli (IPCC — Intergovernmental Panel on Climate Change) ve Dünya Bankası raporları dikkate alınmıştır.

Makalede tarım alanının genişlemesinden kaynaklanan çevre ve diğer yeni çağrışımlar anlatılmaktadır. Ortaya çıkan sorunların çözümü için çeşitli devlet kurumlarının ve uluslararası kuruluşların önerileri incelenmiştir. Makalede, ekolojik ve diğer alanlardaki mevcut zorlukların çözümü için dünyada uygulanan başarılı dijital çözümler incelenmiş, makalenin sonuç ve öneriler kısmında alanda ilerleme sağlanmasına yönelik ilgili önerilerde değerlendirilmiştir.

Ayrıca yazar, Amerika Birleşik Devletleri'ne yaptığı bir iş gezisi sırasında bu ülkede tarım sektörünün dijitalleşmesi yönünde yürütülen çalışmalarla ilgili bir çalışma yapmış, çeşitli özel ve devlet kurumlarını ziyaret etmiştir. Yapılan araştırmalara dayanarak makale, bu ülkenin bu alandaki başarılı deneyiminin bir örneğini sundu.

## Tarım Sektöründe Verimliliğin ve Kalitenin Artırılmasında Dijital Teknolojilerin Rolü

Dijital teknolojilerin desteğiyle üretim sürecinin büyük bir aşamasını otomatikleştirmek mümkün. Üretim sürecinin otomasyonu, optimizasyon ve izleme operasyonlarının daha verimli uygulanmasını sağlar. Otomatik yönetim sistemlerinin uygulanması, işletmenin ihtiyaçlarını karşılayacak şekilde su, gübre ve diğer kaynakların optimum düzeyde harcanmasına olanak tanır. Modern dijital sistemler, çiftçilerin sulama ve gübrelemeyi tarlanın her alanının ihtiyaçlarına göre hassas bir şekilde ayarlamasına olanak tanır. Bu teknoloji, toprak nemini, besin seviyelerini ve diğer parametreleri sürekli izleyen sensörler kullanılarak uygulanır. Otomatik kaynak yönetimi sistemleri, su ve gübre tedarikini optimize etmek, kayıpları en aza indirmek ve bitkiler için en uygun koşulları sağlamak için sensörlerden alınan verileri dinamik olarak analiz eder.

Tarım sektörü ülke ekonomisinin itici gücü olarak lokomotif rolünü üstlenmektedir. Tarımsal sanayinin gelişmesi, yeni işlerin yaratılmasına, gelirlerin artmasına ve genel olarak ülke ekonomisinin güçlenmesine yardımcı olur. Tarım sektörünün önemine değinen Cumhurbaşkanı İlham Aliyev, şunları söyledi: "Tarım sektörü bizim için stratejik bir sektördür. Hem ekonomik hem de sosyal bir alandır. Nüfusumuzun yüzde 47'si bölgelerde yaşıyor. Dolayısıyla son yıllarda tarımın ve bölgelerin sosyo-ekonomik kalkınmasına gösterilen özen, hem istihdamın hem de verimliliğin artırılmasına yönelik olup, Azerbaycan hem iç talebi hem de ihracat ürünlerini en üst düzeye çıkarmaktadır."<sup>[1]</sup> Tarım endüstrisinin gelişimi ülkedeki çeşitli sektörler üzerinde karmaşık bir etkiye sahiptir, gıda ve işleme endüstrisi gibi diğer endüstrilerin gelişiminde önemli bir rol oynamakta ve değer zincirlerinin oluşturulması ve girişimciliğin desteklenmesi için yeni fırsatlar yaratmaktadır.

Verimliliği ve verimliliği artırmak için çeşitli teknolojik yenilikler uygulanmaktadır. Bunun bir örneği insansız hava araçlarının tarım alanında uygulanmasıdır. Tarım alanında kullanılan insansız hava araçları, çiftçilerin tarlayı görsel olarak gözlemlemesinin yanı sıra sensörlerden gelen verileri analiz ederek bitki hastalıkları veya nem eksikliği gibi sorunları hızlı bir şekilde tespit etmesine olanak tanıyor. Toprak analizi için dijital haritaların ve sensörlerin kullanılması, çiftçilerin gübre uygulaması için daha doğru haritalar oluşturmasına olanak tanır. Gübrelerin tarlanın seçilen bölümlerinin ihtiyaçlarına göre doğru uygulanması, verimliliğin artmasına ve kaynakların verimli kullanılmasına yardımcı olur. Bu teknoloji aynı zamanda verimli topraklarda aşırı gübreleme nedeniyle verim kaybının da önüne geçiyor.

Tarım sektörünün dijitalleşmesi sadece cihazların değil, aynı zamanda modern yazılımların geliştirilmesini ve kullanılmasını da gerektiriyor. Bu amaçla dijital cihazlardan toplanan verilerin işlenmesinde çeşitli yazılım ve platformlar yaygın olarak kullanılmaktadır. Böylelikle tarım alanında faaliyet gösteren çiftçiler, toplanan verilere dayanarak daha doğru kararlar alma olanağına sahip oluyor. Bu fırsatlar, tarım alanında faaliyet gösteren işletmenin bir bütün olarak daha verimli yönetilmesine katkıda bulunur. Son yıllarda tüketicilerin gıda ürünlerinin kalitesi ve tazeliğine yönelik talepleri arttı.

Fotoğraf 1: "Columbia Fruit Packers"ta uygulanan "Spectrum Master Fruit" yazılımının yazar tarafından çekilmiş fotoğrafı



Modern donanım ve yazılımları kullanarak daha geniş ürün yelpazesi ve daha kaliteli ürünler sunabilen firmalar büyük bir pazar payı elde edebilirler. Bu amaçla tüketiciye sunulan ürünler sıkı bir ayıklama ve kalite testinden geçirilmektedir. Bu durum büyük market zincirlerinden elde edilen ürünlere göre daha kesin bir şekilde kendini göstermektedir. Birkaç yıl öncesine kadar kalite parametreleri çoğunlukla işçiler tarafından fiziksel ve görsel incelemeye dayalı seçici bir yöntemle gerçekleştiriliyordu. Bazı ülkelerde, ham gıda ürünlerinin kalitesinin değerlendirilmesinde el emeği hala önemli bir rol oynamaktadır. Ancak hem iç hem de ihracat pazarlarında tarım ürünlerine olan talep arttıkça, ayıklama sürecinin otomasyonu, gıda üreticilerinin hem kısa hem de uzun

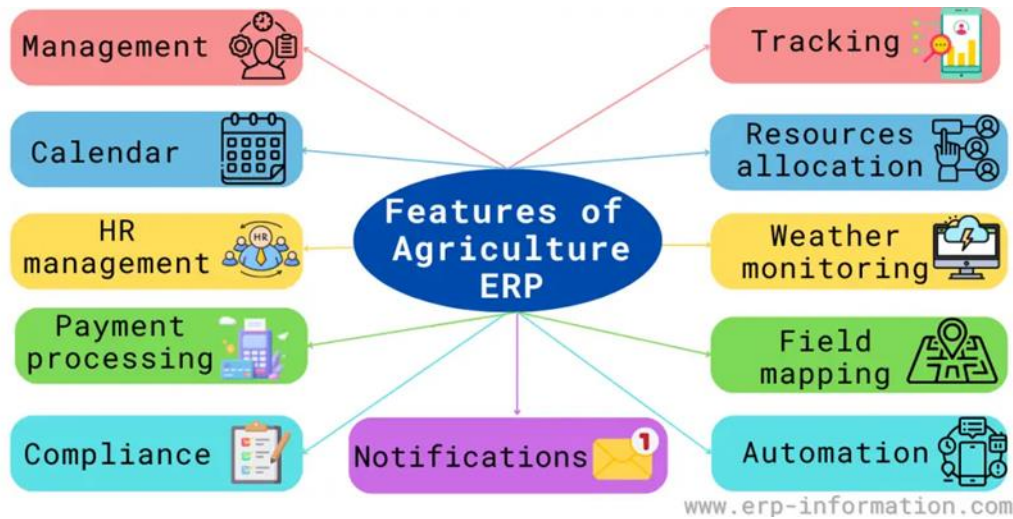


tüketim dönemlerinde yüksek üretkenlik ve tutarlı kalite elde etmeleri için temel bir gereklilik haline geldi. Kalite kontrol ve ayıklama sürecinin otomasyonuna örnek olarak Amerika Birleşik Devletleri Seattle, Washington'da bulunan "Columbia Fruit Packers" firmasının uyguladığı "Spectrum Master Fruit" yazılımından (resim:1) bahsedilebilir. Yazılım, özel sensörler ve kameralardan alınan sonuçlara dayanarak meyve ve sebzelerin hasat sonrası kalitesini değerlendirmek için renk ve diğer görünür özellikleri kullanır.

Yazılım olgunluk yüzdesi, şekli, boyutu, kusur varlığı gibi parametreleri izleyebilmektedir. Manuel ayıklama ve kalite kontrol süreci genellikle seçici bir şekilde gerçekleştirilir. Yazılımda işleme hattına giren her meyve için işlem tam otomatik olarak gerçekleştirilmektedir. Bu, bozulmaları ortadan kaldırır, riskleri en aza indirir ve kalite göstergelerinin en üst düzeyde tutulmasını mümkün kılar. Ayrıca yazılım, her meyvenin mevcut durumunu analiz ederek meyve suyu, konserve veya çiğ tüketime uygun olup olmadığına göre sıralama yeteneğine de sahip.

Tarımsal sanayi sektöründe faaliyet gösteren işletmelerde dijital teknolojilere dayalı yönetim sistemlerinin kurulması, verimliliğin sağlanmasının yanı sıra süreç kontrolünü kolaylaştırmakta ve kayıpları en aza indirmektedir. Aynı zamanda ortaya çıkan dijital çözümler, üretici ile tüketici arasındaki ilişkiyi çeşitlendirerek her iki tarafın da seçeneklerini genişletiyor. Modern dijital çözümler tarım arazilerinin daha verimli kullanılmasını sağlıyor. Bu sistemler, işletmelere finansal işlemlerini otomatikleştirerek şeffaflık ve daha güçlü kontroller sağlar. Bütçeyi etkili bir şekilde planlamanıza, maliyetleri kontrol etmenize ve karı en üst düzeye çıkarmanıza olanak tanır. Modern çözümler, yedek kaynakların envanterini sağlayarak kontrol sürecini kolaylaştırır. Bu yetenekler, işletmelerin kaynak kullanımını optimize etmesine, israfı en aza indirmesine ve genel üretim verimliliğini artırmasına yardımcı olur. Dijital kontrol sistemleri, üretim hacimlerini planlamayı, çalışma programlarını optimize etmeyi ve görev performansını kontrol etmeyi kolaylaştırarak üretim sürecinin daha doğru ve verimli bir şekilde yönetilmesine yardımcı olur. Dijital platformlar büyük miktarda veriyi toplayıp analiz ediyor ve verilere dayalı stratejik karar almayı destekliyor. Pazarlama, lojistik, satış kanalları ve müşteri hizmetleri gibi diğer iş alanlarıyla entegre dijital yönetim sistemleri, farklı alanlar arasında bağlantılar kurarak bütünleşik ve verimli bir iş süreci oluşturur.

Kurumsal Kaynak Planlama (ERP-Kurumsal Kaynak Planlama) platformları bahsi geçen sistemlere örnektir. "ERP", işletmenin çeşitli iş süreçlerini ve fonksiyonlarını tek bir platformda birleştiren bir bilgi sistemidir. Bu dijital sistemler kaynakların, finansın, üretimin, deponun ve kurumsal faaliyetin diğer sektörlerinin yönetimini otomatikleştirmeye ve optimize etmeye olanak tanır.



Kaynak: www.erp-information.com

Tarım sektöründe ekimden hasada kadar üretimin tüm aşamalarının kontrolünün sağlanmasında, üretim sonrası satış, finansman ve lojistikte kilit rol oynamaktadır. "ERP" işletmelerin ekim ve hasat süreçlerini daha verimli yönetmesine destek olur. Ayrıca modern sistem, tohum seçimi, ekim programı, gübre ve pestisit kullanımı da dahil olmak üzere teknik işlemler hakkında doğru bilgiler sağlıyor.

"ERP" sistemleri, işletmenin üretim sürecinin sürekliliğini sağlamak için gerekli kaynakların temininin kontrolünü kolaylaştırarak, stok fazlalığı veya kaynak eksikliğinden kaynaklanan kayıpların önlenmesine yardımcı olur. "ERP" sistemleri endüstriyel ekipman ve makinelerin periyodik bakımlarının planlı bir şekilde yapılmasını mümkün kılar. Bu, ekipmanların ömrünü uzatır ve üretim süreçlerindeki ani duruşları önler. Modern dijital

sistemler gübrelerin, bakım araçlarının ve diğer işletme maliyetlerinin doğru hesaplanmasını sağlar. Bu da kurumsal bütçenin optimize edilmesine ve mali şeffaflığın artırılmasına yardımcı olur. Tarımsal sanayi sektörünün hava koşullarındaki değişikliklere veya pazardaki dalgalanmalara karşı duyarlı olduğu düşünülmektedir. Bu faktörler işletmenin işleyişinde çeşitli riskler oluşturmaktadır. "ERP" sistemleri, hava koşullarını ve piyasadaki güncel dalgalanmaları analiz ederek gelecek döneme yönelik riskleri azaltacak adımların atılmasını destekler. Dijital sistemler, işletmelerin standartları karşılamak için ürün güvenliğini ve kalitesini izlemesine yardımcı olur. Bu, ilgili mevzuat gerekliliklerinin karşılanması ve tüketici ihtiyaçlarının karşılanması açısından önemli bir faktördür.

"ERP" sistemlerinin hayata geçirilmesiyle işletmelerde verimliliğin artmasının yanı sıra doğal kaynakların daha verimli kullanılması da mümkün olabiliyor. Modern bir yaklaşım, gübre ve böcek ilacı kullanımını optimize ederek olumsuz çevresel etkilerin en aza indirilmesine yardımcı olur. Bu açıdan bakıldığında tarımsal sanayi alanında mevcut zorlukların çözümünde başarıya ulaşmak için ERP sistemlerinin yaygın olarak kullanılması gerekmektedir.

### **Tarım sektörünün gelişmesine paralel ortaya çıkan sorunların çözümünde dijital teknolojilerin uygulanma olanakları.**

Son yıllarda dünyada küreselleşme ve nüfus artışı gibi çeşitli süreçler tarım ürünleri üretiminin genişlemesine neden olmuştur. Tarım ürünlerine olan talebin artmasının arka planında farklı yeni dernekler ortaya çıktı. Tarım arazilerinin ekosistem için gerekli görülen diğer alanları da kapsayacak şekilde genişletilmesi veya gübre kullanımının yaygınlaşması nedeniyle tatlı su kaynaklarının ve tarım arazilerinin kirlenmesi buna örnek olarak verilebilir. Bu süreçlerin arka planında, tarım ürünlerine olan talebi karşılamak ve nüfusun gıda güvenliğini sağlamak amacıyla dijital çözümlerin uygulamaları yaygınlaşıyor. Modern dijital çözümler, üretim sürecinin verimliliğinin ve sürekliliğinin artırılmasını destekler. Dijital çözümler, çarpıklıkları ortadan kaldırarak tarım alanında faaliyet gösteren çiftçilerin işini kolaylaştırıyor, tarla verimliliğini artırıyor ve kaynakların verimli kullanılmasını sağlıyor. Tarım alanının genişlemesinden kaynaklanan zorluklar şu şekilde gruplandırılabilir:

**Nüfus artışı.** Dünya nüfusunun hızla artması, tarım ürünlerine olan talebin artmasının temel nedenlerinden biri olarak kabul ediliyor. Birleşmiş Milletler'in (BM) 2022 yılında yayınladığı rapora göre dünya nüfusunun 2050 yılında 9,7 milyara, 2100 yılında ise 10,9 milyara ulaşması bekleniyor. Bu, önümüzdeki 30 yıl içinde dünya nüfusunun yaklaşık 2 milyar kişi artacağı anlamına geliyor. Büyüme esas olarak düşük ve orta gelirli ülkelerde yoğunlaşacak. Genel olarak bu ülkelerdeki nüfusun 2100 yılına kadar %70 oranında artması bekleniyor. Raporda ayrıca nüfus artışıyla birlikte artan gıda talebinin karşılanması için gıda üretiminin 2050 yılına kadar yüzde 60 artması gerektiği vurgulanıyor. Ayrıca üretim sürecinin çevre üzerindeki olumsuz etkisinin azaltılması da önemli bir faktör olarak raporda yer alıyor [2].

**İklim değişikliği.** Son yıllarda meydana gelen iklim değişikliği, tarım ürünlerinin üretimini olumsuz yönde etkileyen temel faktörlerden biri olarak öne çıkıyor. İklim değişikliği tarım ürünlerinin üretimini azalmasına ve fiyatlarının artmasına neden olabiliyor. Hükümetlerarası İklim Değişikliği Paneli'nin (IPCC - Hükümetlerarası İklim Değişikliği Paneli) altıncı değerlendirme raporunda, iklim değişikliğinin halihazırda tarım üzerinde olumsuz etkilerinin olduğu ve bu etkilerin gelecekte artacağı belirtiliyor. Raporda iklim değişikliğinin bazı bölgelerde sıcaklıkların artmasına neden olduğu belirtiliyor. Bu durum, ısıya daha az toleranslı olan bitkilerde verimliliğin azalmasına neden olmuştur. Aynı zamanda, kuraklık, taşkın veya mahsullere zarar verebilecek aşırı sıcaklık değişiklikleriyle sonuçlanan yağış yoğunluğundaki değişiklikler de mahsul verimliliği üzerinde olumsuz bir etkiye sahiptir. Ayrıca deniz seviyesinin yükselmesi tarım arazilerini sular altında bırakabilir ve bu da gıda üretimini azaltabilir. Dünya Bankası, deniz seviyesindeki yükselişin 2100 yılına kadar gıda üretimini %10 oranında azaltabileceğini tahmin ediyor [3]. Deniz seviyeleri yükseldikçe, tuzlu su karaya sızarak bitkileri yetiştirmek için uygunsuz hale geliyor. Aynı zamanda deniz seviyesi yükseldikçe tuzlu su tatlı suya karışabilmekte, bu da tarımsal su kaynaklarının azalmasına ve toprağın tuzlanmasına neden olabilmektedir. Günümüzde Bangladeş, Hollanda ve Tayland gibi ülkelerde deniz seviyesinin yükselmesi sonucu tarım alanlarının zarar görmesi vakaları kendini göstermektedir. Tarım ürünlerine olan talepteki artışın çeşitli alanlarda geniş kapsamlı etkileri bulunmaktadır. Örnek olarak tarım ürünlerinin üretimi için verimli alanların genişletilmesinin bazı bölgelerde ormansızlaşmaya yol açtığını söyleyebiliriz. Ormansızlaşma yalnızca ekosistemleri yok etmekle kalmıyor, aynı zamanda iklim değişikliğini de şiddetlendiriyor.

**Beslenme alışkanlıklarında değişiklik.** Tarım ürünlerine olan talebin artmasında yukarıdakilere ek olarak insanların beslenme alışkanlıklarının yenilenmesinin de etkisi olmuştur. Böylece küreselleşme, dünya ülkeleri arasında teknolojik yeniliklerin çeşitlenmesiyle birlikte insanların yeme alışkanlıklarının da geniş çapta

çeşitlenmesine etki etmiştir. Günümüzde beslenme alışkanlıkları tüm dünyada hızla değişiyor. İnsanlar günlük yaşam tarzlarına göre beslenme seçimleri yapmayı daha çok düşünüyorlar. Bu eğilim özellikle gelişmiş ülkelerde belirgindir. Bu doğrultuda öne çıkan trendlerden biri de "beslenme geçişi" yaklaşımıdır. "Beslenme geçişi" ekonomik gelişme, küreselleşme, kentleşme ve demografik değişimin bir sonucu olarak oluşan bir terimdir. Bu trend et ve süt ürünlerine olan ilginin artması olarak görülüyor. Bu genellikle lif, meyve ve sebze açısından zengin geleneksel diyetlerden daha fazla et, doymuş ve trans yağ, ilave şeker ve işlenmiş gıda içeren diyetlere geçişi içerir. Proteinden zengin beslenme olarak nitelendirilen bu beslenme türü birçok gelişmiş ülkede yaygındır. Küreselleşen dünyada insanların gelirlerindeki artış, yiyecek tercihlerinde de gözden kaçmıyor. Et, kümes hayvanları, balık, yumurta ve süt ürünleri gibi hayvansal ürünler genellikle zenginlik ve statü sembolü olarak görülüyor ve gelir arttıkça bunların tüketimi de artıyor. Bu da hem yerel hem de küresel tarım ürünlerinin üretiminin artmasına neden oluyor. Artan gelir, insanların gıdalara bakış ve yaklaşımlarında değişikliğe neden oluyor, bu da hayvansal kaynaklardan elde edilen protein açısından zengin gıdaların tercihini artırıyor. Bir zamanlar lüks olarak kabul edilen et ve süt ürünleri artık daha erişilebilir hale geliyor; bu da yalnızca tattaki değişiklikleri değil, aynı zamanda yaşam tarzı ve kültürel normlardaki daha geniş değişiklikleri de yansıtıyor. Değişen beslenme ortamının bir sonucu olarak et ve süt ürünlerine yönelik artan talep, tarım sektörünü etkiliyor. Hayvansal proteinin ana kaynağı olan hayvancılık üretimi büyük ölçüde sürekli yem bitkisi tedarikine bağlıdır. Hayvan yemi formülasyonunda mısır, yonca ve soya fasulyesi gibi mahsuller önemli bir rol oynamaktadır. Bu bitkiler hayvanların büyümesi ve gelişmesi için gerekli besinleri sağlayarak et, süt ürünleri ve yumurta üretimine olanak sağlar. Hayvansal ürünlerin tüketimi arttıkça yem bitkilerine olan talep de artmakta, bu da tarım arazilerinin kullanılmasına, gübre tüketimine ve su kaynaklarının daha fazla kullanılmasına yol açmaktadır. Beslenme geçişinin karakteristik bir işareti, hayvanların yetiştirildiği yoğun hayvancılıktır. Kapalı alanlar ve konsantre hayvan besleme işlemleri (CAFO-Konsantre Hayvan Besleme Operasyonu), geniş uygulama alanıyla karakterize edilir. Et ürünlerine yönelik artan talebi karşılamak için büyük miktarlarda yem, su ve diğer kaynaklara ihtiyaç duyulmaktadır.

Hızlı ekonomik gelişmesiyle seçilen Çini "beslenme geçişi" uygulamasında örnek olarak bahs edilebilir. Gelirin artmasıyla birlikte yeme alışkanlıklarında da ciddi bir değişiklik oldu ve et tüketiminde de ciddi bir artış gözlemlendi. Çin'de et tüketimi 1990'dan bu yana dört katına, süt ürünleri tüketimi ise aynı dönemde üç katına çıktı. Tahminler, bu hızlı beslenme geçişinin Çin'in tarım sektörü üzerinde büyük bir baskı oluşturduğunu ve yemlik tahıl talebinin 2030 yılına kadar %50 oranında artmasının beklendiğini gösteriyor. Bu değişim yalnızca bölgedeki tarım ürünlerine olan talebi artırmakla kalmıyor, aynı zamanda Çin'in tarım sektörünü de etkiliyor. küresel ticaret kalıpları [5].

Ayrıca önemli bir ekonomik büyüme yaşayan Hindistan'da süt ürünleri tüketiminde de gözle görülür bir artış yaşanıyor. Süt ve peynir gibi ürünler yalnızca besin içerikleri nedeniyle değil aynı zamanda kültürel önemleri nedeniyle de değerlidir. Süt ürünleriyle zenginleştirilmiş bir diyet geçiş, ekonomik refahla ilişkili değişen yaşam tarzlarını yansıtmaktadır [6].

Değişen gıda alışkanlıklarının sonuçları bireysel tercihlerin ötesine geçiyor ve çevresel sürdürülebilirlik, kaynak yönetimi ve küresel gıda güvenliği gibi daha geniş konuları etkiliyor. Gıda ve Tarım Örgütü (FAO) ve Uluslararası Gıda Politikası Araştırma Enstitüsü (IFPRI) gibi kuruluşlar, bu eğilimleri aktif olarak izliyor ve inceliyor; değişen beslenme biçimleri, hayvancılık üretimi ve yem bitkileri talebi arasındaki karmaşık etkileşimler hakkında kritik bilgiler sağlıyor [7].

Tarım ürünlerine olan talebin hızlı artışına, farklı ülkeler arasındaki ihracat operasyonlarının genişlemesi de eşlik ediyor. Artış çeşitli nedenlerle açıklanmaktadır. Buna küreselleşme, değişen yeme alışkanlıkları ve artan gelirler gibi faktörler de dahildir. Bu büyüme, çiftçilerin ve tarım sektöründe faaliyet gösteren diğer kuruluşların gelirlerini artırarak yeni fırsatların yanı sıra yeni zorluklar da yaratmaktadır. Yenilikçi teknolojilerin tarım sektöründe uygulanmasının, ekosisteme verilen zararın en aza indirilmesi amacıyla tarım ürünlerinin insanlara minimum düzeyde sunulması yönünde yapılan çalışmaların ayrılmaz bir parçası haline getirilerek paralel biçimde geliştirilmesi amaçlanmaktadır. Küreselleşme, tarım ürünleri pazarlarının genişletilmesine yardımcı olmaktadır. Sonuç olarak, farklı ülkelerin ihracatçıları ürünlerinin ihracat coğrafyasını genişletebilmektedir. Bunun sonucunda ihracat hacimleri ve ihracatçıların gelirleri artıyor. Küreselleşme ayrıca ticaret engellerinin azaltılmasına yardımcı olur, tarım ürünlerinin ihracatını kolaylaştırır ve lojistik maliyetlerini düşürür. Ayrıca küreselleşme tarımda ileri teknoloji ve bilginin yayılmasına yardımcı olmaktadır. Bu durum tarımsal üretimde verimliliğin ve verimliliğin artmasına yol açmaktadır. Yukarıdakilere ek olarak, küreselleşmenin tarım sektörü açısından başka zorlukları da vardır. Dolayısıyla sayılan faktörlerin bir sonucu olarak tarımsal üreticiler pazar payı için giderek artan bir rekabetle karşı karşıya kalmaktadır. Bu rekabet ortamında ayakta kalabilmek için piyasa katılımcılarının değişen koşullara uyum sağlamaya ve verimliliklerini artırmaya hazır olmaları

gerekmektedir. Küreselleşme, beslenme alışkanlıklarının değişmesi, dünya nüfusunun ve gelirlerinin artmasıyla birlikte et, süt, yumurta ve diğer hayvansal kökenli tarım ürünlerine olan talep de artıyor. Hızla artan talebi karşılamak için çiftlikler genişliyor ve milyarlarca hayvan yetiştiriliyor. Bazı durumlarda bu genişlemeler, ormanlar ve diğer ekosistemler için hayati öneme sahip alanların pahasına gerçekleşir. Hayvan yemi hazırlamak amacıyla yetiştirilen bitkiler çok geniş alanları kaplamaktadır. Dünyadaki soya fasulyesinin yaklaşık %80'i ve mısırın %35'i hayvan yemi olarak üretiliyor. Soya fasulyesi bitkisi, zengin protein ve amino asit içeriği nedeniyle son yıllarda hayvan yemi için ana protein kaynağı olarak kabul edilmektedir. Aynı zamanda soya fasulyesi ekimi de ormansızlaşmanın nedenleri arasında ön sıralarda yer almaktadır [8].

Tarımsal ürünlerin üretiminin yoğunlaşması sürecinde çoğu durumda aşırı gübre uygulamasına yol açmakta, bu da tatlı su kaynaklarının ve tarım arazilerinin kirlenmesine yol açabilmektedir. Bu kirlilik su kaynaklarına zarar verebilir, içme suyu kaynaklarını ve toprak kaynaklarını kirletebilir. Yem bitkilerine olan talebin artması, küresel tahıl fiyatlarını artırıyor ve bu da hassas bölgelerdeki gıda güvenliğini olumsuz yönde etkileyebiliyor. Yüksek tahıl fiyatları, düşük gelirli bireylerin yeterli gıdaya ulaşmasını zorlaştırarak açlığı ve yetersiz beslenmeyi artırabiliyor. Ormansızlaşmanın iklim değişikliği üzerinde ciddi bir etkisi vardır. Ağaçlar havadaki karbondioksiti azaltmanın yanı sıra su döngüsünü ve sıcaklığı düzenlemek gibi ekosistemde de önemli bir rol oynuyor. Bu da iklim değişikliği tehdidini ağırlaştırıyor, ekosistemleri istikrarsızlaştırıyor ve milyonlarca insanın gıda güvenliğini tehdit ediyor. Ormanlar sayısız fauna ve flora türüne ev sahipliği yapmaktadır. Ormansızlaşma aynı zamanda hayvanları ve bitkileri yok ederek, karmaşık ekolojik ilişkileri bozarak ve ekosistemlerin düzgün çalışma yeteneğini tehlikeye atarak türlerin yok olmasına da yol açmaktadır. Tarım alanının genişlemesi sonucu kesilen ormanlar bazı bölgelerde yerel köylülerin yaşam tarzını olumsuz etkileyebilmektedir. Bazı orman bitki ve meyveleri, dar gelirli ailelere ek gıda veya gelir kaynağı olarak kullanılıyor. Hayvan yemi bitkilerinin yetiştirilmesi nedeniyle ormansızlaşma, bu grup insanların geleneksel yaşam tarzlarını bozarak gıda güvenliğini ve finansal gelirlerini olumsuz yönde etkileyebilir.

Tarım sektöründe faaliyet gösteren büyük firmalar, artan müşteri talebini karşılayabilmek için daha fazla araziye ihtiyaç duymaktadır. Bu, yerel halkın kullandığı arazilerin büyük şirketler tarafından satın alınmasıyla sonuçlanıyor. Bunun sonucunda kırsal kesimde toplumsal eşitsizlik olasılığı artıyor. Görünüşe göre ormansızlaşma artık bir çevre sorunu değil. Araştırmaya göre 2001-2015 yılları arasında 8,2 milyon hektar orman alanı yok edildi ve yerine soya fasulyesi ekildi. Yetiştirilen soya fasulyesi ürününün %37'si kanatlı eti yemi, %20'si ise domuz eti ürünleri için kullanıldı [8]. Dünya Kaynakları Enstitüsü'nün Mart 2021'de yayınladığı bir araştırmaya göre hayvan eti üretimi diğer sektörler göre beş kat daha fazla ormansızlaşmaya neden oluyor. Böylece ormanlık alanlarda yeni çiftlikler kuruluyor ya da yem bitkilerinin yetiştirilmesinde kullanılıyor. 2001 ile 2015 yılları arasında 45,1 milyon hektar alan ormansızlaştırıldı; bu, çoğu endüstriyel üretimden beş kat daha fazladır. İstatistiklere göre 2019 ile 2020 yılları arasında tropik ormanlar %12 oranında azaldı. Azalma nedenleri arasında hayvan eti yetiştiriciliği ve tarım alanlarının genişletilmesi %36 ile ilk sırada yer almaktadır. Şu anda yem bitkilerine olan talebin 2050 yılında 2010 yılına göre %56 daha yüksek olacağı öngörülmüyor. Bu, Hindistan'ın neredeyse iki katı büyüklüğünde, 593 milyon hektarlık ek bir alanın ekimini gerektirecektir. Tarım sektörünün mevcut teknolojik yetenekleri dikkate alındığında bu genişleme, ilave 11 gigaton sera gazı azaltımı anlamına geliyor. Sonuç olarak, küresel ısınmayı güvenli sınırlar içinde tutma yeteneği tehlikeye giriyor. Sorunların aciliyeti, gıda üretimine yaklaşımda köklü bir değişiklik yapılmasını gerektirmektedir [10].

## SONUÇ ve ÖNERİLER

Dijitalleşme tarım sektöründe üretilen malların verimliliğini ve kalitesini artırıyor. Üretim sürecindeki bozulmaları ortadan kaldırarak ürünün maliyetini düşürür. Sonuç olarak, uluslararası pazarlara ihraç edilmek üzere daha rekabetçi tarım ürünleri yetiştirilmektedir. Tarım alanında sürdürülebilecek, uluslararası rekabete uygun fiyat ve kalitede bir ürünün yetiştirilmesi, daha yeni pazarlara erişimin sağlanmasıyla sonuçlanmaktadır. İhracat coğrafyasının genişlemesiyle birlikte yeni pazarlara erişim, tarım endüstrisine ülke ekonomisine daha fazla döviz getirme konusunda ek bir ivme kazandırıyor. Ayrıca tarım sektöründe faaliyet gösteren şirketlerin gelirlerinin artması da onların daha da büyümesini teşvik eden bir faktör oluyor. Genişlemenin bir sonraki aşaması olarak bölgelerde daha fazla kişiye istihdam sağlanmasının yanı sıra işlemenin derinleşmesiyle ekonominin diğer sektörlerinde de ilerleme sağlanması olarak kendini göstermektedir. İyi gelişmiş bir tarım endüstrisi, nüfusa kaliteli ve yeterli gıda sağlayarak ülkenin gıda güvenliğini desteklemektedir. Gelişmiş bir tarım endüstrisi nüfusa gıda sağlar ve ithalata bağımlılığı azaltır. Jeopolitik süreçlere uygun olarak uluslararası piyasalardaki fiyat değişimlerinin etkisini en aza indiriyor, düşük gelirli nüfusun gıda arzına destek oluyor. Bu faktörler gıda tedarikinde istikrar ve bağımsızlığın sağlanmasında kilit rol oynamaktadır.

Tarımsal alanın genişlemesi, ekonomik ve sosyal alanlardaki büyümenin yanı sıra yeni karmaşık zorlukların da önünü açıyor. Tarım ürünlerine olan talebin artmasında insanların beslenme alışkanlıklarının yenilenmesi de etkili oldu. Böylece küreselleşme, farklı bölgelerden farklı ülkelere ürün ihraç etmeyi kolaylaştırmıştır. Bu durum aynı zamanda insanların yeme alışkanlıklarının da geniş çapta çeşitlenmesine etki etmiştir. Günümüzde beslenme alışkanlıkları tüm dünyada hızla değişiyor. İnsanlar günlük yaşam tarzlarına göre beslenme seçimleri yapmayı daha çok düşünüyorlar. Dünyadaki küreselleşme ve nüfus artışı, tarım ürünleri üretiminin genişlemesine neden olmuştur. Artan gıda talebinin karşılanması amacıyla tarım arazilerinin ekosistem için gerekli görülen diğer alanları da kapsayacak şekilde genişletilmesi veya gübre kullanımının yaygınlaştırılması, tatlı su kaynaklarının ve tarım arazilerinin kirlenmesi gibi konular gündeme gelmiştir. Araştırmaya göre 2001-2015 yılları arasında 8,2 milyon hektar orman yok edildi ve yerine soya fasulyesi konuldu. Şu anda yem bitkilerine olan talebin 2050 yılında 2010 yılına göre %56 daha yüksek olacağı öngörülüyor. Bu durum daha geniş alanların ekimini zorunlu kılmaktadır.

Olan bitenin arka planında iklim değişikliği gibi sorunlar daha da belirgin bir şekilde hissediliyor. İklim değişikliği, son yıllarda tarım ürünleri üretiminin artmasıyla birlikte olumsuz bir etki olarak öne çıkıyor. Hükümetlerarası İklim Değişikliği Paneli'nin (IPCC) altıncı değerlendirme raporuna göre, iklim değişikliği halihazırda tarımı olumsuz etkiliyor ve bu etkilerin gelecekte daha da artması bekleniyor. Bu değişiklikler sıcaklıktaki artışla ilgilidir ve sonuçta bitkilerin verimliliğinde azalmaya yol açar. Yağış yoğunluğunun artması veya azalması, kuraklığa, taşkınlara veya aşırı sıcaklık değişikliklerine neden olarak verimliliğin düşmesine neden olur. Yükselen deniz seviyeleri tarımı da tehdit ediyor. Yükselen deniz seviyeleri tarım arazilerinin sular altında kalmasına neden olabilir. Bu da gıda üretiminde azalmaya yol açabilir. Dünya Bankası tahminlerine göre deniz seviyesindeki yükselme, gıda üretimini 2100 yılına kadar %10 oranında azaltabilir. Deniz seviyeleri yükseldikçe karaya tuzlu su sızıyor, bu da onu mahsul yetiştirmek için uygun hale getirmiyor ve aynı zamanda su kaynaklarını tüketiyor.

Tarım sektörünün genişlemesiyle ortaya çıkan yeni zorlukların çözümünde dijital teknolojilerin uygulanması önemlidir. Bunun için hava koşullarının izlenmesi ve tahmin edilmesi amacıyla sensörler ve dijital meteorolojik araçlar yaygın olarak kullanılabilir. Modern çözümler, tarım sektöründe faaliyet gösteren girişimcilerin iklim değişikliklerine hazırlıklı olmalarını ve üretim sürecinin sürekliliğini planlamalarını sağlıyor. Küreselleşme, teknolojik gelişme, kentleşme ve demografik değişimler insanların beslenme alışkanlıklarında da değişikliklere neden oluyor. Bu, et ve süt ürünlerine olan ilginin bir işareti olarak anlaşılan ve "beslenme geçişi" olarak adlandırılan bir eğilimdir. Gelişmiş ülkelerde insanlar, günlük yaşamın gereksinimlerine ve modern çalışma koşullarına göre yiyecek rasyonunun seçimine daha fazla önem vermektedir. Günümüzde lif, meyve ve sebze açısından zengin geleneksel gıdalardan ziyade daha fazla et, doymuş ve trans yağ, ilave şeker ve işlenmiş gıda içeren bir diyet daha fazla tercih edilmektedir. Bu değişimler et ve süt ürünlerine olan talebi hızla arttırmaktadır. Beslenme alışkanlıklarındaki değişim dünya çapında tarım ürünlerine olan talebin artmasına neden oluyor. Bu da bazı zorlukların önünü açıyor. İnsanlar hayvansal ürünlere daha fazla ilgi duydukları tarımsal-endüstriyel çiftlikler genişliyor. Bu durum aynı zamanda yem bitkilerine olan talebi artırmakta ve yoğun hayvan yemi üretimine yol açmaktadır. Bu durumda tarım ürünlerinin entansif ekimi için daha fazla araziye ihtiyaç duyulmaktadır. Entansif hayvancılık çiftliklerinin yaygınlaşmasıyla birlikte çevre üzerindeki olumsuz etkiler de artıyor. Ayrıca hayvan yemi olarak yetiştirilen bitkiler daha fazla gübre ve suya ihtiyaç duyduğundan su kaynaklarının azalmasına ve toprak kirliliğine yol açabilir.

Bahsi geçen sorunların çözümünde modern bir çözüm olarak Nesnelerin İnterneti teknolojisinin kullanılması uygun olabilir. Böylece su kaynaklarının kullanımının bu teknoloji ile takip edilmesi mümkün olmaktadır. Bu teknolojiler su talebini etkili bir şekilde yönetmeye ve su tüketimini azaltmaya yardımcı olur. Ayrıca bitki genetiği ve ürün geliştirmede dijital teknolojilerin kullanılması iklim değişikliğinin sonuçlarının azaltılmasına yardımcı olmaktadır. Modern teknolojilerin desteğiyle iklim değişikliklerine daha dayanıklı bitkiler yetiştirmek mümkün.

Tarım sektöründeki mevcut dijitalleşme hızıyla birlikte ekosistem için gerekli dengeyi sağlamak zor bir süreç haline geliyor. Bu süreçlerin arka planında, tarım ürünlerine olan talebin karşılanması ve ekolojik dengenin yanı sıra nüfusun gıda güvenliğinin sağlanması amacıyla dijital çözüm uygulamalarının yaygınlaştırılması büyük önem taşıyor. Modern dijital çözümler, üretim sürecinin verimliliğinin ve sürekliliğinin artırılmasını destekler. Dijital çözümler, çarpıklıkları ortadan kaldırarak tarım alanında faaliyet gösteren çiftçilerin işini kolaylaştırıyor, tarla verimliliğini artırıyor ve kaynakların verimli kullanılmasını sağlıyor. Dijital teknolojilerin daha yaygın uygulanmasıyla tarımsal sanayi alanında önümüzdeki zorlukların daha kolay çözülmesi ve ekolojik dengenin korunması mümkün oluyor.

Mevcut zorluklar dikkate alındığında tarım sektöründe daha hızlı dijital gelişim için kapsamlı tanıtım ve bilinçlendirme faaliyetlerinin yürütülmesi gerekmektedir. Ayrıca farkındalığı ve daha sağlıklı gıda seçimlerini teşvik eden girişimler, artan gıda talebinin karşılanması ve aynı zamanda ekolojik dengenin korunmasında başarılı sonuçlara ulaşılmasında kilit rol oynuyor. Aynı zamanda modern dijital çözümlerin daha geniş çapta uygulanmasını ve yeni dijital fırsatların keşfedilmesini desteklemek Tarımsal sanayi alanındaki mevcut sorunların çözülmesi büyük önem taşıyor. Modern dijital teknolojilerin yarattığı yeni fırsatlar uygulanarak artan küresel nüfus için daha sürdürülebilir bir gıda sistemi sağlanabilir. Beslenme alışkanlıklarının bitki bazlı protein kaynaklarına kaydırılması, yem bitkilerine olan talebi ve çevresel etkiyi önemli ölçüde azaltabilir.

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## Greek veto: an analysis of Albania's integration process amidst populist trends in the European Union

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**Abstract:** This article delves into the intricate dynamics surrounding the Greek veto on Albania's integration process into the European Union, examining the opportunistic maneuvers of leaders from both nations within the broader context of the proliferating populist sentiments across EU member states. Employing the Albania-Greece dispute as a case study, the research explores the securitization theory in International Relations to elucidate the complexities underlying the veto decision. The study unveils the multifaceted motivations driving the Greek veto and sheds light on the political opportunisms at play in both Greece and Albania. Furthermore, it situates the dispute within the overarching trend of populism sweeping through European Union countries, providing a comprehensive understanding of the socio-political landscape influencing regional decisions. In considering the upcoming elections for the European Parliament, the article concludes that the current momentum, crucial for Albania's integration, risks being squandered. As enlargement may not be prioritized on the EU's agenda, the article emphasizes the urgency of leveraging the existing momentum to advance the integration process. Failing to do so could have long-term implications for both Albania and the European Union, as the geopolitical landscape continues to evolve amidst shifting political tides.

**Key words:** Integration Process, Populism, Securitization, Momentum, Enlargement, Geopolitical Landscape

### 1. Introduction

In the context of the European Union (EU), the veto power of a member country refers to its ability to block certain decisions or initiatives proposed by the EU (The ABC of EU Law). The most common mechanism for veto power in the EU is through the unanimous voting requirement for certain significant decisions. In the EU, important decisions related to issues such as treaty changes, accession of new member states, and certain policy areas require unanimous agreement among all member states. This means that if any single member state chooses to exercise its veto, it can prevent the proposal from being adopted.

When it comes to the integration of new countries into the EU, the process is typically outlined in Article 49 of the Treaty on European Union. Any European country that fulfills the criteria for membership can apply to join the EU. However, the actual accession process involves negotiations between the applicant country and the EU, and the final decision on accession requires the unanimous approval of all existing member states (Article 49 of the Treaty on European Union).

A single member country can use its veto power to block the accession of a candidate country for various reasons. These reasons might include concerns about the candidate country's readiness, compliance with EU standards, or other political considerations. In practical terms, the veto power gives each member state a significant influence over the enlargement process.

Greece vetoed Albania's progress due to the issue of the elected mayor of Himara, Fredi Beleri, a region in the South of Albania with a Greek minority. According to Greece, the essence of the case – Beleri's oath to the municipality council – is about a political-administrative decision; according to Albania, it has to do with the independence of the judiciary. This state clash also degraded into a battle of personal egos.

A typical Balkan anarchy is created where the characters become two opportunists. On the one hand, Greek PM Mitsotakis scores a victory among the Greek electorate: he defends Beleri and challenges the Albanian counterpart - but at the same time conditioning Albania on the path to integration process. The Greek Prime Minister starts the duel with doses of threat and superiority: "Athens will not support the integration of Albania until the Beleri issue is resolved." (Mitsotakis to Rama, Voxnews, December 2008). On the other hand, Rama unfolds his own opportunism in the form of a cocktail where the ingredients are stubbornness and nationalism. He continues the duel with somewhat chivalrous tones: "If you blocked us, I return proud from Brussels" (Rama defies Greece, Top Channel, December 2008).

In fact, opportunism is often used by politicians. But in the case of Mitsotakis there is a paradox: Mitsotakis came to power with a formula to challenge the SYRIZA populists and not to feed (read: to intensify the fear of enlargement) the populists of Europe with savory materials to them. Mitsotakis began even lecturing on how

to defeat anti-establishment populists at the European level. For instance, in an interview on CNN, he declared: “The victory over populism in Greece serves as a lesson for other liberal democracies” (Amanpour, 2023).

This behavior of official Greece is clarified by a representative of SYRIZA who says: “. . . instead of a structured strategy in the Balkans, Greece promotes the policy of Mitsotakis, which gives priority to his micropolitical interests”. (Mitsotakis' policy gives priority to his interests, Bota Sot News. 2023). To reinforce this idea and to illustrate the format of the Greek foreign policy, at the time of the victory of the New Democracy, Feta (2019) says that “If Greece has returned to normality with the victory of the New Democracy . . . , the new normal may in some ways be very similar to the old” (p. 1).

## 2. Literature review

Two main points of securitization in the EU are at the same time two opposites: the tendency for integration and the so-called fatigue from enlargement.

“Expansion fatigue” in the context of the European Union (EU) refers to a perceived weariness or reluctance among some member states and EU institutions regarding the continuous enlargement of the EU by admitting new member countries. The term is often used to describe a situation where there is a sense of exhaustion or hesitation among existing members to support further expansion. (Mayer & Thoenig, 2112; Alfaro, 2017; Ruge, 2021).

The concept of expansion fatigue doesn't mean that the EU has completely abandoned the idea of further enlargement. Instead, it reflects a more cautious and measured approach, with the EU carefully evaluating each candidate's readiness and the potential implications for the union as a whole. The enlargement process continues, but at a pace that considers the challenges and concerns of existing member states.

The EU has experienced significant challenges in integrating new member states, particularly in the aftermath of the Eastern Enlargement in the early 2000s. The integration of diverse economies, legal systems, and political cultures can be complex and requires substantial resources and efforts.

In international relations, securitization is the process of transformation - by state actors - of subjects from ordinary political issues to basic security issues; thus, for certain topics like “expansion fatigue” extraordinary tools are used in the name of security. According to the authors Buzan and Wæver (2003) in “Regions and Powers: The Structure of International Security”, the strongest security discourse in the EU has been the argument that Europe should avoid a return to its past characterized by wars and competition for power; therefore, integration – and expansion – is seen as a necessity. Thus, for Europe, integration is often considered a “lifeboat” (384 – 385).

On the other hand, in recent years, the fear that the spread of populism could fragment Europe has increased (Galston, 2018). This author emphasized that “the rise of populism, mostly right-leaning, is the most important European political development of the 21<sup>st</sup> century. It has eaten into support for traditional center-right parties while dealing a knock-out blow to the center-left. The result is the end of the center-left/center-right duopoly that has dominated European politics since the end of World War II. Party systems throughout Europe have fragmented, and most have shifted toward the right. And the rise of populism has opened the door to increased Russian influence throughout Europe” (p 1).

This approach offers the opposite argument to the above: integration is seen as a threat. Today's populists are mobilizing against integration.

The Western Balkans is a typical case for the strengthening of this discourse. The destabilization in the Balkans (including the wars of the 90s) bring the idea that war on the doorstep of the EU is possible (reinforced today by the war in Ukraine). As Kaplan (2021) says, the Balkans are haunted by the ghosts of the past.

The intersection of veto power, populism, and expansion fatigue within the European Union (EU) reflects a complex dynamic that shapes the bloc's decision-making processes and its approach to enlargement. Veto power, often employed through unanimous voting on crucial matters, grants individual member states significant influence. In the context of expansion, this power allows a single country to block the accession of new members, reflecting concerns about the potential economic, political, and social implications of enlargement. Populist sentiments within member states can further complicate matters, as leaders responsive



to such sentiments may be more inclined to use the veto to cater to nationalist agendas or capitalize on anti-expansion sentiments among their populations (Fossum, 2023).

Expansion fatigue is closely linked to both veto power and populism. The weariness or hesitation among member states towards further enlargement can be fueled by populist movements that emphasize national interests over collective European goals. Populist leaders may tap into public apprehensions about the integration challenges posed by new members, economic strains, or cultural differences. This can align with the reluctance of some member states to support expansion, leading to a convergence of populist narratives and expansion fatigue.

In the EU's decision-making landscape, the use of veto, fueled by populist sentiments and expansion fatigue, creates a delicate balance between maintaining unity and accommodating the diverse interests of member states. The challenge lies in addressing the legitimate concerns of both existing and aspiring members while navigating the broader political landscape shaped by populist forces. Striking this balance is crucial for the EU to sustain its commitment to enlargement, uphold democratic values, and address the evolving geopolitical landscape in a way that benefits the entire union.

### **3. Methodological framework**

This research employs a case study methodology to delve into the intricate dynamics surrounding the Greek veto on Albania's integration process into the European Union. The focus on a specific case, the Albania-Greece dispute, allows for an in-depth analysis of the securitization theory in International Relations. By examining the materials, discourses, and declarations of the Albanian and Greek governments, the study aims to unravel the multifaceted motivations driving the Greek veto. The case study approach provides a nuanced understanding of the interactions between the two nations, offering insights into the political opportunisms at play in both Greece and Albania. Through a detailed examination of this specific case, the research seeks to contribute to broader theoretical discussions on securitization and its impact on the EU's enlargement process.

The research methodology is anchored in the securitization theory in International Relations, providing a conceptual framework to understand the complexities underlying the Greek veto. This theory, developed by the Copenhagen School, examines how certain issues are constructed as security threats, influencing political decision-making. In this context, the study analyzes how the Greek government framed the integration process of Albania as a security concern, leading to the decision to veto. By exploring the securitization process, the research aims to uncover the discourses and narratives that shaped the perception of Albania's integration within the security discourse, shedding light on the strategic considerations driving the Greek veto.

To gather comprehensive data, the research employs a mixed-methods approach. Firstly, an extensive analysis of materials, discourses, and declarations from both the Albanian and Greek governments was conducted. This includes official statements, policy documents, and public speeches that provide insights into the motivations behind the Greek veto. Additionally, semi-structured interviews with 10 experts in foreign policy were conducted. These interviews offered a qualitative dimension to the study, providing expert perspectives on the geopolitical implications, underlying motivations, and the role of populist sentiments in shaping the veto decision. The combination of document analysis and expert interviews ensures a robust and holistic understanding of the factors influencing the integration process in the context of the Greek veto.

The methodological framework incorporates a forward-looking perspective. By analyzing the current momentum and its potential impact on Albania's integration, the study aims to provide insights into the urgency of leveraging existing opportunities for advancing the integration process. It recognizes the potential consequences of failing to prioritize enlargement on the EU's agenda, emphasizing the long-term implications for both Albania and the European Union. This future-oriented approach adds a policy-relevant dimension to the research, offering recommendations based on the findings to navigate the evolving geopolitical landscape amidst shifting political tides in the European Union.

### **4. Findings**

#### *Expansion fatigue*

While expansion fatigue in the European Union refers to a weariness or reluctance among member states and institutions regarding continuous enlargement, the term doesn't imply a complete abandonment of further enlargement, it signifies a cautious and measured approach. The EU evaluates each candidate's readiness,

considering the challenges and concerns of existing member states. The integration of new member states, especially after the Eastern Enlargement, has posed significant challenges, demanding substantial resources and efforts. Expansion fatigue is intricately linked to the cautious approach in integrating new members and reflects a balance between sustaining commitment to enlargement and addressing the complexities arising from diverse economies, legal systems, and political cultures.

#### *Veto power, populism, and the complex EU decision-making landscape*

The intersection of veto power, populism, and expansion fatigue within the EU creates a complex decision-making landscape. Veto power, often exercised through unanimous voting, grants significant influence to individual member states. This power can be wielded to block new member accessions due to concerns about economic, political, and social implications. Populist sentiments further complicate matters, as leaders responsive to these sentiments may use the veto to cater to nationalist agendas or capitalize on anti-expansion sentiments. Striking a balance between maintaining unity and addressing the legitimate concerns of both existing and aspiring members is crucial for the EU to navigate its decision-making processes successfully.

#### *Securitization and populism's impact on EU integration*

Securitization in the EU involves transforming political issues into security matters. The strongest security discourse in the EU revolves around the idea that integration is a necessity to avoid a return to past conflicts. However, the rise of populism, particularly right-leaning, is identified as a significant political development, challenging the traditional center-left/center-right duopoly. Populists, mobilizing against integration, perceive it as a threat. This populist sentiment, coupled with expansion fatigue, intersects with veto power in the EU decision-making processes. Populist leaders, responsive to anti-expansion sentiments, may use the veto to cater to nationalist agendas, complicating the delicate balance required to maintain unity and accommodate diverse member state interests.

#### *Securitization and the Greek veto on Albania's integration*

There are the intricate dynamics surrounding the Greek veto on Albania's integration into the European Union. The Albania-Greece dispute aims to unravel the motivations behind the Greek veto. This case shows how the Greek government framed the integration process as a security concern, influencing the decision to veto. By exploring the securitization process, the study contributes to theoretical discussions on the impact of securitization on the EU's enlargement process, providing a nuanced understanding of the complexities underlying the Greek veto.

#### *Albania as a case Study for EU expansion discourse*

The Balkans, currently in the form of the Western Balkans, exemplify the complex dynamics surrounding EU expansion. The region's history, including the wars of the 90s, contributes to the discourse that war on the EU's doorstep is possible. This perception, reinforced by the ongoing conflict in Ukraine, strengthens the argument for integration as a protective measure. Simultaneously, the Balkans exemplify the challenges, with the ghosts of the past haunting the region. The intersection of veto power, populism, and expansion fatigue is particularly pronounced in the Balkans, shaping the EU's approach to enlargement, and reflecting the broader geopolitical landscape.

#### *The momentum*

The current momentum should be exploited and has a potential impact on Albania's integration. Currently there are some leveraging existing opportunities for advancing the integration process, recognizing the consequences of failing to prioritize enlargement on the EU's agenda. This future-oriented approach adds a policy-relevant dimension to the research, offering recommendations based on the findings to navigate the evolving geopolitical landscape amidst shifting political tides in the European Union. The research not only contributes to academic discussions but also provides actionable insights for policymakers and stakeholders involved in the EU enlargement process.

## **5. Discussion**

The radiography of European populism reveals a complex relationship between EU enlargement policy and populist sentiments, varying across member states. Populist leaders across Europe, from Geert Wilders in the Netherlands to Marine Le Pen in France, consistently criticize the EU's enlargement policy (Casert, 2023). Their opposition centers on concerns related to national identity, immigration, economic challenges, and

sovereignty. Populist leaders exploit nationalist sentiments to garner support and hinder further integration, particularly by opposing the enlargement process (Sertan, 2018). This opposition creates a conflict between those advocating for integration and those preventing it, with the actions of leaders like Mitsotakis serving as ammunition for populists.

The EU has experienced different political phases, with periods of positive momentum toward enlargement. Factors influencing this momentum include the need for stability, security, economic benefits, regional cooperation, and geopolitical considerations such as conflicts in Ukraine, Serbia-Kosovo, and Russia's behavior in Moldova, Georgia, and Armenia. However, the rise of populism, exemplified by leaders like Viktor Orban and Alternative für Deutschland in Germany, has shifted the narrative (Greven, 2016). Populists view integration as a threat, mobilizing against it, and potentially derailing the momentum for enlargement. The Western Balkans, haunted by past conflicts, becomes a focal point in this discourse, amplifying concerns about instability at the EU's doorstep.

In the context of the Greek veto on Albania's integration, the securitization theory provides a robust analytical framework. The study reveals that the Greek government framed Albania's integration as a security concern, employing securitization discourse to influence the veto decision. Materials, discourses, and declarations from both nations were analyzed to unravel the multifaceted motivations behind the Greek veto. Political opportunism was identified as a significant factor, with the study shedding light on the interactions between Greece and Albania. The mixed-methods approach, combining document analysis and expert interviews, provided a comprehensive understanding of the geopolitical implications, underlying motivations, and the role of populism in shaping the veto decision.

Looking ahead to the upcoming European Parliament elections, the study emphasizes the potential sidelining of enlargement on the EU's agenda (A forecast for the 2024 European Parliament elections . . .) The findings underscore the urgency of leveraging the current momentum for Albania's integration, as failure to prioritize enlargement could have long-term implications for both Albania and the EU. The delicate balance between the tendency for integration and enlargement fatigue within the EU poses challenges for navigating the evolving geopolitical landscape amidst the rise of populism. The paper concludes by offering policy-relevant recommendations based on these findings to address the relationship between Albania and Greece in the context of EU's integration process and the complex dynamics surrounding EU enlargement in the face of populist trends and integration fatigue.

The findings presented shed light on the intricate dynamics surrounding EU enlargement, particularly emphasizing the phenomenon of expansion fatigue. The weariness or reluctance among member states and institutions, as discussed above, doesn't indicate a complete rejection of further enlargement but rather underscores a cautious and measured approach. This cautiousness is closely tied to the challenges posed by integrating new members, especially after the Eastern Enlargement, which demands substantial resources and efforts. The Western Balkans exemplify these challenges, with the region's history and ongoing conflicts contributing to the discourse that war on the EU's doorstep is possible.

The intersection of veto power, populism, and expansion fatigue creates a complex decision-making landscape within the EU. Veto power, often used to block new member accessions, reflects concerns about economic, political, and social implications. Populist sentiments further complicate matters, as leaders responsive to these sentiments may use the veto to cater to nationalist agendas or capitalize on anti-expansion sentiments, as is the case of Bulgaria-Northern Macedonia dispute and before Greece-Northern Macedonia dispute. Both Greece and Bulgaria blocked, and the latter is still blocking Northern Macedonia's integration process. This delicate balance between maintaining unity and addressing the legitimate concerns of both existing and aspiring members is crucial for the EU's successful navigation through its decision-making processes (Benter, 2023). The Balkans serve as a poignant example where this intersection is particularly pronounced, shaping the EU's approach to enlargement.

Securitization theory, underpinning the analysis of the Greek veto on Albania's integration, contributes to the broader theoretical discussions on securitization and its impact on the EU's enlargement process. This perspective offers a nuanced understanding of the complexities underlying the Greek veto and adds depth to the theoretical discourse on securitization.

## 6. Recommendations & Conclusion

The European populism reveals a complex relationship between EU enlargement policy and populist sentiments, varying across member states. Populist leaders consistently criticize the EU's enlargement policy, using concerns related to national identity, immigration, economic challenges, and sovereignty as their focal points. To address this, the EU should proactively engage with populist leaders and their concerns, fostering a more inclusive dialogue on the benefits of enlargement. Public outreach campaigns emphasizing the positive aspects of integration, such as economic growth and regional stability, can help counteract the negative narratives propagated by populists. Moreover, efforts should be made to address genuine concerns regarding national identity and sovereignty, perhaps through enhanced communication and collaboration between the EU institutions and member states.

The EU has experienced shifts in political momentum toward enlargement influenced by factors like stability, security, economic benefits, regional cooperation, and geopolitical considerations. However, the rise of populism has altered this narrative, perceiving integration as a threat. The EU needs to recalibrate its communication strategies, emphasizing the positive impact of enlargement on stability and prosperity. Engaging with member states individually to understand and address specific concerns can contribute to a more cooperative approach. Additionally, a renewed focus on regional cooperation and addressing geopolitical challenges in regions like the Balkans is essential to alleviate concerns about instability at the EU's doorstep.

Looking ahead to the European Parliament elections, the study highlights the potential sidelining of enlargement on the EU's agenda. To counteract this, the EU should prioritize enlargement as a key policy area, emphasizing its positive impact on stability, prosperity, and regional cooperation. Efforts should be made to garner support from member states, particularly those affected by expansion fatigue. The EU should consider implementing a flexible approach to enlargement, acknowledging the diverse challenges faced by aspiring members and tailoring the process to address specific concerns. Moreover, a proactive communication strategy targeting the general public, can enhance understanding and support for enlargement, countering the narrative perpetuated by populist leaders.

In the context of the Greek veto on Albania's integration, the findings underscore the need for the EU to be vigilant against the potential weaponization of security concerns in the enlargement process. An increased emphasis on transparency and communication can demystify the securitization discourse, ensuring that security considerations are valid and not exploited for political gains. Additionally, the EU should encourage a collaborative approach between member states to avoid unilateral vetoes, promoting a sense of collective responsibility and commitment to the enlargement process.

Given the intricate dynamics and multifaceted motivations surrounding the Greek veto on Albania's integration, it is crucial for both nations to engage in diplomatic efforts and open channels of dialogue. Diplomatic discussions can help uncover underlying concerns and facilitate mutual understanding. This approach can be particularly effective in addressing the securitization aspects highlighted in the research, providing an opportunity for both Greece and Albania to find common ground and work towards resolving the issues that led to the veto.

The article emphasizes the risk of squandering the current momentum for Albania's integration, especially with the upcoming elections for the European Parliament. It is recommended that Albania, with the support of diplomatic efforts, actively advocates for the prioritization of enlargement on the EU's agenda. This can involve engaging with EU member states and institutions, showcasing the significance of Albania's integration in the broader context of regional stability. By actively participating in shaping the agenda, Albania can work towards ensuring that its integration process is not overlooked amidst other geopolitical considerations, preventing potential long-term implications for both Albania and the European Union.

In conclusion, navigating the complex dynamics of EU enlargement in the face of populism and expansion fatigue requires a multifaceted and adaptive approach. The recommendations outlined emphasize the importance of proactive engagement, transparent communication, regional cooperation, and flexibility in policy implementation. By addressing concerns and fostering a sense of collective responsibility, the EU can maintain its commitment to enlargement while effectively navigating the challenges posed by populist sentiments and expansion fatigue.

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# Emerging Economies and Cryptocurrency Regulation: A Comparative Analysis Of Legislative Approaches In Serbia, Romania, Hungary, Croatia, Albania, Ukraine, Bulgaria, And Moldova

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**Abstract:** Since the emergence of Bitcoin in 2008, cryptocurrencies and their underlying technology did not initially attract significant economic and social interest. However, the accelerated development of the internet has facilitated public access to these new financial tools, increasing interest. Consequently, states and financial institutions have had to consider the impact of cryptocurrencies on the global economic environment and analyze this emerging field with the intention of creating an appropriate legal framework for the current situation. This study investigates the various forms of legislation that can be applied to virtual currencies in certain European countries. Considering that countries with stable economies already have some legal frameworks in place, the study focused on European countries with emerging or developing economies. Therefore, selecting Gross Domestic Product as a selection criterion, countries such as Serbia, Romania, Hungary, Croatia, Albania, Ukraine, Bulgaria, and Moldova were chosen, emphasizing the diversity of legislative approaches in different economic contexts. After establishing the legislation in these countries, the study compared the results, revealing a series of similarities and differences, thus outlining a European position different from that existing in developed countries regarding cryptocurrencies. The study conducted highlights that, although there is an interest from these states towards this field, there is still a notable deficit regarding legislation. The study concludes that although legislation in the virtual currency sector has developed significantly since the appearance of Bitcoin, it remains predominantly focused on the aspect of taxing transaction gains, leaving other important aspects less regulated.

**Keywords:** crypto, bitcoin, tax, fiscality

## 1. Introduction

The advent of cryptocurrencies has brought about a significant transformation in the global financial system, which presents both regulatory challenges and opportunities. In Europe, the various national approaches to cryptocurrency regulation demonstrate the complexity of this field. This paper aims to analyze the different approaches of European countries towards regulating laws concerning cryptocurrencies.

Technological advancement has played and will continue to play a crucial role in the historical development of societies and nations around the world. It has served, continues to serve, and will remain a vital force for the progression of human endeavors, acting as a tool for both personal and institutional liberation, and a driving force behind the ongoing changes in how business is conducted, and economic theories are conceived. (Ionel Jianu, 2011)

Research has emphasized the importance of regulating the crypto sector. For instance, Foley, Karlsen, and Putniņš (2019) highlighted the risks associated with cryptocurrency transactions and their use in illegal activities, stressing the urgent need for regulation.

The advent of digitalization, exemplified by the emergence of electronic funds, alongside the evolving nature of the banking sector, has introduced fresh vulnerabilities for money laundering activities by banks, complicating the efforts of Central Banks and law enforcement agencies to identify and address these infractions promptly. (Herteliu, 2021)

Catalini and Gans (2016) discussed how innovation in blockchain technology can influence the legislative field. Böhme, Christin, Edelman, and Moore (2015) analyzed the intricate relationship between cryptocurrencies, market rules, and user security, highlighting regulatory challenges. Cong (2019) explored the impact of regulations on cryptocurrency market dynamics and pointed out that regulations have an influence on market activity.

## 2. Methodology

Cryptocurrency regulations in Eastern Europe and the Balkans represent a diverse and constantly changing landscape. Our research aims to provide a comprehensive understanding of this regional complexity by analyzing and comparing the regulations of different countries, including Croatia, Serbia, Hungary, Romania,

Moldova, Albania, and Bulgaria. We will focus on legislative, fiscal, and supervisory aspects, collecting data from various sources such as national legislation, government reports, academic articles, and literature reviews.

Using a comparative method, the research will identify common trends and key differences in national legislations, evaluating policies, tax regulations, and supervisory approaches. The qualitative analysis will estimate the impact of these regulations on innovation and financial security, as well as their social and economic impact, such as the influence on the adoption of cryptocurrencies.

We recognize that the cryptocurrency sector is highly volatile and rapidly developing, and that the availability and timeliness of data, as well as differences in the interpretation of laws, may represent limitations to our research.

Based on the collected and analyzed data, we will draw conclusions regarding the current state of cryptocurrency regulation in Eastern Europe and the Balkans.

### **3. Literature Review**

#### **3.1. Croatia**

Mihai Banu (2019) specifies that there is no specific legislation in Croatia apart from the law on the prevention of money laundering and terrorism financing implemented on December 20, 2018.

Directive 108 (2017) introduces for the first time in Croatian legislation the definitions of virtual currency, digital assets, and digital wallet, informing individuals and legal entities about their obligations regarding the prevention of money laundering and terrorism.

The capital gains from the previous year, after deducting capital losses, are subject to a tax rate of 12% (residents of Zagreb are subject to a tax rate of 18%). Before paying taxes, individuals must register in the taxpayers' register, declaring income from abroad. Additionally, mining in Croatia is taxed at a rate of 24%. (Lukas Krainz, 2020)

#### **3.2. Hungary**

On December 20, 2016, the National Bank of Hungary warned Hungarian customers about the use of virtual currencies, emphasizing that this entails numerous risks. These currencies operate in a legally unregulated virtual system, lacking appropriate rules regarding risks, protection, and compensation, which does not ensure sufficient protection for users in case of abuse. (Mihai Banu, 2019).

#### **3.3 Bulgaria**

On February 14, 2018, the National Bank of Bulgaria declared that it joins the position of EU managing an account administrator with respect to the dangers inalienable within the buy and exchanging of virtual monetary forms. The Bulgarian central bank famous that these virtual monetary standards or virtual monetary forms appear extraordinary cost instability giving signals around an unsafe extension of the considered costs and a cost bubble. Concurring to the Bulgarian central bank, shoppers who purchase virtual monetary forms should be mindful that there's a tall chance that they will lose a large sum or indeed all the money contributed. Since 2014, the Bulgarian assess specialists have issued decisions requiring people to pay charges on picks up from the deal of virtual monetary forms, comparable to the assess administration for the deal of budgetary resources. In 2015, a Bulgarian court found that exercises related with buying, offering, and paying with virtual monetary standards are not subject to authorization prerequisites. (Mihai Banu, 2019)

Whereas Bulgarian assess enactment does not direct the assess treatment of cryptocurrencies, agreeing to the non-binding direction of the Bulgarian charge specialists, cryptocurrencies qualify as budgetary resources from a charge viewpoint. Hence, the assessable capital pick up of a characteristic individual inhabitant in Bulgaria gotten from the deal, trade or other transfer of budgetary resources is the sum of benefits gotten within the particular year, reduced by the amount of misfortunes endured within the same year. (Mihai Banu, 2019)

As a common run the show, assessable capital pick up from the deal of cryptocurrencies by person financial specialists is subject to Bulgarian individual pay assess at a level rate of 10%. In case, be that as it may, the

activity is carried out systematically and comprises the most source of pay of the person investor, the picks up gotten from the exchange are burdened as commerce wage at a level rate of 15%. (Redava, 2023)

### **3.4. Romania**

Analyzing the official positions that Romania has taken on this subject through the BNR and MFP, one can observe a reluctance towards this new technology in the financial field. The announcements of the institutions are not banning the use, but rather warning about the dangers and problems they may have. (BNR,2015)

Due to the rapid growth and considerable fluctuations in the prices of most cryptocurrencies in a short time, the National Bank of Romania classifies them, including Bitcoin, as speculative, highly volatile assets with a high degree of risk. (BNR,2015)

To minimize the reputational risk for banking institutions, the National Bank of Romania, in its role as regulatory authority, advises banks to refrain from any involvement with cryptocurrencies. This includes providing services to entities that provide investment or trading services in the field of cryptocurrencies. (BNR,2015)

From a governmental point of view, the MFP does not prohibit the use of cryptocurrencies and specifies that, in the case of operations regarding the bitcoin currency, the Decision of the European Court of Justice will be taken into account in order to apply the VAT regime. (Mihai Banu, 2019)

According to law 227(2015) on the Fiscal Code, with its subsequent amendments and additions, services involving the exchange of traditional currencies and units of the virtual currency bitcoin and vice versa, qualify for VAT exemption. This exemption applies when the services are provided in exchange for an amount representing the margin, defined as the difference between the purchase price and the sale price of the coins. (Mihai Banu, 2019)

### **3.5. Republic of Moldova**

Law 66 (2023) stipulates that starting from July 1, 2023, Moldova prohibits the provision of services related to cryptocurrencies. This measure impacts both legal entities and individuals, explicitly prohibiting activities such as cryptocurrency-to-fiat currency exchanges, cryptocurrency transfers, and participation in any financial services related to them. As a result, a broad spectrum of operations conducted by cryptocurrency platforms becomes unauthorized.

### **3.6. Ukraine**

Currently, there are no detailed procedures for calculating taxes on crypto-assets. Law on Virtual Assets 2074 (2022) refers to legal entities that are subject to a corporate profit tax of 18%, while individuals are subject to an income tax of 18% plus a military tax of 1.5%. The law proposes a specific rate of 6.5% for gains from the sale of virtual currency for individuals and allows for the carryover of losses. Companies may deduct mining expenses under certain conditions, while individuals can only deduct cash purchase expenses. There are no specific documentation requirements for holders of virtual assets, but transactions must be recorded according to accounting records. Crypto-asset exchanges are required to report the income paid, and traders are responsible for declaring and paying the tax on capital gains. (Law 2074,2022)

### **3.7. Serbia**

The Republic of Serbia has established an advantageous legal structure for digital asset taxation, aligning itself with countries like Estonia, Malta, and Cyprus in the digital real estate market sector. This updated tax policy for digital assets was activated on June 29, 2021, under the Digital Property Law (2020), and the rules governing the inheritance and gifting of digital assets have been operational since January 1, 2021.

In Serbia, individuals must remit a 15% tax on the capital gains earned from trading cryptocurrencies, which is determined by the difference between the selling and buying prices. Should the buying price be unverifiable, it is presumed to be zero, thus making the full sale amount subject to taxation. Moreover, obtaining cryptocurrencies via inheritance or as gifts is taxable, with the tax rate varying based on the relationship to the giver or deceased. (Helms,2021)



Under the Digital Assets Law (2020), corporate entities are subject to capital gains tax on the profit made from the disparity between the purchase and sale prices of digital assets. However, exceptions are made for cases where the sale of digital assets occurs as part of routine business operations or when the income generated from these sales is reinvested into the equity of a Serbian resident taxpayer or a Serbian investment fund within the same financial year.

or service providers in the digital assets sector in Serbia, such as trading platforms, exchanges, and providers of custodial wallets, it's mandatory to establish a physical presence within the nation and secure approval from the National Bank of Serbia before operating. Additionally, entities issuing digital assets must produce and make public a detailed white paper. The adherence to these stipulations is monitored by the relevant national regulatory bodies. (Helms,2021)

### **3.8. Albania**

Albania is advancing in the field of cryptocurrency regulation, preparing to impose taxes on the income and profits generated by crypto assets and investments starting in 2023. This initiative is part of a broader effort to integrate the digital economy into the national tax system, reflecting the country's commitment to creating a safe and transparent environment for cryptocurrency transactions. By opening the legislation to public consultation, the Albanian government demonstrates an open and participatory approach to policy formulation, ensuring that the regulations will benefit from widespread consensus and meet the needs of various stakeholders. (Kristina Dosen,2022)

This move follows the adoption of a solid legal framework for activities related to virtual assets, positioning Albania as a regional leader in regulating the cryptocurrency market. The legislation aims not only to stimulate innovation and investment in the crypto sector but also to protect consumers and prevent the misuse of these technologies for money laundering and terrorism financing. (Godfrey Benjamin,2022)

The proposed tax law clarifies how revenues from cryptocurrencies, including profits from trading and mining, will be taxed. Importantly, the law excludes central bank digital currencies from its definition, focusing exclusively on cryptocurrencies and virtual assets. It defines mining as an activity that involves using computing power to confirm transactions and obtain cryptocurrencies, a practice that has until now remained in a legal grey area. (Godfrey Benjamin,2022)

Under the new legislation, revenues obtained from cryptocurrency transactions or mining activities will be considered corporate income if they result from a business activity. If the beneficiaries are individuals, they will be subject to a capital gains tax of 15%. This approach aims to balance the need for innovation and economic growth with financial security and tax compliance. (Kristina Dosen,2022)

Furthermore, the Albanian Parliament has instructed the Financial Supervisory Authority (AFSA) to develop and adopt new cryptocurrency regulations by the end of 2022, marking a decisive step towards strengthening the legal infrastructure for the digital economy. Although crypto trading platforms are allowed to operate legally in Albania, the country does not yet host licensed entities, signaling future opportunities for sector development. (Lubomir Tassev,2022)

## **4.Results and Discussion**

In the Eastern European and Balkan region, the approach towards cryptocurrencies and their regulation varies significantly among different countries, with each adopting specific policies in accordance with their own assessments of the risks and opportunities presented by this emerging technology. A comparative analysis of the situation in countries such as Croatia, Hungary, Bulgaria, Romania, Moldova, Ukraine, Serbia, and Albania reveal both similarities and notable differences in terms of cryptocurrency regulation and taxation.

All the mentioned countries recognize the need to address concerns related to money laundering and terrorism financing in the context of cryptocurrency use. In this regard, most have initiated or are in the process of developing legislation to integrate digital asset transactions into the existing legal framework to prevent these risks. For instance, both Croatia and Romania have made steps in this direction, demonstrating a cautious approach towards the crypto phenomenon.

A major difference between these countries lies in the stage each is at in the process of regulating and taxing cryptocurrencies. Serbia, for example, has already implemented a tax regime for digital assets, while Albania is

preparing to introduce taxes on income generated from crypto assets starting in 2023. In contrast, Hungary and Bulgaria have emphasized the risks associated with cryptocurrencies, without yet establishing a clear framework for their taxation.

A distinctive feature of the legislation proposed in Albania is the clarification of the treatment of cryptocurrency mining activities, setting it apart from other countries where mining may remain in a legally undefined area. Additionally, the income tax rate applied to cryptocurrency gains varies; Serbia imposes a 15% tax on capital gains, while Albania proposes a preferential rate of 6.5% for gains obtained by individuals from the sale of virtual currency.

The Republic of Moldova has adopted a restrictive stance, completely banning the provision of cryptocurrency-related services from July 2023. This radical decision may indicate serious concerns about financial stability and the risks associated with money laundering, reflecting extreme caution in the face of a technology considered potentially destabilizing.

By adopting specific approaches, each country aims to balance the need for innovation and economic growth with ensuring financial security and tax compliance. This diversity reflects not only differences in risk perception but also in strategies for integrating digital assets into the broader economy. Thus, the region presents a complex and dynamic picture of how governments are adapting to the challenges and opportunities presented by cryptocurrencies.

Cryptocurrency regulation significantly impacts the social and economic environment, influencing both the positive aspects and potential challenges accompanying this emerging technology. In a context marked by rapid market growth and widespread adoption, regulations play a crucial role in shaping the financial and social future.

From an economic perspective, regulations can bring stability to the volatile cryptocurrency market by setting safety standards and limiting volatility. Requirements such as Know Your Customer (KYC) and Anti-Money Laundering (AML) measures can reduce the risks associated with using cryptocurrencies for illegal activities, contributing to overall financial security. Furthermore, a clear and favorable regulatory framework can stimulate innovation and economic growth, attracting investments and facilitating the development of blockchain startups, which can lead to new job creation and the development of new technologies and financial services. Regulations can also promote financial integration, offering safe and regulated access to cryptocurrencies for unbanked or underbanked individuals.

Socially, the implementation of stringent regulations can protect consumers from fraud, scams, and other risks. Enhanced education and awareness about cryptocurrencies can help the public understand the potential and risks involved, contributing to a more informed and responsible adoption. Additionally, a well-defined regulatory framework can increase overall confidence in cryptocurrencies, promoting them as legitimate means of payment and investment, and leading to broader acceptance in commercial transactions and daily life.

## **5. Conclusions**

Based on the comparative analysis of the approaches of different countries in Eastern Europe and the Balkans towards the regulation and taxation of cryptocurrencies, several significant conclusions can be drawn that reflect the diversity and complexity of the legislative landscape in this emerging field. These conclusions highlight both the common efforts to address the risks associated with cryptocurrencies and the various strategies adopted to capitalize on their economic potential.

Firstly, it is clear that the majority of countries recognize the need to regulate the cryptocurrency market to prevent money laundering and terrorism financing. In this regard, both the legislative changes proposed in Croatia, Romania and Republic of Moldova, and the warnings issued by the central banks in Hungary and Bulgaria, underline the security concerns that underpin regulatory initiatives.

A second important conclusion is that there is a variety of approaches regarding the stage of implementation of cryptocurrency legislation. Serbia and Albania are examples of countries that have made significant progress in establishing a tax framework for crypto assets, while other states are still assessing the risks and potential regulatory strategies.

A notable difference between the approaches of the analyzed countries is the treatment of cryptocurrency mining activities and legislative clarity in this respect, with Albania providing a specific definition and a tax framework for these activities, unlike other jurisdictions where the status of mining remains less clear.

Furthermore, differences are observed in the proposed or implemented tax rates for incomes generated from crypto assets, ranging from preferential rates for individuals in Albania to a more standardized approach in Serbia. This underscores attempts to balance between fostering innovation and the need to ensure tax compliance.

However, balancing effective regulation with the support of innovation is essential for maximizing the economic and social benefits of cryptocurrencies while minimizing associated risks. Therefore, cryptocurrency regulations are a key factor in shaping the digital future, with the potential to influence both the economic and social environments in profound and varied ways.

For global perspective, there are challenges associated with regulating cryptocurrencies. Overly strict or unclear regulations can inhibit innovation and limit technological and economic development in the blockchain and crypto domains. Moreover, the lack of global consensus on regulations can create difficulties in cross-border transactions and international cooperation.

The cryptocurrency regulation landscape in Eastern Europe and the Balkans is continuously evolving, with each country seeking to adapt its legal framework to the realities and challenges of the digital market. By adopting approaches that vary from strict caution to encouraging innovation, these countries reflect the global dynamics in trying to navigate between the risks and opportunities brought by cryptocurrencies. While some states have made significant strides in regulating this field, others are still in the initial phases of exploration and debate, signaling a period of transformation and adaptation to the new digital economy.

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## Free Economic Zones of the Republic of Moldova: peculiarities, Foreign Direct Investment and European integration

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**Abstract:** The paper highlights the peculiarities and functioning of the Free Economic Zones (FEZ) of the Republic of Moldova through the lens of the European integration process. Thus, FEZs are analyzed in comparison with similar platforms existing globally and in the European Union (EU), their particularities being highlighted – hybrid entities, which combines the particularities and facilities specific to free zones as special customs procedures, established in the European Union in accordance with the Union Customs Code, with the particularities and tax incentives of investment platforms with different names in international practice.

The functionality of FEZs is also analyzed, especially foreign direct investments and their structure. The study highlights, finally, the alignment of the legal framework and the activity of the zones with the *acquis* of the European Union, as part of the European integration process, as well as the difficulties that the Government of the Republic of Moldova faces in this context.

**Key Words:** Free Economic Zones, special customs procedures, state aid, Foreign Direct Investment, European integration.

### Introduction

The Free Economic Zones (FEZs) in the Republic of Moldova were created in the context of the relocation of industrial production and the expansion of investment platforms with special regimes in the emerging economies, that have characterized the world economy at the confluence of the XX-XXI centuries. After the initial establishment of FEZs in the mid-1990s, where local businesses sought to address transitional challenges and enhance competitiveness in the global market through tax and customs incentives, significant progress on these investment platforms commenced following the implementation of a new regulatory framework in 2001.

Against the background of the *premature deindustrialization* (Rodrik, 2016) that marked the economy of the Republic of Moldova, when the share of industry in GDP fell from 40% to 12%, the investment projects in the FEZs were the main factors that supported the industrial sector in the years of growth. After thirty years of operation, the ZELs in the Republic of Moldova face three common challenges shared by all existing SEZs in emerging economies, along with two challenges specific to the Moldovan economy:

- *The sustainable development agenda* - FEZs must contain nationalized commitments of Agenda 2030, implicitly Environmental goals, poverty reduction and inclusion.
- *The new industrial revolution* - the digitization and automation of production associated with Industry 4.0, reduce the importance of low labor cost in determining direct investments in FEZs, where companies from the industrial sector are the main residents.
- *Changes in patterns of international production and Global value Chains (GVCs)* - the overlapping crises, implicitly the war in Ukraine, fuel protectionist and regionalization trends.
- *Macroeconomic Imbalances* – especially labor market imbalances, particularly the shortage of qualified labor, represent a significant challenge in the Republic of Moldova, leading to various market repercussions and exerting pressure on the operations of FEZs and the country's economic growth.
- *The alignment with the European Union acquis*, as part of European integration and the transposition of EU regulations, requires the transformation of FEZs in the Republic of Moldova.

While labor market imbalances are a structural issue affecting the overall economy, this study specifically examines the impact of aligning with the European Union's *acquis* on free economic zones in the Republic of Moldova, despite the broader relevance of common challenges faced by emerging economies.

## Special Economic Zones in international practice: is the European Union different?

Special Economic Zones (SEZs) are designated areas in international practice where governments facilitate various economic activities, particularly industrial production, through tax incentives or infrastructure support. International practice knows a different range of special regimes and their names – free zones, special economic zones, free trade zones, export processing zones, free economic zones, and freeports – while UNCTAD’s data set is based on the most commonly used definition of SEZs, which centres on three key criteria:

- A clearly demarcated geographical area;
- A regulatory regime distinct from the rest of the economy (most often customs and fiscal rules, but potentially covering other relevant regulations, such as foreign ownership rules, access to land or employment rules);
- Infrastructure support (UNCTAD, 2019).

The development of SEZs in the modern period is associated with the free zones created since the 1960s near airports and ports, initially on the European continent and then extended to the rest of the continents. The stagflation of the 1970s in developed economies stimulated the relocation of global production in the 1980s, and SEZs were rapidly expanding into emerging economies, as part of the (neo) mercantile export promotion policies. The simultaneous acceleration of international trade and production in the late 1990s and 2000s, through the rapid growth of global value chains (GVCs) confirms the theoretical assumption that trade and international mobility of production factors are complementary and, equally, has determined the expansion of ZES in the world economy.

According to UNCTAD data, there are approximately 5,400 ZES in the world economy, located in 147 countries. The vast majority of these are created in Asia (Table 1), of which 2543 are located in China (UNCTAD, 2019).

Table 1. Number of SEZs, by region 2019

	<i>Total number of SEZs</i>	<i>Additional SEZs planned</i>
<b>World</b>	<b>5383</b>	<b>507</b>
<b>Developed economies</b>	<b>374</b>	-
Europe	105	-
North America	262	-
<b>Developing economies</b>	<b>4772</b>	<b>502</b>
Asia	4046	419
Africa	237	53
Latin America and the Caribbean	486	24
<b>Transition economies</b>	<b>237</b>	<b>5</b>

Source: UNCTAD (2019), p. 138.

The data in Table 1 indicate the low share of ZES in the developed economies, implicitly the fact that no such investment platforms are planned. Also, UNCTAD data disaggregated by geographical regions and ZES types denote the differences between developed and emerging economies. Thus, if in the emerging economies the largest weight is held by multifunctional ZES, where there are various types of customs regimes and tax facilities for industrial production, then in the developed economies predominate free zones as storage / logistical hubs (Table 2).

Table 2. Distribution of zone types, by region or grouping (%).

	Logistics hub	Multi-activity	Specialized	Innovation-driven
World	8	62	24	5
Developed economies	90	9	1	0
Asia	2	65	26	7
<i>China</i>	<b>1</b>	<b>93</b>	<b>1</b>	<b>6</b>
Africa	1	89	10	0
Latin America and the Caribbean	9	77	13	1

Transition economies	3	34	59	5
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Source: UNCTAD (2019), p. 140.

The European Union (EU) is no different from other developed economies in the part of the SEZ, since there is a relatively small number of ETS relative to the size of the European economy and there is no SEZ in construction/planning. Also, most of the existing SEZs in the EU are free zones/ Logistics hubs, comparable to the data in Table 2, for developed economies. According to data from the European Commission, as referenced in the *Study of the impact of free zones and proposals for guidelines on their future, in light of the European Green Deal* there were 62 active free zones in the European Union as of August 2022 (Table 3). These free zones were established in compliance with the regulations outlined in the EU Customs Code pertaining to free zones.

As per the EU Customs Code, free zones are designated as special storage areas where non-EU goods are exempt from import duties during their storage period within these zones. Consequently, non-Union goods may be stored in the customs territory of the Union without being subject to any of the following: (a) import duty; (b) other charges as provided for under other relevant provisions in force; (c) commercial policy measures (Regulation (EU) No 952/2013).

Table 3. Presence of free zones in the EU27.

Country	Number of free zones
Austria	None
Belgium	None
Bulgaria	3
Croatia	10 (2 of which are inactive)
Cyprus	1 (inactive)
Czech Republic	2
Denmark	1
Estonia	3
Finland	None
France	2 (of which 1 is inactive)
Germany	2
Greece	4
Hungary	1 (inactive)
Ireland	None
Italy	6
Latvia	4
Lithuania	3
Luxembourg	1
Malta	1
Poland	7
Portugal	1
Romania	6
Slovakia	None
Slovenia	1
Spain	8
Sweden	None
The Netherlands	None
<b>Total</b>	<b>62 active free zones</b>

Source: EE (2023), p. 25.

As shown in the Table 3, there are currently active free zones in 18 member states (MSs). Seven MSs do not have a free zone, and two have only one free Zone, which is inactive (Cyprus and Hungary). There is no legitimacy for the establishment of free zones in the EU, once they are created both in the developed Western European states and in the Eastern European states. While maritime ports can be a factor to consider, they do not serve as a determining factor for legitimacy, as evidenced by the absence of free zones in the Netherlands despite their presence in Luxembourg and the Czech Republic.

The data from the European Commission does not specifically address other types of SEZ, such as investment platforms. While there is a lack of comprehensive data on investment platforms with special tax regimes that incentivize investment and industrial production, these types of SEZ have served as instruments of regional development policy in EU countries. The mentioned platforms are predominantly active in the eastern and southern periphery of the European Union, such as the 14 SEZ in Poland, 7 FEZs in Lithuania and 5 SEZs in Latvia (ESPON, 2020).

As a rule, in the European Union these investment platforms are instruments of regional development policy, benefiting from regional state aid schemes (income tax facilities/dividends and/or state subsidies), pursuant to Article 107(3) of the Treaty on the Functioning of the European Union (TFEU) and the Guidelines on regional State aid 2021/C 153/01 (Table 4).

Table 4. SEZs comparative elements.

Topic	Latvia	Lithuania	Poland
Objectives	To attract investments, develop infrastructure and production, create new jobs, and promote export growth and industrial activities.	To encourage the growth of industry and to create jobs in least-developed regions of the country by promoting investments.	To speed up the economic development of the poorest Polish regions by attracting foreign capital and fight structural unemployment.
Territorial coverage	Five designated SEZs between 1,155 and 4,000 hectares of land.	Seven designated FEZs between 47 and 534 hectares of land.	14 regional SEZs covering the whole country with sub-SEZs within them.
Main incentives	- Corporate income tax reduction - Property tax reduction - Tax rebates for labour for some SEZs	- 0% corporate income tax -0% property tax reduction - 0% dividend tax	Tax exemption from -Corporate tax - Personal income tax, - Real estate tax
The role of the state	Financing the incentives. Publicly owned SEZ companies.	Financing the incentives. Privately owned FEZ companies.	Financing the incentives. Publicly owned SEZ companies.
Governance structure	Publicly owned and operated	Blended structure where the government finance the incentives and a private company operates the SEZ.	Publicly owned and operated

Source: ESPON (2020).

Competition rules, implicitly the rules relating to state aid, are another peculiarity of the European Union, including in the case of tax incentives in the SEZ/investment platforms. In this order of ideas, the various forms of State aid existing in the SEZ must be aligned with the provisions of the Treaty on the Functioning of the European Union and the relevant Guidelines on State aid.

### Free Economic Zones of the Republic of Moldova: peculiarities and economic activities

Free Economic Zones (FEZ) of the Republic of Moldova operate in accordance with the provisions of Law no. 440/2001 on Free Economic Zones and other normative acts. Law No 440/2001 regulates the process of creation and functioning of FEZs, which are economically separate parts of the customs zone of the Republic of Moldova, in which local and foreign investors are allowed, on a preferential basis, certain types of entrepreneurial activity. The territory of the free zones is limited by the rest of the country by a safe enclosure. Each FEZ is administered by a separate public body – FEZ Administration – appointed by Government (Law no. 440/2001).



The FEZs are created with the aim of accelerating the socio-economic development of the country and while most production from FEZs is exported, residents can also sell production into the customs territory of the Republic of Moldova. The allowed business activities in the free economic zones are:

- industrial production of goods for export;
- sorting, packaging, labelling and other similar operations for goods in transit in the customs territory of the Republic of Moldova;
- external commercial activities;
- other auxiliary activities required for the above plants (utilities, storage, construction, restoration, etc.).

Firms establishing in FEZs ("residents") benefit from incentives that are spelled out in Law No 440/2001 as well as the Fiscal Code. They include:

- 50% national Corporate Income Tax (CIT) of the income obtained from goods and services exported outside the Republic of Moldova or sold to other FEZ residents;
- CIT exemption for a period of 3 or 5 years depending on the size of investment (at least USD 1 million or USD 5 million);
- VAT and excise duties exemption;
- Preferential customs duties - reduced fees for customs procedures;
- 10 years state guarantee for changes of legislation, while under certain conditions this period may be extended to 20 years (Law no. 440/2001).

Thus, **FEZs** of the Republic of Moldova represent **hybrid entities**, which:

- **combines the particularities and facilities specific to free zones as** special customs procedures, established in the European Union in accordance with the Union Customs Code, established by Regulation (EU) no. 952/2013 (*free zone – special storage regime* (Article 210 UCC), placing goods in storage procedures being exempt from customs duties and commercial policy measures (Regulation (EU) No 952/2013, Article 237 UCC)), such as Muuga Free Zone in Estonia or Free zone of Piraeus in Greece
- **with the particularities and tax incentives of investment platforms** with different names in international practice and EU, such as the Special Economic Zones of Poland and Latvia or the Free Economic Zones of Lithuania.

Based on the existing legal framework, 6 free economic zones (FEZ "Balti", FEZ "Ungheni-Business", FEZ "Export-Business-Chisinau", FEZ "Valkanes", FEZ "Tvardița", FEZ "Taraclia") are have been created and are operating, with 37 sub-zones located throughout the country on a total area of about 440 ha (Table 5).

Table 5. FEZs activity: general data.

	2021	2022	2023
Number of residents	229	240	250
Total investment stock (USD million)	506.3	548.7	588,5
Employment	15.830	15.878	15.946
Production (USD million)	672,9	653,2	692,2

Source: Ministry of Economic Development and Digitalization.

The establishment and expansion of FEZ's activity, especially investment projects in the automotive components industry, determined the intensive growth of the machine and equipment construction sector, marking an average annual growth of over 20% during 2011-2021. Industrial production in FEZ has also boosted exports and economic growth, while resident companies employ a significant part of workers working in the industrial sector. At the same time, the data in Table 5 demonstrate that the dynamics of economic activities in free economic zones was tempered by cyclical factors (overlapping crises and the war in Ukraine), but also by some structural factors, especially labour market imbalances. Over the past three years, there has been a

moderate increase in the number of inhabitants, the stock of investments, and the volume of industrial production.

The trend of slowing down economic activities in FEZs is also reflected in the share of pre-noted investment platforms in the national economy. Thus, data for recent years show that while the share of FEZ employees in total employees in the manufacturing remained relatively stable, around 19%, the contribution of FEZ investments to total private investments decreased from a peak of about 8.2 percent in 2016 to about 3.3 percent in 2022 (Figure 1,2).

Figure 1. The share of FEZ employees in total employees in the manufacturing

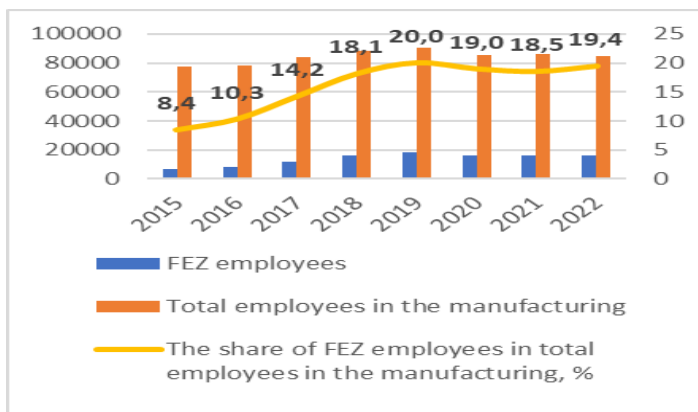
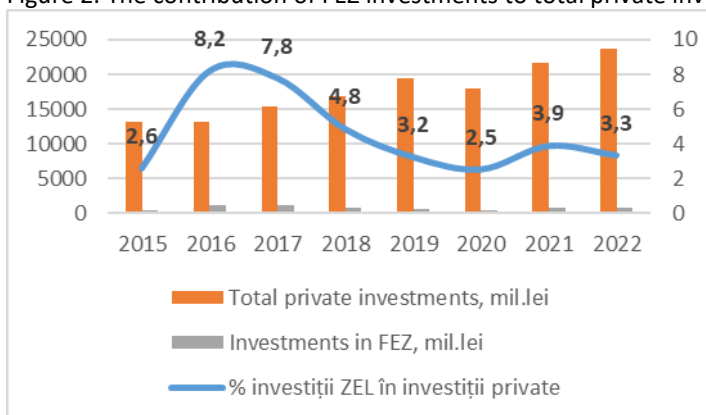


Figure 2. The contribution of FEZ investments to total private investments



Source: National Bureau of Statistics.

Also, the share of industrial production from FEZs in total industrial production decreases, from 22.1% in 2019 to 16.2% in 2022. In the same vein, the share of exports from these investment platforms in total domestic exports decreased from over 35% in 2018 to just under 20% in 2022 (Figure 3,4).

Figure 3. The share of industrial production from FEZs in total industrial production

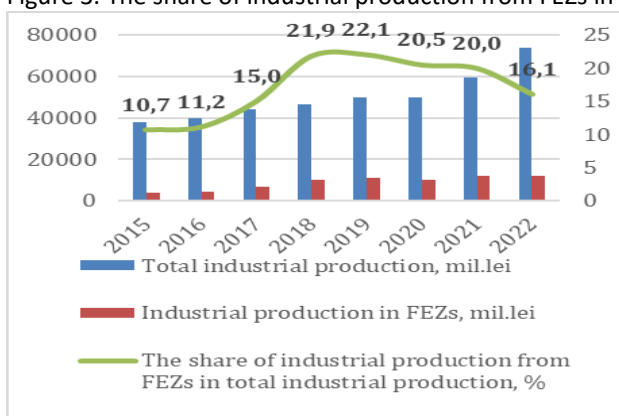
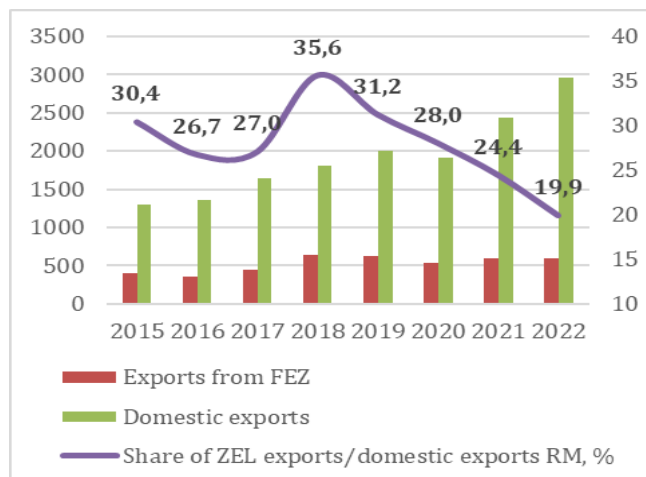


Figure 4. The share of ZEL exports/domestic exports RM, %



It is certain that the FEZs of the Republic of Moldova face a number of challenges. Although the mentioned trends are partly determined by the context, there are also fundamentals of the Moldovan economy and structural imbalances, which explain the figures. Almost a decade ago, the World Bank highlighted in the Country Report on free economic zones (FEZs) in the Republic of Moldova. „ that *“employment growth may have reached its peak and will be slowing in the majority of the registered zones”* (World Bank, 2016). The highest number of employees was recorded in the pre-pandemic year of 2019, followed by a decrease in employees in investment platforms. Both FEZs and the overall economy are affected by structural imbalances, particularly labor shortages, while the process of European integration has significant implications on the activities of FEZs and the economy as a whole.

### Alignment with the acquis of the European Union: customs regime and state aid

Given the specific nature of FEZs in the Republic of Moldova, it is necessary for FEZs to be in accordance with two policies that are under the exclusive competence of the European Union (EU).

- *Common Commercial Policy/Customs Union.* Article 201 of the Moldova-EU Association Agreement provides for approximation of customs legislation Gradual approximation to EU customs legislation and certain international legal instruments shall be carried out in accordance with Annex XXVI to the Agreement (EU, 2014).
- *Competition policy.* The Moldova-EU Association Agreement provides in Article 341 paragraph (3) that, *...the alignment period shall be extended for a maximum period of up to ten years from the date of entry into force of this Agreement on State aid schemes established under the Law of the Republic of Moldova on Free Economic Zones No 440-XV of 27 July 2001 (EU, 2014, art 341(3)).*

The Republic of Moldova has approved a new Customs Code (Customs Code no. 95/2021), in force from January 1, 2024, which partially transposes Regulation (EU) no. 952/2013 and provides, *inter alia*, with reference to free zones:

- *Free zone* – special storage regime (such as warehousing).
- *Processing* – only under special *inward and outward processing regime* (EU, 2014).

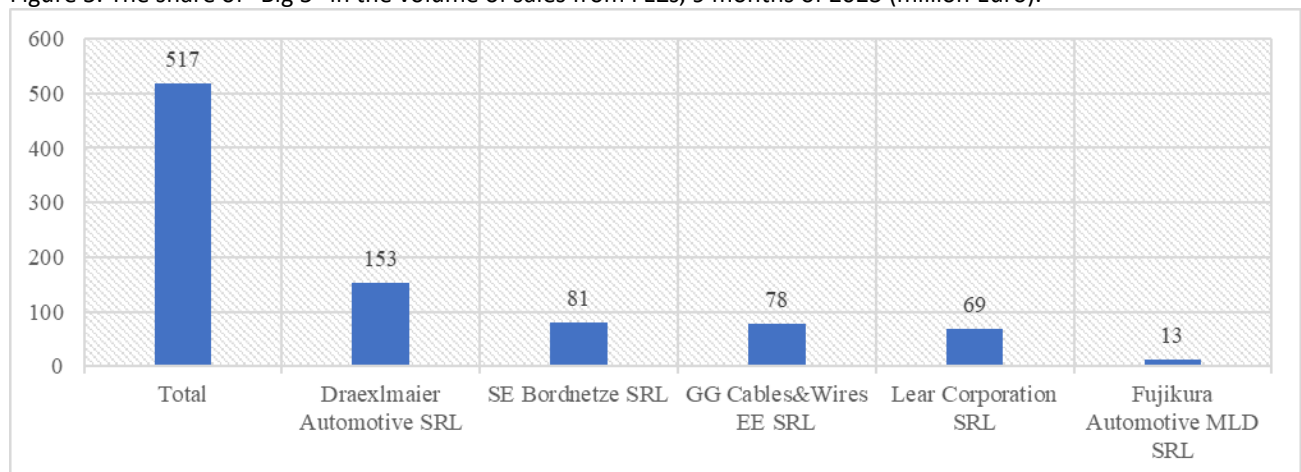
Given that free economic zones (FEZs) in the Republic of Moldova serve not only as storage but also as investment platforms for industrial production, the ongoing production activities necessitate compliance with Customs Code no. 95/2021, requiring placement in inward processing rather than free zones. Residents practicing industrial activities in FEZs, especially companies that are part of global value chains (GVCs), claim that the provisions of the Customs Code no. 95/2021, in the part related to free zones, worsen their conditions of activity, especially Western companies operating in the automotive components sector, implicitly:

- Placing goods under inward processing regime, a time-consuming procedure for items containing hundreds of sub-components;
- The obligation to deposit a bank guarantee, although FEZs are also restricted under the supervision of the Customs Service;

- VAT on the equipment introduced in FEZ – the equipment introduced in FEZ to be used in the process of inward processing on the territory of FEZ is to be declared under temporary admission customs regime (maximum 10 years) with the guarantee of import / import duties (IM4) with payment of import duties.
- Consumables for domestic use (foreign goods) not found in the compensating product, are to be placed under customs import procedure (IM4) with payment of import duties.

In fact, more than 75% of the economic activity and sales in the FEZs of the Republic of Moldova are provided by 5 European/Western companies in the automotive components industry (*Big 5*), which produce in the GVCs "just-in-time" model mainly electrical wiring and components for car seats. Thus, for the first 9 months of 2023, the volume of net sales of FEZ residents amounted to about EUR 517 million, of which EUR 394 million (76%) the volume of net sales of the 5 prenoted companies (Figure 5).

Figure 5. The share of "Big 5" in the volume of sales from FEZs, 9 months of 2023 (million Euro).



Source: MEDD data.

The inward processing regime for car components from Moldovan FEZs will put additional pressure on the "just-in-time" model, after the transit of trucks from Ukraine to the customs territory of the Republic of Moldova increased the waiting time at the Moldovan-Romanian border crossing points. Simultaneously, the production stages in which the "Big 5" companies from the Republic of Moldova are integrated into GVCs can only be relocated to the (south)eastern region of Ukraine in order to maintain competitiveness. This contradicts the strategy of *Nearshoring* in the automotive industry, which is crucial for the revitalization of the European industry to enhance resilience and competitiveness in the XXI century. It is important to note that the disruptions in global value chains and the ongoing conflict in Ukraine have resulted in shortages of semiconductors and automotive components.

Regarding state aid, the European Commission's Report highlights the incentives in the FEZs of the Republic of Moldova have a „*detrimental effect on public finances, the incentives granted to FEZ residents are liable to distort competition and trade, both in the country where the FEZ is present and in neighboring jurisdictions*” (EU, 2023). However, the fiscal incentives in the FEZs of the Republic of Moldova are not different from the incentives existing in other Eastern European states and may be considered to be compatible with the internal market, in accordance with Art. 107 (3) of the Treaty on the Functioning of the European Union (EU, 2007).

The Republic of Moldova is committed to aligning existing state aid incentives with the provisions of the Association Agreement with the EU, rather than abandoning current incentives. In line with this commitment, the Government of the Republic of Moldova is actively engaged in developing a State Aid Scheme for enterprises in Free Economic Zones, in accordance with Article 107(3) of the Treaty on the Functioning of the European Union (TFEU) and Communication from the Commission Guidelines on regional State aid 2021/C 153/01 (EC, 2021). Considering the existing guarantees in art. 13 paragraph (2) of Law no. 440/2001 – *If new laws are adopted that worsen the conditions of activity of residents... residents are entitled during a period of 10 years ... to operate according to the provisions of the laws in force until the date of implementation of the new laws* – The Government of the Republic of Moldova may request a transitional period, but it is important

that the State Aid Scheme respect the maximum State aid intensity - 50% for large enterprises, 60% for medium-sized enterprises and 70% for small enterprises.

In the same vein, the data in the figures below show that the state aid provided to residents of FEZs in the Republic of Moldova has not been and is not able to affect trade with the European Union (EU, 2007, Article 107, paragraph (1)).

Figure 6. External trade of industrial products with the EU countries in 2014-2022, mil.USD

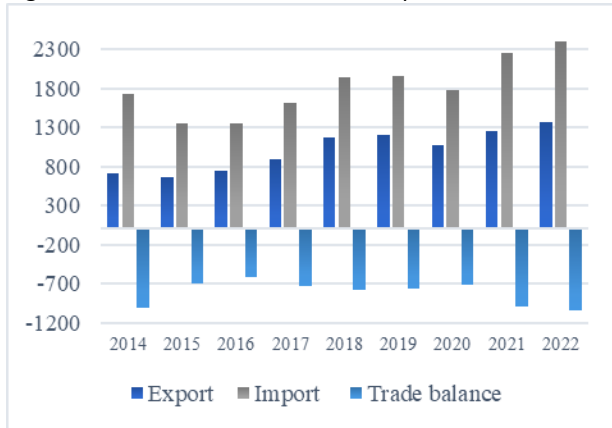
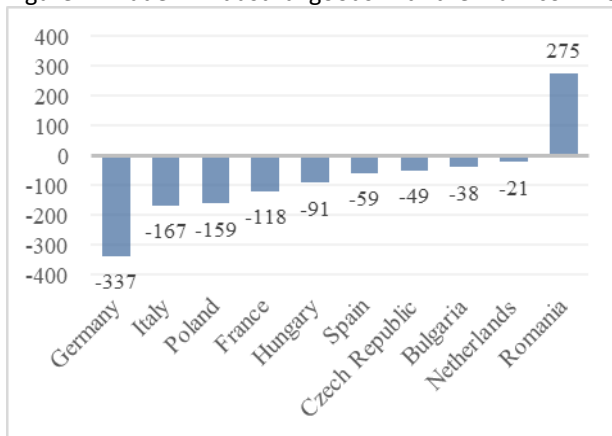


Figure 7. Trade in industrial goods with the main commercial partners in the EU, mil.USD



Source: National Bureau of Statistics.

Therefore, the relatively low numbers pertaining to investment, industrial production, and state aid do not have any impact on trade with the European Union. It is important to note that the Republic of Moldova experiences a trade deficit with the EU as a whole and with each of its major trading partners. Additionally, the positive trade balance that the Republic of Moldova maintains with Romania is not solely attributed to the production of electrical wiring and car seat covers in FEZs.

## CONCLUSIONS

- Special Economic Zones (SEZs) are designated investment areas in which governments facilitate different economic activities. SEZs were established in the latter half of the twentieth century in Western economies. They later expanded to all continents, becoming integral to industrialization and export promotion strategies in emerging economies during the late 1990s and 2000s.
- Since the mid-1990s of the last century, the Republic of Moldova has adopted a model of industrial development and export promotion by implementing special regimes and establishing a regulatory and institutional framework. This initiative led to the creation of 7 investment platforms (FEZs) that integrate the characteristics and advantages of free zones, such as special customs regimes (storage), with the unique features and fiscal incentives of investment platforms aimed at boosting industrial production and exports.

- The development of FEZs in the Republic of Moldova is mainly determined by foreign direct investments in the automotive sector and by several domestic companies in the manufacturing industry that produce mainly for foreign markets. For over two decades, industrial production from free economic zones (FEZs) has driven exports and economic growth, with resident companies playing a significant role in employing workers in the industrial sector. However, the operations of the aforementioned investment platforms present a set of challenges shared by all special economic zones (SEZs), as well as unique challenges specific to them. These challenges include the structural imbalances of the Moldovan economy, particularly the issue of labor shortages, and the need to align with the regulations of the European Union.
- The European Union, along with other developed Euro-Atlantic economies, has a relatively small number of SEZs compared to the size of the European economy, of which most of the existing SEZs in the EU are free zones / Logistics hubs. The relevant acquis of the European Union is complex and quite demanding, implicitly the Customs Code of the European Union and the European legislation on state aid, which is why the specificity of FEZs in the Republic of Moldova requires alignment with two policies that are the exclusive competence of the EU, implicitly: the common commercial policy / Customs Union and competition policy.
- The Government of the Republic of Moldova has transposed Regulation (EU) no. 952/2013 into the new Customs Code and is involved in the development of a State Aid Scheme for enterprises in Free Economic Zones, in accordance with Article 107(3) of the Treaty on the Functioning of the European Union (TFEU) and Communication from the Commission Guidelines on regional State aid 2021/C 153/01, but given the regional context and related crises, as well as the guarantees residents have, they may need to request transitional periods for the transposition and application of the EU acquis.

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## A review of wages, labor costs, and productivity in Greece during the financial crisis period

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### Abstract:

**Introduction:** Greece grappled with an unforeseen financial crisis that unfolded in 2009 and persisted until 2018. Throughout this tumultuous period, the Greek government implemented a series of austerity measures and liberal reforms in a bid to stabilize the faltering economy. Central to these initiatives was the concerted effort to curtail wages and trim labor costs, all aimed at catalyzing heightened productivity across both public and private sectors.

**Objective:** Our study seeks to meticulously evaluate the impact and effectiveness of these austerity measures on the compensation per employee, unit labor costs, and labor productivity of the Greek workforce.

**Methodology:** To accomplish this, we meticulously analyzed data drawn from primary sources including national legislation, reports from the Hellenic Statistical Authority, as well as publications from the European Commission and pertinent scholarly articles.

**Results:** Our comprehensive analysis unveiled a significant adverse impact stemming from the austerity measures enforced during the crisis era. Notably, these measures had a palpable negative repercussion on compensation per employee, unit labor costs, and overall productivity, which intriguingly diverged from the initially envisaged outcomes of bolstering labor productivity. Furthermore, our scrutiny revealed a discernible concomitant decline in compensation per employee, unit labor costs and productivity, suggesting a plausible causal relationship. Additionally, following the cessation of the financial crisis, we observed a correlated uptick in workforce compensation per employee alongside a commensurate rise in productivity.

**Conclusion:** The findings of our study cast doubt on the efficacy of conventional austerity measures and liberal reforms frequently adopted by nations worldwide during periods of financial distress. These revelations beckon a critical reassessment of policy paradigms employed in addressing economic crises, urging for more nuanced and empirically-grounded approaches.

**Keywords:** financial crisis; Greece; wages; compensation per employee; unit labor cost; labor productivity; austerity; reforms; IMF; European Commission;

### 1. Introduction

Since the onset of the economic crisis in late 2009 and the initiation of the first Economic Adjustment Program on May 2nd, 2010, successive Greek governments have been compelled by foreign lenders to continually enact various economic austerity measures in response to the deteriorating Greek economy. Among the objectives of these measures was the reduction of wages and labor costs to bolster productivity across both the private and public sectors (Greece: the third economic adjustment programme, European Council, 2019; The Second Economic Adjustment Programme for Greece Fourth Review, European Commission, 2014; Greece: First Review Under the Stand-By Arrangement, International Monetary Fund, 2010). However, the implementation of these policies was met with widespread social unrest (Pritchard, 2016; Kanellopoulos, 2018), with many economists expressing skepticism about their potential to stimulate the Greek economy (Betz, 2015; Polychroniou, 2013).

Presently, we possess the data necessary to evaluate the effectiveness of these measures by scrutinizing their fundamental characteristics and assessing their impact on compensation per employee, unit labor costs, and labor productivity during the economic crisis period spanning 2010 to 2018 (Hellenic Statistical Authority reports, 2010-2020).

## 2. Methodology

In pursuit of our objectives, we meticulously combed through primary sources, including National Laws, Ministerial Decisions, and Circular Letters published in the Official Government Gazette of the Hellenic Republic. Furthermore, we meticulously examined Decisions of the Court of the State of the Hellenic Republic, alongside reports from esteemed institutions such as the European Commission, European Central Bank (ECB), and International Monetary Fund (IMF). We also delved into reports from the Hellenic Statistical Authority, consulted economic textbooks, and perused economic magazines.

Our comprehensive search extended to reputable databases, including Google Scholar, IDEAS/RePEc, and Scopus, to identify pertinent studies available in Greek, English, or German. Initially, our exploration centered on titles and abstracts, followed by a thorough evaluation of full-text articles. In our article, the term 'wages' is used interchangeably with 'compensation per employee'.

## 3. A review of the Economic Adjustment Programs implemented during the mid-2010 to 2018 period.

### a) Memorandum I (i.e. Memorandum of Economic and Financial Policies).

The initial memorandum for Greece, commonly referred to as 'Memorandum I' or 'Memorandum of Economic and Financial Policies,' was formalized in May 2010 through an agreement among Greece, the European Union, the International Monetary Fund (IMF), and the European Central Bank (ECB). This memorandum constituted a vital component of the economic assistance program for Greece and concluded in March 2012 (Financial assistance to Greece 2010-2018, European Council, 2023; Greece: First Review Under the Stand-By Arrangement, International Monetary Fund, 2010; Law 3845/2010).

The primary commitments outlined in Memorandum I encompassed:

- Economic Adjustments: Enactment of stringent austerity measures entailing reductions in public sector spending, restructuring of the tax system, reform of pensions, and wage cuts within the public sector.
- Structural Reforms: Implementation of comprehensive reforms across diverse sectors, including labor markets, goods and services markets, education, healthcare, and the public sector.
- Financial Support: Provision of financial aid from the European Union, IMF, and ECB to alleviate debt burdens and ensure the operational stability of the state. This assistance materialized in the form of bilateral loans from EU member states, with a total commitment of €80 billion, of which €52.9 billion was disbursed (**Figure 1**).

Figure 1. Financial assistance to Greece between 2010 and 2018 amounted to billions of euros from various international institutions, including the European Union, the International Monetary Fund (IMF), and the European Central Bank (ECB) (source: Infographic - Financial assistance to Greece 2010-2018, European Council, 2022 ).





### **b) Memorandum II (i.e. Technical Memorandum of Understanding).**

The second memorandum for Greece, commonly referred to as 'Memorandum II' or 'Technical Memorandum of Understanding,' was ratified in March 2012 and concluded in June 2015. Serving as an extension and refinement of its predecessor, Memorandum I (2010), Memorandum II introduced significant modifications to Greece's economic framework (The Second Economic Adjustment Programme for Greece Fourth Review, European Commission, 2014; Financial assistance to Greece 2010-2018, European Council, 2023; Law 4046/2012).

The key commitments and measures outlined in Memorandum II comprised:

Further Austerity Measures: Implementation of intensified tax burdens, reductions in pension benefits, public sector wage cuts, and other austerity measures designed to meet fiscal targets.

- Structural Reforms: Introduction of supplementary reforms focusing on labor market dynamics, pension systems, taxation policies, and administrative procedures.
- Privatizations: Continued emphasis on the privatization of state-owned enterprises and assets to foster economic efficiency and attract foreign investment.
- Financial Support: Provision of fresh financial assistance from the European Union, IMF, and ECB to alleviate debt pressures and stabilize the Greek economy. This support was facilitated through loans disbursed by the European Financial Stability Facility (EFSF), with a total commitment of €144.7 billion, of which €141.8 billion was disbursed (**Figure 1**).

### **c) Memorandum III (i.e. Memorandum of Understanding on Specific Economic Policy Conditions).**

The third program, commonly known as 'Memorandum III' or 'Memorandum of Understanding on Specific Economic Policy Conditions,' was signed in August 2015 and concluded in August 2018 (Greece: the third economic adjustment programme, European Council, 2019; Financial assistance to Greece 2010-2018, European Council, 2023; Law 4336/2015). Similar to its predecessors, Memorandum III operated on analogous assumptions and principles, encompassing a wide array of areas such as tax policy, public administration, social protection systems, labor and product market reforms, and financial stability.

The most notable measures introduced under the third memorandum were enacted through Laws 4336/2015, 4387/2016, and 4389/2016. These measures included:

- Reduction of both main and supplementary pensions
- Increase in contributions to healthcare
- Abolition of special allowances
- Value-added tax (VAT) hikes
- Reductions in minimum and disability pensions
- Decrease in lump sums for self-employed individuals and public employees
- Increase in income taxes for legal entities and the agriculture sector
- Augmentation of advance tax payments
- Rise in rent tax
- Escalation of special consumption taxes

Financial assistance was extended in the form of loans from the European Financial Stability Facility (EFSF), with a total commitment of €86 billion, of which €61.9 billion were disbursed (**Figure 1**). In summary, all three economic adjustment programs elicited strong and unprecedented social reactions and protests in Greece (Pritchard, 2016; Kanellopoulos, 2018). The implementation of austerity measures persisted for many years, and even after the official termination of the economic crisis period, the country continued to undergo economic adjustments and structural reforms (Post-Programme Surveillance Report. Greece, European Commission, 2023).

## **3. Examining the effects of austerity measures and reforms on the labor cost, compensation per employee, and productivity of the Greek workforce.**

Analysis of data from the Hellenic Statistical Authority reveals a decline in the wages of dependent employment per employee across all sectors of economic activity during the implementation of economic austerity packages from 2011 to 2018. Specifically, labor productivity exhibited an overall decrease of -4.99%, while compensation

per employee and unit labor cost both showed an overall decrease of -11.18% and -10.47%, respectively (Figure 2 and Figure 3).

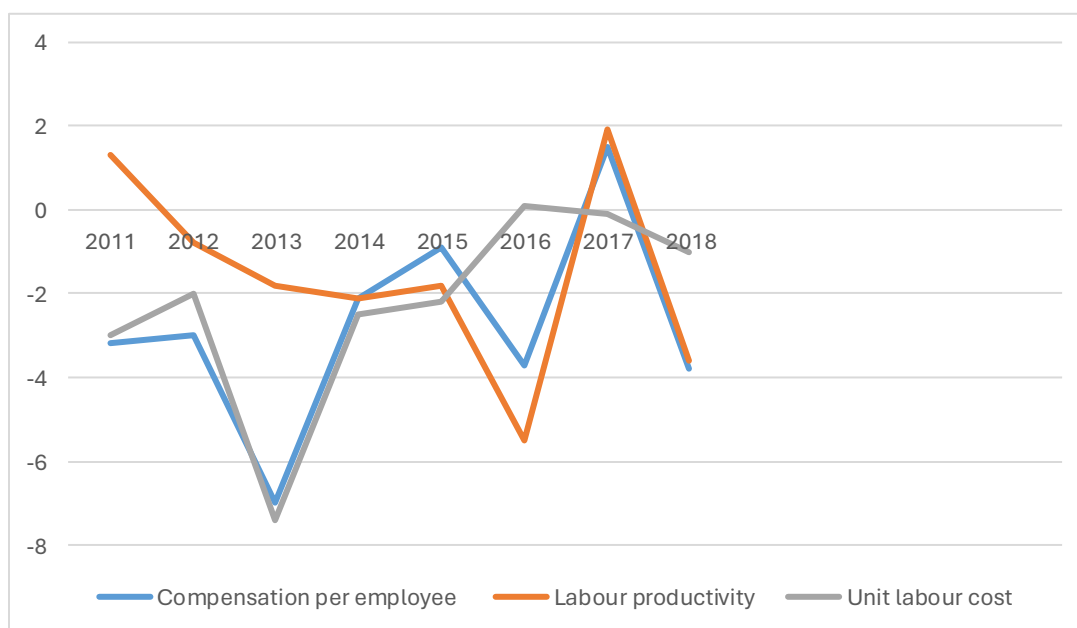
Figure 2. Annual changes of compensation per employee, labor productivity, and unit labor cost between 2011 and 2018 (source: Hellenic Statistical Authority).

variable	2011	2012	2013	2014	2015	2016	2017	2018	Overall change between 2011-2018
Compensation per employee (i.e. wages) <sup>1</sup>	-3,2	-3,0	-7,0	-2,1	-0,9	-3,7	1,5	-3,8	-11.18%
Labour productivity	1,3	-0,8	-1,8	-2,1	-1,8	-5,5	1,9	-3,6	-4.99%
Unit labour cost <sup>2</sup>	-3,0	-2,0	-7,4	-2,6	-2,2	0,1	-0,1	-1,0	-10.47%

<sup>1</sup>The spectrum of economic activities encompasses all sectors.

<sup>2</sup>The unit labor cost (ULC) measures the average labor cost per unit of output and is calculated as a percentage of labor compensation to real growth domestic product (GDP).

Figure 3: Compensation per employee, labor productivity and unit labour cost (annual change) (source: Hellenic Statistical Authority).



#### 4. Discussion

In light of data from the Hellenic Statistical Authority, it becomes evident that wages for dependent employment, encompassing all sectors of economic activity, underwent a decline during the period of memorandum implementation, particularly in 2013 and 2016. Parallel trends were also discerned in labor costs and labor productivity, as indicated by reports from the Hellenic Statistical Authority.

The trajectory of wages holds paramount importance in upholding equilibrium in the official labor market, exerting direct influence on household incomes across various sectors. Furthermore, wages intricately intertwine with workers' productivity, shape the economy's competitiveness, and significantly impact the income and stability of the insurance system, as highlighted in reports by the Foundation for Economic and Industrial Research (2022) and Meager (2011).

It is unmistakable that the execution of austerity measures and reforms led to a notable reduction in labor costs, aligning with initial intentions. However, this was concurrently accompanied by a decrease in labor productivity, contrary to the primary objective. This reality warrants careful consideration when assessing the

overall impact of austerity measures on the Greek economy during the crisis period, probing whether they facilitated the economy's recovery or inflicted irreparable damage.

## 5. Conclusion

We have demonstrated that the economic austerity measures implemented in Greece resulted in a noteworthy decrease in wages. Despite the substantial reduction in labor costs, productivity also declined. The situation in Greece prompts inquiries into the effectiveness of traditional austerity measures and other liberal reforms typically instituted at the national level worldwide during periods of financial crisis.

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# The Concept Of Good Quality Management

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**Abstract:** Quality is a group of characteristics of a certain product that determine its desirability and that can be controlled by the manufacturer to meet certain demands from consumers. From the point of view of the consumer, the degree of fulfillment of the requirements for the necessary features, the price and the "likeability" determine the level of the quality of the product. From the manufacturer's point of view, quality is the structure of the characteristics of the materials used to create a certain product.

While the higher or lower quality compared to the competition is determined as an oscillation from the average value for the same materials used to produce the analyzed product.

**Keywords:** quality, quality management, innovation, product, efficiency, and competition

## Introduction

The ultimate success of the dairy industry product as part of the food industry is assessed based on the degree of its acceptance by consumers in the market. In the paper, due to the frequent and accelerated placement of new/modified products within different industries and markets, the theory of "diffusion of innovations" is analyzed in more detail. The process of acceptance and adoption of the product on the market known as diffusion is actually a process of communicating the innovation through certain channels (mass media and interpersonal channels), over time, between members of a certain social system... For enterprises from the food industry with an emphasis on the dairy industry, when placing new products on the market, it is important to know the basic factors that condition the acceptance of the innovation and accelerate the rate of acceptance.

The diffusion process also implies knowledge and prediction of consumer behavior. In this direction, it is of particular importance to analyze the behavior of different types of consumers when accepting new products.

## 1. Defining quality

Quality is an important factor for the survival, business success and prosperity of enterprises, while the activities of producers are aimed at:<sup>1</sup>

- preventive measures to ensure quality in the entire life cycle of the product, in order to approach the so-called error-free production

and

- gaining confidence among customers that the system of organization in the enterprise provides products with the necessary and constant quality.

Therefore, for the successful inclusion of enterprises from the food industry in the liberalized market and successfully facing the ever stronger and more dynamic competition, it is necessary to ensure:<sup>2</sup>

- higher level of quality;

- maximum flexibility ;

- cost reduction, to the extent of the necessary minimum

and

- shortening the production time.

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<sup>1</sup> Saad, G. H., & Siha S. Managing quality: critical links and a contingency model. Journal of Engineering Design, 2(1), 1140-1162., (2008), p.105

<sup>2</sup> Saad, G. H., & Siha S. Managing quality: critical links and a contingency model. Journal of Engineering Design, 2(1), 1140-1162., (2008), p.106

These are the reasons why companies from the food industry must direct their activities to the following elements:<sup>3</sup>

- in the shortest possible time for the product to appear on the market;
  - to perform on the market with better and better products and services;
  - to constantly make quick changes to products and services;
  - to reduce prices continuously
- and
- to provide all necessary standards and certificates for the product and the organization.

The competitiveness of enterprises in the world's global and liberalized market is determined by the quality of the processes inside the enterprise itself. Quality means the tendency to perform work tasks well the first time and every subsequent time. Quality assurance basically means that quality control is carried out in a systematic way, i.e. that appropriate quality management is established through planning and system activities.<sup>4</sup>

It implies compliance not only in the sphere of production, but also in the course of design (development, installation and servicing), as well as in the assessment and verification of the functioning of the management system (including documentation). This fundamental change in the rules of business, which represents the fourth stage in the evaluation of quality management, is called Total Quality Management (TQM).<sup>5</sup>

## 2. Quality management

The concept of QUALITY MANAGEMENT (QM) implies a system of procedures, protocols and documents that define, plan, manage, control and evaluate all existing and predictable internal and external relations in several types of enterprises from the food industry. QM aims to build, maintain, confirm, and improve the quality of all levels of communication with end users and internal participants in the creation, development and sale of products or services. The concept of quality is placed based on marketing, according to its orientation to the buyer, since today the buyer determines the quality, not the manufacturer.

In the past, quality management has only applied to manufacturing food companies, and now, the principles of quality management (QM) also apply to service activities. Unlike before when production, productivity and the price of the product were critical factors for the success of an organization, Nowadays, innovation skills requirements, uniqueness, learning ability, well-designed products and service programs, flexible adaptation of variable market conditions and customer demands are the highest requirements of quality standards for a modern organization. <sup>6</sup>

In essence, quality management refers to the general management of different processes in food sector companies, in order to ensure value control and minimum errors at each stage of work, regardless of the activity or business activities of an organisation.<sup>7</sup> This requires a more decentralised approach to governance throughout the work processes, as opposed to the traditional notion of management, where leaders are responsible for all decisions, and employees simply follow politics and rules.

### 2.1. Process approach - a condition for connecting. business processes in food industry companies

The desired results can be effectively achieved if the management of the appropriate activities and resources of activities in the food industry takes place as a process. Food companies are generally structured in functions

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<sup>3</sup> Monroe, D. J. Analyzing value stream. Total Quality Management, 45(1), 50, (2006), p.211

<sup>4</sup> Saad, G. H., & Siha S. Managing quality: critical links and a contingency model. Journal of Engineering Design, 2(1), 1140-1162., (2008), p106

<sup>5</sup> Monroe, D. J. Analyzing value stream. Total Quality Management, 45(1), 50, (2006), p.212

<sup>6</sup> Monroe, D. J. Analyzing value stream. Total Quality Management, 45(1), 50, (2006), p.213

<sup>7</sup> Monroe, D. J. Analyzing value stream. Total Quality Management, 45(1), 50, (2006), p.214

that need to be related to co-processes, and products and services arise from all processes. In this regard, the following definitions are accepted:<sup>8</sup>

- **The process** is a set of internally related resources and activities

which transform inputs into value-added outputs.

- **The main business process** turns market opportunities into

financial flow and generate sourcing and

- **Auxiliary processes** are responsible for maintaining the effectiveness of the main process.

The process at the center of the diagram is the main process. The surrounding processes are auxiliary and provide information about the main process, in order to obtain the planned results. All these interconnected processes constitute a quality management system (QMS). The exit of one process becomes the entry of another process. Inputs and outputs can be grouped into four general categories: products, services, resources (people, money, energy and materials) and information. In doing so, food industry companies must identify and manage major business and auxiliary processes within quality management systems.<sup>9</sup>

This means that the process approach is a management strategy, using interaction between the processes identified, and inputs and outputs connect all processes together in this process approach. In short, the quality management system is composed of many processes, and these processes are interconnected with the help of very input-output relations.<sup>10</sup> These input-output relationships are converted into a loose network of processes into an integrated system. Without such input-output relations, they would not have an integrated quality management system in the food industry.

Therefore, quality management is a systemic way of managing processes, a set of activities and actions that affect the quality of products, services, work in food companies and the execution of business processes.<sup>11</sup> Hence today, the competitiveness of the world market is determined by the quality of processes, inside food industry companies.

## 2.2. Quality management systems

The introduction of quality management systems in food industry companies' conditions for a continued improvement in its management, increasing competitiveness, increasing efficiency and profitability. Quality management systems in the food industry have clear procedures, error minimization, reduction of production time, better motivation of all employees, better communication and awareness, image enhancement, product security and safety, better management of human potential and customer orientation.

This process is a very responsible obligation and a prerequisite for all those food companies that should implement and implement some of the international standards (ISO, HACCP), or form part of an international consortium where corporate governance is practiced. Management systems based on ISO standards, Managing total quality (TQM), Six Sigma, Lean Production, Lean Six Sigma, Lean Six Sigma are all about different ways to achieve goals, such as: meeting buyers' needs, eliminating losses and achieving savings.<sup>12</sup>

Each of the systems mentioned in focus has a different goal, the achievement of which determines the characteristics of the system in the food industry.

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<sup>8</sup> Monroe, D. J. Analyzing value stream. *Total Quality Management*, 45(1), 50, (2006), p.216

<sup>9</sup> Saad, G. H., & Siha S. Managing quality: critical links and a contingency model. *Journal of Engineering Design*, 2(1), 1140-1162., (2008), p108

<sup>10</sup> Mukhopadhyay, A. R. Estimation of cost of quality in an Indian textile industry for reducing cost of non-conformance. *Total Quality Management*, 15(2), (2004), p. 158

<sup>11</sup> Saad, G. H., & Siha S. Managing quality: critical links and a contingency model. *Journal of Engineering Design*, 2(1), 1140-1162., (2008), p109

<sup>12</sup> Mukhopadhyay, A. R. Estimation of cost of quality in an Indian textile industry for reducing cost of non-conformance. *Total Quality Management*, 15(2), (2004), p.159

### 3. Standardization and Certification, standard implementation process for food industry companies

Standardization is an activity to establish provisions (rules) for common and reuse, which relate to real or potential problems, in order to achieve an optimal degree of order in the food industry.<sup>13</sup> A number of definitions are associated with the term standardization. According to one, standardization is a set of coordinated activities to adopt standards and related documents. According to others, standardization is a process of creating rules for systematically organised access to special activity that benefits all interested parties and their co-operation, especially for optimal improvement of the overall efficiency of food companies.

Standardization is an activity in all business areas in food companies aimed at increasing efficiency through their unification and simplification. Standardization may have one or more goals that allow products, processes and services to comply with their purpose. The result of standardization is standards, which are official documents.

The standard is based on the following principles:<sup>14</sup>

- voluntary participation of all parties concerned in the process of the adoption of standards;
- voluntary application of standards;
- harmonisation of the views of all parties concerned with regard to the technical content of the standards, reached by consensus;
- public and transparency of decisions on standard-making;
- mutual harmonisation of standards and
- achieving optimal benefits for society as a whole

The standard itself requires each company to check internally (internally) to determine whether it manages its processes in an appropriate and efficient manner and to confirm that it fully controls its activities. In addition, food industry companies can invite or enable their customers to check their management system and make sure their company is safe and able to deliver the requested product or service, which fully meets their requirements.<sup>15</sup>

Finally, food industry companies are also checked by an independently accredited certification body, which will determine compliance with ISO standards. This type of verification has become almost necessary, as the market gives the utmost importance to the certificate and evidence of the credibility of companies by independent institutions. This is particularly useful as a business reference between companies and customers who are geographically remote, whose secondary checks become complicated and expensive for companies.

Certification is a process of determining whether a product, service, company or individual meets the requirements of the relevant standards.<sup>16</sup> It ends with an official certificate of compliance/ compliance and entry of the certificate holder in the relevant register. The certificate is a written guarantee issued by an independently accredited certification body, issued after verification to establish that the specific management system, product or service complies with the requirements laid down in the relevant standard.<sup>17</sup> In certification, it is important to note that, in accordance with the The highest management of companies decides to determine the certification range, i.e. decide whether to certify all processes within companies in the food industry or only part of them, in one, more or all locations of companies in the food industry.

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<sup>13</sup> Klefsjo, B. Bjame, B., & Rickard, G. Quality management and business excellence, Research, 3(1), 59-76., (2008), p. 245

<sup>14</sup> Mukhopadhyay, A. R. Estimation of cost of quality in an Indian textile industry for reducing cost of non-conformance. Total Quality Management, 15(2), (2004), p.160

<sup>15</sup> Klefsjo, B. Bjame, B., & Rickard, G. Quality management and business excellence, Research, 3(1), 59-76., (2008), p. 246

<sup>16</sup> Klefsjo, B. Bjame, B., & Rickard, G. Quality management and business excellence, Research, 3(1), 59-76., (2008), p. 247

<sup>17</sup> Mukhopadhyay, A. R. Estimation of cost of quality in an Indian textile industry for reducing cost of non-conformance. Total Quality Management, 15(2), (2004), p.162

Certification of only part of the processes does not mean that other processes do not meet the requirements of the relevant standards. On the contrary, companies may and should endeavour to comply with the requirements of the standard so that there is no potential possibility of jeopardising certified processes, and thus there is a risk of withdrawing the certificate issued.

### **3.1. Implementation of ISO standard in the food industry**

It is a general practice for companies from the food industry that want to obtain a certificate for any management standard, to concentrate on the design/conception of the management system and the production of the necessary documented information. An overall plan is needed to describe the needs of companies. Phases for realisation should be implemented, which take a minimum of six to eight months. In addition, the plan should identify the phases, participants and the time for the necessary trainings such as, awareness of the main title of the problem – quality, environment, health and safety at work, management of them, the reasons for which implementation is needed, the role of each employee in the relevant systems, preparation of documented information and analysis of activities, training of internal checkers.<sup>18</sup> Employees should be constantly informed of progress in implementation.

### **3.2. Training of employees for management standard**

Training during the implementation itself in the food industry is key to successful certification of any management standard. Through it, employees acquire skills for analyzing processes in their own companies, as the basis for the production of the necessary documented information. It also includes meeting the necessary requirements of the relevant standard clauses, Adherence to the timetable of the activity plan, the provision of useful process facts, the familiarisation of employees about the requirements of a particular specific process, its control and measurability, and suggestions of possible improvements therein.

### **3.3. Analysis of processes in the food industry**

Known software tools for producing activity diagrams are used to analyze processes in the food industry, through which the essence of a process is clearly seen, a fact more that all standards emphasize the process approach in the application of requests. Thus, it is clearly shown what is the entry into the process, which activities are carried out within it, which documentation circulates between them and what the exit from the process is. These block diagrams should be prepared by responsible persons, so-called process carriers and harmonised within their sectors.

### **3.4. Development of the necessary documented information**

Based on block diagrams, documents of the type of procedures, work instructions, records, and manual can be prepared as desired. When they are developed, they are released to discussion companies. It is not mandatory, but a management system manual (quality, environment, health, and safety at work) can also be developed, and within

which gives a clear account of food industry companies, i.e., management policy, the responsibilities of all employees for the relevant management system, the organisational scheme shown through a management structure, the range of management system and a brief description of the processes in which the standards requirements are applied.<sup>19</sup>

### **3.5. Issuing documented information**

Documented information produced must be verified and approved before being issued. The order for issuing them is very important. Some of them should be issued before others and at the appropriate time. A

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<sup>18</sup> Mukhopadhyay, A. R. Estimation of cost of quality in an Indian textile industry for reducing cost of non-conformance. *Total Quality Management*, 15(2), (2004), p.169

<sup>19</sup> Klefsjo, B. Bjame, B., & Rickard, G. Quality management and business excellence, *Research*, 3(1), 59-76., (2008), p. 250



plan/schedule for internal checks must be prepared, which will clearly see which activities covered by documented information will be checked and in what term. Checks should be carried out in all parts of the relevant management system. All data from it should be clearly shown to the management of the companies, through so-called reviews held with a certain dynamics and frequency.

### 3.6. Internal checks and management reviews

Trained internal checkers carry out internal checks planned in the previously prepared schedule. The internal checkprocess includes planning checkactivities, check notification, review of documented information being checked, checklists drawn up for verification, verification, preparation of a report from the verification carried out, issuance of corrective checks and monitoring of verification sought and corrective requests carried out.<sup>20</sup> At least twice a year, management reviews must be carried out.

### 3.7. Precertification – Checking the Management System

It is desirable that about four to six weeks before the certification of any management system by the independent accredited certification body, a certification or assessment of it. It is seen as a certification exercise that follows. It is good to find all major discrepancies during it, which will be of great benefit to the certification ahead, and also a great deal of experience in terms of the necessary communication with external checkers.

## CONCLUSION

The consumer's perception of quality is most appropriately described by the word "like", because if one product likes it more than the other, it is of higher quality for the consumer itself, regardless of the real structure of the materials used in its production. Additionally, the higher price contributes to the desire to own the product higher or increases the "likability" that directly re-affects the height of quality.

There are groups of products whose quality has no oscillation, i.e. the structure of the quality of the ingredients is approximate, but products that have a higher price are perceived as higher quality, which is really debatable whether it is real or not.

On the other hand, which is also of great importance, for the consumer the price is in many situations crucial to buying or not a particular product, regardless of which perceives it of higher quality. In this case, if companies have a high price, there is a likelihood that products will be desired and seen as quality but will not make a sale because the price exceeds the consumer's budget. Again, if manufacturers use high-quality manufacturing materials, the product will have a high price and be re-perceived at a high quality, but also a high price.

Food industry companies that constantly use, practice and implement quality systems and continuously apply quality systems are expressed at the fourth level of intensity, or over 85% of respondents are correlated to obtaining a better competitive quality of product or service. The continued practice of food companies with a particular emphasis on the dairy industry is explained to 60% of respondents for Process innovation in the dairy industry is applicable with over 40% by top managers and innovators of strategic decisions. Marketing innovation and organizational innovation are adapted with over 30% of respondents' responses. The introduction of new goods or services and new improved raw materials for a quality final product are effective through the innovation of a new product is represented by oklu 29%. From this we conclude that in large percentage companies are working hard and directing for good quality of product.

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## Gravity model: An application to Albanian international trade flows

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**Abstract:** According to the gravity model of international trade, trade volume between two countries or areas is proportional to their economic mass, and a measure of the respective relative trade frictions. The gravity model of trade has been often considered as the most successful model in empirical economics. This paper is focused on some of the main determinants of international trade in Albania, over the years from 2000 to 2019. We formulate and estimate a particular gravity model for international trade flows between Albania and 31 of the most important trade partners. According to the respective empirical results, the proposed equation fits well the considered sample of countries and variables.

**Keywords:** international trade, gravity model, Albania.

### 1. INTRODUCTION

The gravity model of trade has been often considered as the most successful model in empirical economics. The model was initially used by Tinbergen (1962) who stated that the volume of trade among two areas or countries is proportional to the product of their gross domestic products, as well as to a distance variable, related to factors that can create trade resistance. According to Leamer and Levinsohn (1995), the gravity model of trade has produced some of the clearest and most robust findings in empirical economics. Disdier and Head (2008) analyze 1.467 distance effects estimated in 103 (gravity) papers. The most interesting finding of this study is that the estimated negative effect of distance on trade increased around the middle of the century, and has been persistently high since then. Head and Mayer (2014) focus on the interpretation of gravity equations for bilateral trade. According to the authors, a certain estimator may be preferred for specific types of data, but the methods should deal with the problem of robustness.

This basic article is focused on some of the main determinants of international trade in Albania, over the years from 2000 to 2019. We formulate and estimate a particular gravity model for international trade flows between Albania and 31 of the most important trade partners. We analyze in the following section some of the most important papers related to the estimation of the gravity model of trade. In section three we present the most relevant empirical results and in the last section we conclude.

### 2. LITERATURE REVIEW

The gravity model of trade has been estimated by numerous authors, both for developed and developing countries. According to Yotov (2022), there are still gaps between gravity theory and empirical estimations. The author focuses on domestic trade flows and argues that there are benefits from adhering to theory by estimating gravity models with domestic trade flows. Yotov (2022) synthesizes 15 arguments for using domestic trade flows in gravity model estimations. The author emphasizes the need for further theoretical contributions and new data developments. Felipe and Kumar (2012) employ a gravity model to analyze the relationship among bilateral trade flows and trade facilitation. The authors also estimate the gains in trade derived from trade facilitation for Central Asian countries. The respective empirical results show that there have been important gains in trade as a result of improving trade facilitation. Furthermore, the greatest increase in total trade flows comes from improvements in infrastructure, followed by the variables of logistics and efficiency of customs. Anggita (2015) studies the trade of Indonesia with 10 top export partners through the gravity model of trade. The author uses a fixed effect model and considers the Gross Domestic Products, Per Capita Gross Domestic Products, transportation costs, and Real Effective Exchange Rates. The empirical results confirm the statistical significance of the considered explanators. Sultan and Munir (2015) investigate the main determinants of Pakistan's exports, imports and total trade, using an augmented gravity model. The sample includes panel data for the period from 2000 to 2013 for 38 countries. The empirical results confirm that export and import determinants are different from total trade determinants. Furthermore, countries that share a common border offer lower transportation costs.

Erdey and Pöstényi (2017) investigate the determinants of exports over the years 1993–2014, with an emphasis on the effect of factor endowments. According to the empirical results, common border, economic size, and

free trade agreements had a statistically significant positive effect on exports, whereas the coefficient of distance had a negative sign. The results also show that exports change in line with the Linder hypothesis: a country trades more with partners having similar factor endowments. Pietrzak and Łapińska (2015) focus on trade exchange between European Union member states. According to the authors, a simple index analysis of trade volume enables scholars to observe changes over time, but it does not take into account the causes of these changes. Pietrzak and Łapińska (2015) evaluate the impact of some selected variables on the development of bilateral trade in the European Union over the period 1999–2010. The empirical results show a positive dependence among the GDP of a member state, and export and import volumes. Furthermore, there is a negative relation between bilateral distance and the size of trade exchange.

### 3. EMPIRICAL ANALYSIS

We propose in this section of the paper a particular gravity equation for Albanian international trade flows, including some basic and new independent variables. The gravity equation includes the respective economic sizes and the bilateral distance, which approximates trade costs. GDPs and GDPs per capita are the most used estimators of both the income level and the economic development. We consider the following gravity model of trade, where all the considered variables are expressed in natural logarithm, and  $\varepsilon$  is an error term that follows a known distribution with zero mean and constant variance:

$$\log(T_{ijt}) = \beta_0 + \beta_1 \log(GDP_{it}) + \beta_2 \log(GDP_{jt}) + \beta_3 \log(SUM\_POP) + \beta_4 BOR_{ij} + \beta_5 \log(D_{ij}) + \beta_6 FTA_{ijt} + \varepsilon_{ijt}$$

where,  $T_{ijt}$  is the trade flow (sum of imports and exports) between Albania (i) and a trade partner (j) at year t; D is the bilateral distance, BOR is a dummy indicating a common border between Albania and a trade partner; FTA is a dummy indicating the existence of a free trade agreement between the two countries.

Table 1: Variables definition and expected sign.

Variable	Definiton	Expected sign
T_ijt	trade flow (sum of imports and exports) between Albania (i) and a trade partner (j) at year t	Dependent variable
GDP_it	GDP in Albania at year t	+
GDP_jt	GDP for a trade partner j at year t	+
BOR_ij	Dummy variable, indicating a common border	+
FTA_ij	Dummy variable, indicating a free trade agreement	+
D_ij	Bilateral distance	-
SUM_POP	Sum of populations	+

Source: Own representation.

The databases of the United Nations (Comtrade), CEPII (CHELEM-INT), and the World Bank were our primary sources. Other missing values were obtained from the respective national statistical offices and ministries. The above table shows the expected sign of the considered variables. Whereas, table 2 reports the estimation results for both the basic and the extended equation. The econometric method that performed better was the random effect estimation. The independent variables are statistically significant in all the cases (5-10% level). The adjusted R-squared varies from 55,1% to 59,3%. The parameters and the respective R-squared values are comparable to other similar studies.

Table 2: Estimation results

Independent variable	model I (T_ijt)	model II (T_ijt)
GDP_it	0,684**	0,505***
GDP_jt	0,761***	0,613**
BOR_ij		0,431***
FTA_ij		0,992***
D_ij	-3,193***	-2,901***
SUM_POP		1,839**
Adjusted R2	0,551	0,593

Source: Own representation.

#### 4. CONCLUSION

The main objective of this basic article was to analyze some of the main determinants of bilateral trade between Albania and 31 of the most important trade partners over the years from 2000 to 2019. We formulated and estimated a particular gravity model for international trade flows. According to the gravity model of international trade, trade volume between two countries or areas is proportional to their economic mass; a measure of the respective relative trade frictions such as the bilateral distance; and other variables, including the respective populations, the existence of free trade agreements, etc. The gravity model of trade has been often considered as the most successful model in empirical economics. According to the respective empirical results, the proposed equation fitted well the considered sample of countries and variables.

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## Risk Management and The Insurance Market: The Case Of Albania

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**Abstract:** This paper will provide information on risk management and its implications within the insurance sector. It provides relevant information, offering both a broader view and insights into this sector. The primary objective is to understand the advantages and benefits inherent in insurance policies, emphasizing their important role in shaping individuals' lives. This paper will investigate how these advantages come from effective risk management, proper case analysis, appropriate package selection, and ensuring the individual's respective income. Through analysis, this paper seeks to unveil how these benefits arise from adept risk management practices. Notably, in Albania, insurance companies offer an extensive range of products with different premiums, offering to a considerable segment of the population. This paper explore on the rationale behind individuals' adherence to this system, driven by empirical evidence and ongoing observations aimed at propelling sustained growth and development.

**Keywords:** Risk, management, the insurance sector, insurance companies, etc.

### INTRODUCTION

Risk management is an important discipline in business, especially in business insurance. Recently, insurance businesses place great emphasis on risk management, as this determines the survival of the business in the market and their performance. Insurance companies are in the business of risk, and as such cover different types of risks for individuals, businesses and companies. Therefore it is necessary that the insurance companies to manage their risk exposure and perform analysis for it avoid losses due to compensation claims made by the insured. Poor risk management by insurance companies' leads to the accumulation of claims from customers thus leading to increased losses and poor financial performance. Risk management activities are affected by the risk behavior of managers. In recent years, there has been increasing attention to the impact of corporate social responsibility (CSR) activities on various business practices, including risk management. Harjoto & Laksmana (2018) emphasizes the influence of CSR activities on risk management, noting that CSR activities can affect other business practices such as risk management.

It is impossible to overestimate the importance of business performance since it directly advances both the industry in which it operates and the nation's economy as a whole. Financial efficacy is measured by profitability, which is why insurance companies prioritize profitability (Burca & Batrinca, 2014). Because insurance companies function as intermediaries, it is important to look into and comprehend the elements that affect their performance in the context of corporate finance literature. These organizations are essential in allocating financial resources to support economic activity in addition to facilitating risk transfer. Nevertheless, this element has received little attention, especially in Albania. Although studies on different facets of insurance in Albania are available, including insurance plans. There hasn't been much previous research on the factors that influence insurance profitability, despite the industry's growth and role (Sharku et al., 2016) and management techniques (Kume & Xhuka, 2010).

The insurance market plays a crucial role in risk management, particularly in the context of natural disasters and health care. Simon, Soni, and Cawley (2017) investigate the impact of health insurance on preventive care and health behaviors, particularly in the context of the ACA Medicaid expansions. The study provides evidence that the availability of health insurance has a significant positive impact on preventive care and health behaviors. This finding underscores the importance of health insurance in promoting better health outcomes and reducing the overall burden on the healthcare system. Furthermore, Gruneir et al. (2011) conducted a literature review on emergency department use by older adults, emphasizing the trends, appropriateness, and consequences of unmet healthcare needs. Moreover, Shan et al. (2016) examined patient satisfaction with hospital inpatient care and its association with trust, medical insurance, and perceived quality of care. This study emphasizes the role of insurance in shaping patient experiences and satisfaction with healthcare services. Exploring how health insurance impacts the quality and timeliness of care for accident-related injuries is essential for understanding its broader implications on patient outcomes and well-being.

## AN OVERVIEW OF THE ALBANIAN INSURANCE MARKET

In 1999, Albania witnessed a significant milestone in its insurance sector with the establishment of its first private insurance company, SIGMA. This marked an important moment, as it broke the 8-year monopoly held by INSIG and introduced a new era of competition, innovation, and product diversification in the non-life insurance market.

The emergence of SIGMA was quickly followed by the entry of another private player, Sigal, in the same year, further intensifying competition and stimulating growth in the sector. Subsequently, additional private companies such as Intersig and ATLANTIC entered the market in 2001, followed by the establishment of five more companies in September 2004, including INTERALBANIAN, Eurosig, and SIGAL (life insurance).

Despite the profitability demonstrated by private insurers over time, the Albanian government initiated the privatization process of INSIG in 2004, selling 39% of its shares to the International Finance Corporation (IFC) and the European Bank for Reconstruction and Development (EBRD). However, this privatization endeavor encountered various challenges and setbacks.

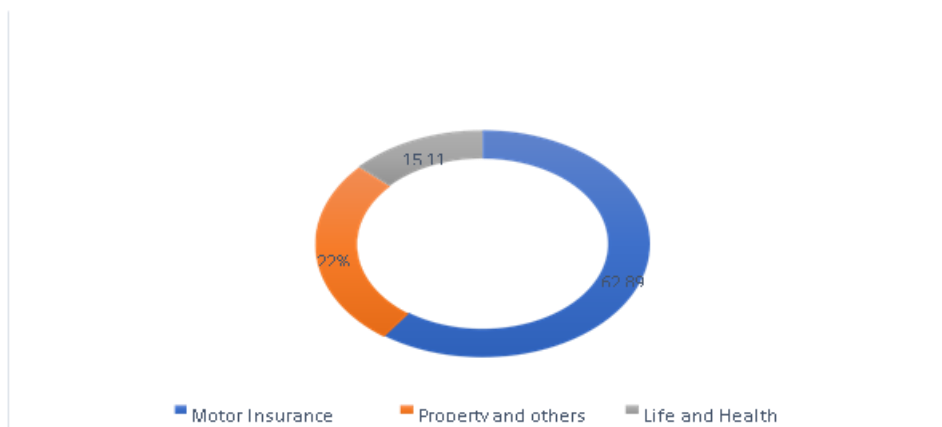
In contrast, private insurers like SIGMA and SIGAL successfully attracted foreign investment, injecting new capital and expertise into the market. Vienna Insurance Group (VIG), a major shareholder in several Albanian insurance companies, strategically merged Sigma and Interalbanian to streamline operations, enhance service quality, and bolster consumer confidence.

The merger culminated in the formation of Sigma Inter-albanian Vienna Insurance Group Sh.a., with VIG retaining a significant stake of at least 85% in the newly consolidated entity. This strategic move not only aimed to optimize operational efficiencies but also to fortify the company's position in the competitive insurance landscape of Albania, ensuring sustained growth and stability for the benefit of consumers and stakeholders alike.

## THE PERFORMANCE OF THE INSURANCE MARKET IN ALBANIA

The insurance market is consolidating year after year and is turning into an industry, which brings benefits to the country's economy, increasing employment and investments.

Figure 1 The structure of the insurance market in Albania 2023



Source: AMF 2023

A noteworthy finding on the distribution of insurance types is revealed in the Albanian insurance distribution for the year 2023. In particular, data show that a significant percentage—62.89%—is attributed to motor insurance. As we can see from the graph above, the market is largely oriented toward Non-Life insurance, with 84.89% of premiums, while Life insurance has only 15.11% of the total share of premiums. The mandatory aspect of auto insurance in Albania is particularly noteworthy, as this statutory need surely contributes to its dominant market dominance. This mandated requirement confirms the important contribution that motor insurance makes to the total insurance percentage and highlights the essential position that it plays in the insurance industry.

Table 1 Gross Written Premium in Motor Insurance

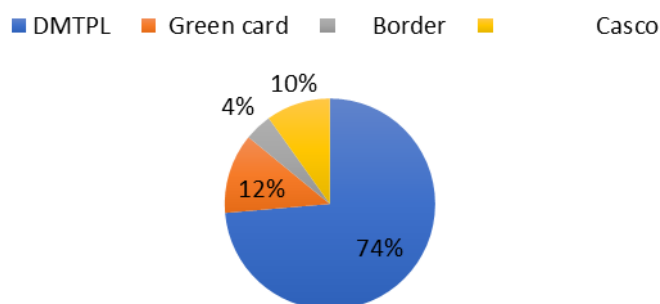
Insurance company	Value (in thous.ALL)		Share in total value (in %)	
	2022	2023	2022	2023
<i>Gross Written Premiums</i>				
Sigal Uniqa Group Austria	2.247.202	2.409.429	21,43	21,22
Eurosig	1.615.049	1.770.466	15,40	15,59
Albsig	1.605.227	1.766.537	15,31	15,56
Sigma InterAlbanian Vienna Insurance Group	1.478.527	1.610.389	14,10	14,18
Intersig Vienna Insurance Group	1.065.250	1.139.173	10,16	10,03
Insig	897.775	966.603	8,56	8,51
Ansig	855.254	908.211	8,15	8,00
Atlantik	723.592	783.611	6,90	6,90
<b>TOTAL</b>	<b>10.487.876</b>	<b>11.354.418</b>	<b>100,00</b>	<b>100,00</b>

Source: AMF 2023

For analytical purposes, the Albanian automobile insurance market is divided into four distinct categories. These groupings include:

1. **DMTPL**, or required third-party liability insurance: DMTPL continues to be a dominant player in the Albanian insurance industry, accounting for a significant 73.7% of premiums. This fact highlights the market's clear focus on required insurance products, which is in line with both societal and legal requirements.
2. **Green Card insurance** plays a important role in cross-border vehicular operations by enabling smooth international travel and compliance with regulations controlling cross-border vehicle insurance. It make 12.2 % of the total market of motor insurance
3. As an additional service to Green Card insurance, **Border insurance** covers some vehicle insurance requirements at international borders. It can be used for a variety of situations including vehicle insurance needs at national borders, catering to diverse scenarios and exigencies encountered during cross-border transit. This segment make 4.2 % of the total market of motor insurance
4. **Casco Insurance**: Casco insurance provides comprehensive coverage for vehicle damage, theft, ect. This segment make 9.9% of the total market of motor insurance

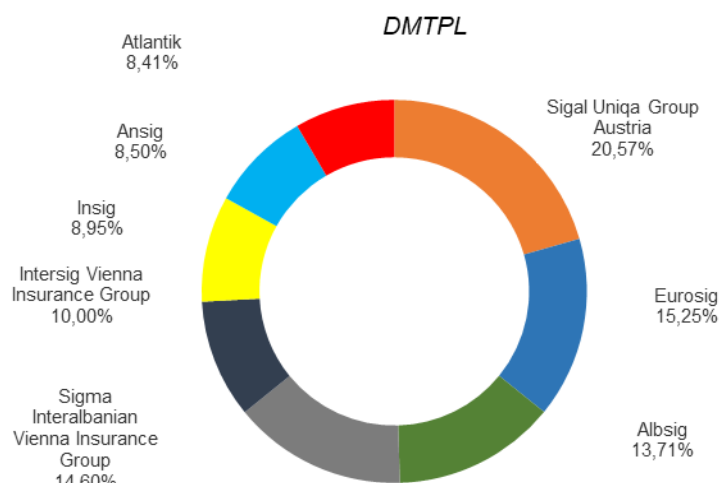
Figure 2 Market Share in Motor Insurance





It is notable that DMTPL continues to hold its leading position in this sector, with a majority portion of premiums. The dominance of major market participants, particularly Austrian insurance companies like VIG and Uniqa, which together claim control over more than 50% of the market, further defines the market dynamics.

Figure 3 Market Share of Insurance Companies in DMTPL



Source: AMF 2023

The majority of Albania's healthcare system is run by the government while private healthcare services are restricted to a small portion of the market. Even though the private healthcare industry is still in its infancy, it provides for dental and pharmaceutical needs in addition to a few specialty clinics that are primarily located in Tirana. The government provides the majority of the

funding for healthcare in Albania, with contributions coming from a few employers, employees, and independent contractors who donate a portion of their earnings to the insurance program. In addition to the obligatory travel health insurance needed to free movement in Europe for Albanian nationals, other kinds of medical insurance are becoming available. These are surgery plans, hospital cash benefit plans, and critical illness covers, which are frequently provided as supplements to life insurance policies.

In the field of accidents and health insurance, gross written premiums are important because they help companies understand the complex requirements of different customer segments. Important parts consist of:

- 1. Workplace Safety:** This section addresses how to make workplaces safe for workers by recognizing and reducing risks to their health and safety.
- 2. Road Safety:** In order to lower the number of traffic accidents and injuries, the focus here is on encouraging safe driving behaviors and improving vehicle safety
- 3. Public health:** This area includes community-based initiatives to improve health, prevent illness, and handle medical emergencies.

Organizations can successfully adjust their tactics and activities to satisfy unique customer demands by demarcating these segments, which will ultimately lead to enhanced safety and health results.

Table 2 Gross Written Premiums in Accidents and Health Insurance

Insurance company	Value (in thous.ALL)		Change (in %)	Share in total value (in %)	
	2022	2023		2022	2023
<i>Gross Written Premiums</i>					
Sigal Uniqa Group Austria	521.604	479.641	(8,04)	49,00	46,37
Albsig	218.758	246.237	12,56	20,55	23,81
Intersig Vienna Insurance Group	125.104	123.978	(0,90)	11,75	11,99

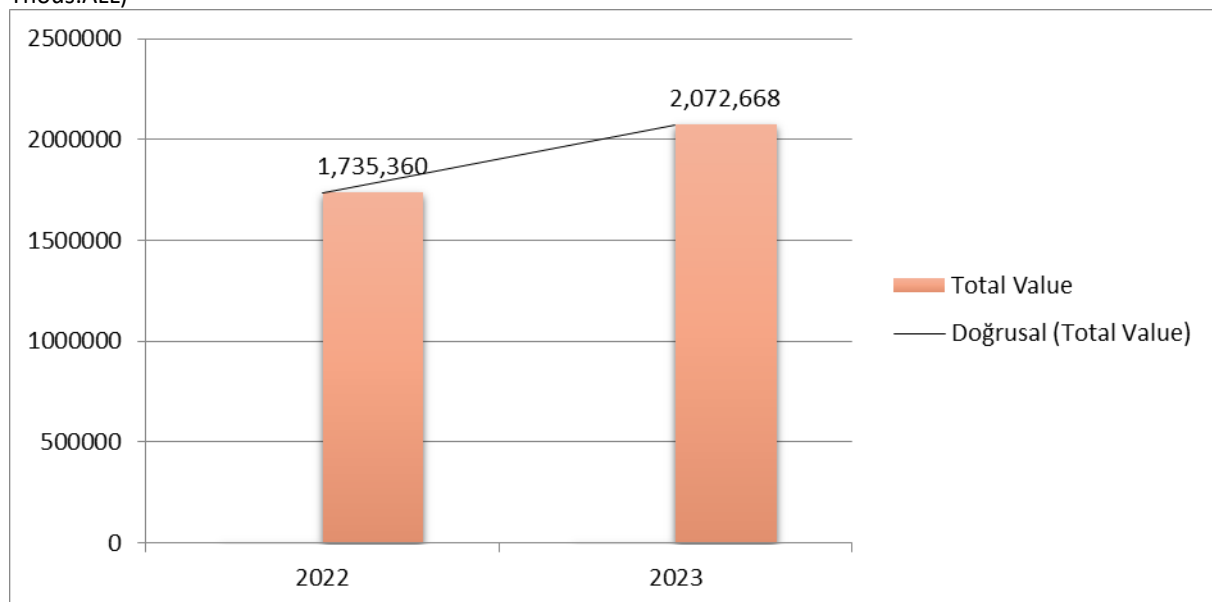
Eurosig	105.027	90.415	(13,91)	9,87	8,74
Sigma Interlbanian Vienna Insurance Group	62.242	64.577	3,75	5,85	6,24
Insig	15.015	14.541	(3,16)	1,41	1,41
Atlantik	12.443	12.157	(2,30)	1,17	1,18
Ansig	4.237	2.820	(33,44)	0,40	0,27
<b>TOTAL</b>	<b>1.064.431</b>	<b>1.034.366</b>	<b>(2,82)</b>	<b>100,00</b>	<b>100,00</b>

Source: AMF 2023

The information shown in Table 2 indicates that there has been a 2.82% decrease in the gross written premiums for health and accident insurance. With a 46.37% , Sigal Uniqa Group Austria is the leading organization with the largest share in this insurance segment for the fiscal year 2023. When comparing the performance of insurance companies in this area, Alsig is the one that shows the biggest growth from 2022 to 2023—a significant 12.56% increase. On the other hand, Ansig shows the biggest drop over that same time frame, falling by 33.44%.

Mortgage agreements necessitate property insurance, with premiums typically ranging from 0.07% to 0.14% of the loan amount, taking in consideration factors like building type and loan size. Some banks mandate property insurance to cover the remaining loan balance plus interest. Consequently, the insured amount decreases as the loan is repaid. While advantageous for banks, borrowers may face challenges. In the event of property damage, such as fire, the cost of rebuilding often exceeds the remaining loan balance. Hence, it's advisable for borrowers to secure insurance covering the property's replacement value. Despite its primary purpose of safeguarding lenders, property insurance benefits homeowners in case of property damage.

Figure 4 Gross Written Premiums in Fire and Natural Forces and other Damage and Loss in Property (in Thous.ALL)



Source: AMF 2023

The information shown in Figure 4 indicates that there has been a 19.44% increase in the gross written premiums in fire and natural forces and other damage and loss in property. With a 45.71%, Sigal Uniqa Group Austria is the leading organization with the largest share in this insurance segment for the fiscal year 2023. When comparing the performance of insurance companies in this area, Eurosig is the one that shows the biggest growth from 2022 to 2023—a significant 80.38% increase. On the other hand, Intersig Vienna Insurance Group shows the biggest drop over that same time frame, falling by 19.52%.

## CONCLUSION and DISCUSSION

Most insurance companies in Albania are large companies with a wide network of branches around the nation. This allows them to offer more individualized services to their customers and grow their market share in an increasingly competitive industry. It can be stated that these businesses must properly manage risk because of their size and their exposure to risk. Accurately identifying and evaluating risks is a critical responsibility that organizations must carry out in a professional manner. Identifying and evaluating different risks—financial, technological, natural, and others—helps in the development of effective management solutions. A large number of these companies had implemented risk management measures, which may explain why the majority of them have continued to operate over a long period of time. Long-standing organizations are likely to have more developed risk management strategies, which have helped them maintain their financial stability over time. The study also reveals that the most important factor affecting insurance businesses' financial success is risk detection and reduction. Because businesses cannot handle what is unknown, risk identification can be viewed as the fundamental first step in any risk management program. However, once risk has been discovered, it needs to be minimized in order to decrease its effect on the company. Rather of reflecting theoretical theories of competitive market, the insurance market of motor vehicle insurance prices has been the contrary. It is revealed that companies raise premiums at the expense of policyholders. As a result, we have a distorted market that puts pressure on the budgets of numerous insured economic units rather than a competitive one. We suggest that each person's insurance premium be calculated individually based on driving history, age and gender of the car, occupation, number of prior driving incidents, and health status.

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## Teenagers' Internet Use in Albania

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**Abstract:** Albania, like most countries in the world, is experiencing a new wind today, the wind of the Internet. (Ahmet Adalier, Ece Emre Muezzin, 2012). Considering the reality that we are experiencing in the last years, when most of the countries experienced a total or partial isolation due to the covid 19 pandemic, the use of the Internet has increased significantly by all categories and ages of people. In particular, teenagers, pupils, students, by necessarily switching to online learning, have significantly increased the use of the Internet during this period. This has certainly affected their studies, their social development, their education as well as their psychological development. Many studies suggest that during the years that adolescents develop intensively, the presence of the virtual world outlines new forms of behavior (Cenameri, 2013). The main purpose of this study is to determine the main factors that influence the use of the Internet by adolescent children aged 12-15 years, this study also aims to study the rate of Internet use in this age group as well as the impact on their learning performance. To carry out this study, a questionnaire was used, which was addressed to the age group 12-15 years old students in Tirana, in some of the main schools with the highest indicators of student performance in the last ten years in Albania.

**Key Words:** Teenager, Internet use, study performance

### 1. INTRODUCTION

Various expert works describe internet addiction as the epidemic of the 21st century (Agaj, 2016). The genesis of studies of the phenomenon of Internet addiction dates back to the mid-1990s, when Young first used the term. (Kimberly S. Young, Robert C. Rodgers, 1998) linked Internet addiction to poor impulse control. Later, Young and Rogers used an alternative term, such as "pathological Internet use", to emphasize the extent of addiction in the psychiatric aspect, in which problematic Internet use was associated with significant social, psychological and functional impairments. Building a bridge between the general definition of the term "addiction", similar to (Chao-Tsung Hsiao, Georges L. Chahine, Han-Lieh Liu, 2000), in this study, Internet addiction is considered as "the inability of an individual to control the use of the Internet, i.e. the time spent on Internet or the problematic use of the Internet by adolescents (Orhan İyitoğlu, Nadir Çeliköz, 2017). This phenomenon has been addressed by several multifaceted studies that have outlined and concretized its theoretical side (Agaj, 2016). *Keeping working time:* This function is carried out by controlling the working time of the personnel at the different operational levels by determining the accounts where the personnel expenditure and the typology of the expenditure will be included.

The Internet is one of the contemporary innovations in the world of information technology. Researchers and academics have debated the increased use of the Internet, positively and negatively affecting the academic performance of students. According to some researchers, the Internet plays a very important role in the field of education (Dorji, 2015). In her paper, Desara Agaj, referring to Ozcan's study, writes that recently the time spent on the Internet, which causes addiction, is spreading at a very fast rate and it is now a fact that this phenomenon negatively affects such areas of the individual's life, such as in the interpersonal, academic, professional (Agaj, 2016). (Shelley E. Taylor, Rena L. Repetti, Teresa Seeman, 1997) considered a virtual classroom as the next step in the development of educational technology (MM Awais, MA Aamir, A Aamir, 2001).

### 2. Research Literature

In their study (Kausar Suhail, Zobia Bargees, 2006) reported that the use of the Internet positively affects education by increasing student-student and student-teacher communication, increasing access to libraries, improving study hours and study habits. Despite the positive impact of the Internet on academic work, research findings have shown that excessive Internet use negatively affects physical health, family life, and academic performance. Problems related to academic performance include falling behind in studying, drastically dropping grades, and poor integration into extracurricular activities (Dorji, 2015). Of course, born

under the spirit of a world where everything is a click away, teenagers are the target group most sensitive to this phenomenon. The current scenario shows that the number of teenagers accessing the Internet multiplies every year (Dorji, 2015). Social networks are quite useful as long as you command them and put them to use when needed. If it is the opposite, many years of life go by without personal activity. The fact that teenagers spend a lot of time "surfing" on the Internet is worrying. If a teenager spends hours on the Internet and fails to be productive in his studies, he is not productive in society, that is, in social relations, and this isolates him. So, this technology is changing the way individuals socialize, study, work, spend their free time. (Maysam Musai, Mohammad Darkesh, 2014) conducted research on the effect of the Internet on the academic performance of students in Tehran. The result showed that students with better academic grades spent more time online than others. Also, more than half of the respondents in the research considered the Internet the most important source of information for knowledge, wisdom and broad entertainment (Young, 1998). In 2008, the study of the World Internet Project (WIP), a global international study carried out in 13 countries of the world, on the impact of the Internet on individuals and society, presented the level of Internet use among teenagers in the age group of 12-14 years. The results proved that these percentages were much higher than expected. Compared to the rest of society, teenagers are the early adopters of the virtual world, they do not need instructions or manuals, for explanations on how to use a mobile phone, a digital camera, so they cannot understand their life without the Internet (Cenameri, 2013). Definitions for Internet addiction have been given by various researchers and psychologists since the moment when studies on this phenomenon began to be carried out in the United States of America, in the years 1998 (Agaj, 2016). Studies on Internet addiction have grown widely over the past few years because the Internet has become a part of everyday life. Internet addiction can affect people of all ages, genders and social economic status (S. A. Wolf 2001). Internet addiction has been identified as a legitimate psychological disorder with significant implications for an individual's cognitive, emotional and social development. Referring to the study of (Bahadir Bozoglan, Veysel Demirer, Ismail Sain, 2013) it is found that although there are different views on the meaning of "Internet addiction" or "pathological use of the Internet" the terms refer to the concept that a person cannot control his use online, leading to severe distress and functional impairment (Young, 1998). Building a bridge between the general definition of the term "addiction", similar to (Chao-Tsung Hsiao, Georges L. Chahine, Han-Lieh Liu, 2000), Internet addiction is considered in this study as "the inability of an individual to control the use of the Internet, which ultimately causes psychological difficulties, social and academic (Ilyitoğlu, Orhan, and Nadir Çeliköz, 2017). Among a number of definitions of Internet addiction, Young's work is of particular importance. He defined Internet addiction as an impulse control disorder. To facilitate Internet addiction research, Young developed the Internet Addiction Test [IAT] in youth, which has been widely used in reported research studies (Young, 2011). Based on the study of Albano Zhapaj, who referred to the study of Lee, it is reported that Young (1998), emphasized that the Internet itself is not problematic, it does not cause addiction, but it is the social networks embedded in various forms on the Internet that attract the attention of users and push them to use them, even to an excessive use. Limited and controlled Internet use can be beneficial, but uncontrolled Internet use can cause a variety of problems, such as academic failure, social isolation, increased depression, loneliness, increased anxiety, and psychiatric disorders. The literature suggests that there are several components of Internet addiction (Md. Sahab Uddin, Abdullah Al Mamun, Mohammed Ashrafal Iqbal, Md. Nasrullah, Md. Asaduzzaman, Md. Shahid Sarwar, Md. Shah Amran, 2016). (Block, 2008) argues that Internet addiction has four components: (1) excessive Internet use, often associated with neglect; (2) withdrawal, including feelings of anger, tension, or depression (3) tolerance, including the need for better computer hardware, more software, or more hours of use; and (4) negative consequences including, lying, poor academic achievement, social isolation and fatigue (Şahin, 2011). Internet addiction has emerged as a potential problem for children and adolescents in recent years. Internet addiction is a psychological disorder, manifested as an obsessive desire to spend time on the Internet. Common's study showed that children aged 8-18 spend about 8 hours a day online. However, as a conclusion, studies say that definitions for Internet addiction differ in research studies and there is no unified meaning of the term or a unified method of examining Internet addiction (Mishra, 2014).

### **3. Material and Methods:**

The purpose of the study is to determine the factors that have brought about the increase in the use of the Internet in the age group of 12-15 years and to examine the relationship between the addiction to the Internet and the educational performance of the teenagers in Tirana. Hypothesis of this study are:

Null hypothesis (H01): Internet addiction does not affect the academic performance of adolescents or positively affects the academic performance of adolescents.

Research hypothesis (HA2): The level of family income affects the rate of Internet use of teenagers.

Null hypothesis (H01): The level of family income does not affect the rate of internet use of teenagers.

Dependent variable: Internet addiction.

Independent variables: Demographic variables (gender, place of residence), parents' employment, parents' education, academic performance.

The participants selected for the sample (representative group) to carry out the study are the students of the 12-15-year-old age group of the main Schools in Tirana for the three months of March-May 2023. The study was conducted in three schools due to the possibility of gathering of data. The total number of respondents is 268 students. For the selection of the sample, the probabilistic method was used, which means simple random sampling, a technique where every student has an equal chance to be selected in the sample. Simple random sampling was chosen because this sample has the advantage of eliminating the possibility of distortion that may come from favoring some personal characteristic. To ensure the list of subjects, the register with the names of each student served. The sample unit is all the students in the age group of 12-15 years, that is, the fifth-seventh grade students who study in this school.

#### 4. Result and Discussion:

To measure the level of Internet Addiction, the Internet Addiction Test (IAT) questionnaire by Dr. Kimberly Young (1998). The Internet Addiction Instrument (IAT) consists of 20 statements, where for each statement, the respondent circled one of the scales, never, rarely, sometimes, often, very often, always. The questions are categorized according to the Likert scale, ranging from 0 = least extreme behavior to 5 = most extreme behavior, and the more points the respondent received, the higher the level of Internet addiction (Akhter, 2013). The total score of the Internet Addiction Scale (IAT) is the sum of the ratings given by the examiner to the 20 questionnaire responses. Each element is evaluated on a 5-point scale ranging from 0 to 5. The maximum score is 100 points (Akhter, 2013).

The degree of Internet addiction is scored in accordance with the scoring guide on four main levels, where from 0 to 30 points reflects a normal level or no addiction, from 31 to 49 points indicates the presence of a mild level of Internet addiction, 50 up to 79 points represents the presence of a moderate level of addiction and 80 to 100 points indicates a high level of Internet addiction (Noreen, 2013). The data analysis was carried out with the quantitative method, by means of the statistical program. The processing consisted in the calculation of central tendency measurements (means and standard deviations), frequencies and percentage values of demographic variables which are among the descriptive statistical methods used for data evaluation. The Pearson correlation ( $r$ ) was used, which serves to measure the strength and direction between two variables, specifically the study variables (academic performance, employment and parental education) and Internet addiction. To determine whether there were statistically significant differences between two groups, t-tests for independent groups were calculated. The t-test analysis in this study was used to test gender and place of residence differences in levels of Internet Addiction among adolescents. To see the strength of the relationship between the study variables, the Pearson correlation was used, which serves to measure the strength and direction between two variables. The coefficient takes values from -1 to 1. When it is close to +1 it indicates that the correlation is positive (strong positive relationship between the two variables), 0 there is no relationship (no relationship between the two variables), -1 negative correlation (relationship of strong negative between variables). By calculating the correlation coefficient between Internet Addiction (IAT) and the employment of parents of teenagers, the analysis found that there is a strong positive correlation ( $r=.669^{**}$ ;  $p<0.01$ ). This means that the higher the level of parental employment, the higher the level of Internet Addiction and the lower the level of parental employment, the lower it will be. the level of Internet Addiction among teenagers. The level of income affects the level of Internet use by students, the relationship is found to be significant and fair, which means that if the level of income increases, the rate of Internet use also increases.

The equation of the model is of the form:  $Y=1.7285+0.000017*X1 - 0.0044*X2$

Attitude =  $1.7285 + 0.000017*Income - 0.0044*Age$

The significance coefficient of the model results  $F = 9.66001922776276E-12$ , less than 0.05, also the level of income greatly affects the time spent on the Internet, and this is confirmed by the P-value (P-value = 1.334E-12), which is smaller than 0.05. so, this variable is significant for the model. The other variable, age, is not significant for the model as the P value is greater than 0.05. This is also reflected in the determinant coefficient  $R^2$ , which results in a value of 17.42%, which shows that the connection of the variables is not very strong. The model as a whole turns out to be significant.

## 5. Conclusions:

*Statistical data of the model:*

Multiple R	0.417388954
R <sup>2</sup>	0.174213539
R <sup>2</sup> Adjusted	0.167981188
Standard Deviation	0.803836368
Observations	268

This study aimed to determine the level of Internet addiction and to examine the relationship between Internet addiction and the academic performance of adolescents aged 12-15 years at the schools in Tirana, as well as to show the relationship between the level of income and the rate of internet use by this age group. Data were collected using this instrument: the Internet Addiction Scale (IAT). The IAT is a self-report instrument used to measure levels of Internet Addiction. The results obtained from the Internet Addiction Scale (IAT) showed that the majority of teenagers have increased their level of Internet use during the pandemic period. They showed high level of addiction because about 40% of them spend more than 4 hours of their active time during a day on the Internet. The degree of their Internet addiction is significantly related to the level of their family income, which means that as the level of income increases, the number of hours they spend on the Internet increases. Children indicated that they experienced negative causes of increased Internet use, such as insomnia, lack of concentration, headaches, virtual harassment and bullying. Also, students reported that they use most of their time on the Internet for entertainment (games, movies, music, videos) and only a moderate amount of time for assignments and projects. From all online platforms and networks, YouTube and TikTok are the most clicked, 34% and 21% respectively, followed by Instagram, Snapchat and Google. It seems that the use of Facebook in this age group has suffered a significant decrease, only 1% of them. The results of the study showed that the time spent on the Internet increased significantly during the pandemic period. From the data analysis, no statistically significant differences were found between the levels of the Internet Addiction scale according to the place of residence, village or city. The results of the study showed that there is a negative correlational relationship between Internet Addiction and the learning performance of the teenagers involved in the study, thus proving the hypothesis of the study. This means that the higher the internet addiction, the lower the academic performance of teenagers and vice versa. Data analysis found that there is a positive correlation between the level of income in the family and the time spent on the Internet. This means that as the level of income in the family increases, the time spent on the Internet increases. The association of age with time spent online was not statistically significant.

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## Auditing as Motivation and Reliability

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**Abstract:** Today, auditing is seen as one of the most significant mechanisms in the process of creating, developing, and expanding the activities of a social organization. It is not considered an end in itself or a concept with a narrow spectrum of action and application. It is a mechanism that identifies deviations from accepted standards and violations of principles, legal breaches, and lack of seriousness, as well as the effectiveness and efficiency of financial and human resource management, more quickly than these deviations can turn into crimes or criminal activities harmful to society. In this sense, if institutions of the Albanian State, political parties, and law enforcement agencies have failed in preparing the country for membership in the European Union, the essence of their deficiencies should be sought in the ambiguity and lack of responsibility towards those publicly accepted standards for governance. The concept of Auditing by leaders at all levels of management and governance is distorted, and for this reason, the people's trust in institutions declines. Auditing directly serves the analysis of financial statements, as these are related to the way the budget is spent and also to the effects of improperly based resource allocation. In this sense, auditing not only uncovers abuses but also prevents the risk of collapse by assisting in finding the most appropriate ways. Auditing is a high level of motivation, but establishing a detailed and scientific relationship between resources in a unit of time and in accordance with major objectives, increases the level of effectiveness and disciplines the use of available resources. Therefore, auditing is not only considered an instrument of financial statement analysis but also of the effectiveness of resource management as a whole.

**Keywords:** Audit, Motivation, Transparency, Reliability

### 1. INTRODUCTION

My studies are my long-standing experience in the field of accounting and auditing. In this sense, the Master of Science program in this field has made me believe that every accountant and auditor has all the opportunities that he holds in the function he takes, with his role and contribution, even if he does not have the organizational opportunities to do what he thinks in the service of the community, I have the opportunity to create in the opinion around him that material and financial resources, human and natural resources require financial income to always live in a progression that not only fulfills the needs but also creates real opportunities for well-being and progress. This belief of mine was created in the future by confronting at every moment the theory and practice learned in school with the practice of management in the field and the concrete results that are realized in the production of material goods and human reproduction. The existing concept of the created mentality, according to which our country does not fulfill its needs, is as archaic and unfounded as no country has this possibility. In these conditions, my work being integrated with concrete cases, experienced by me, my family or my relatives, give me the right to reach the preliminary conclusion that "knowledge about our resources is virgin and as such its structuring requires a dimension brand new but without denying any achievements of generations" I see auditing as a scientific and professional discipline that includes every aspect of life and professionalism.

The scientific concept of it keeps you connected to the basic object as part of the general interest. Thus, the audit avoids mistakes, but also discovers faults by initiating solutions at the right time, the right place and at the optimal cost.

#### 1.1. Auditing and our concept of it

If we refer to what we have learned and I am already convinced of this, but also the relevant theories and practices in this direction, as mentioned by Creëll<sup>1</sup> and others, we will notice that auditing is not just a technical matter or a simple scientific discipline.

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<sup>1</sup>Creëll, J., 2003. Research design: Qualitative, quantitative and mixed methods approach. California Sage Publications, pg. 8.

I see auditing as a mechanism that strongly influences the efficiency of economic units. As such, the audit has purely technical content "within the unit that is exercised", while in the framework of communication with other institutions of society or the state, it crosses the borders of the unit where it is applied, it has public and political content. For this reason, the audit of economic entities is done not only in the narrow "internal" concept, but also by external auditors and without connection and relationship with the economic entity, so-called independent.

## 1.2. Methodology

For the design of this study, it was necessary to compare the few practices that I have provided with the theoretical part and the concepts that have been developed in the education process, in the Master of Science program, but also studied by an important world author in the field of auditing. The study also has an approach to see the views, the concepts of official practices with the concepts and practices of public auditing. These are reflected in the study in the framework of some statistical data and the questionnaires or interviews developed in this direction and for issues oriented in accordance with the purpose of the study, which I consider as primary and basic data for the paper. The main essence of the methodology used is based on finding, analyzing and reviewing the literature available in the audit field.

The secondary, auxiliary data also includes information gathered from public and private economic and administrative units, focusing as much as we can on the findings and recommendations of the auditors for those audited units, but without being able to find any practice or action plan to before how it is reflected in the economic activity.

## 2 RELIABILITY AND SUSTAINABILITY AUDIT – HIGH LEVEL OF MOTIVATION

The explanation of the activity

The ethical essence of the auditor's profession is not to remain silent in the face of distortion of facts. The auditor is like the doctor, who does not tolerate the disease and its treatment according to the knowledge and experience he has. Hiring a reputable auditor should ensure the reliability and credibility of the financial statements, which is in the interest of management, shareholders and the company<sup>2</sup>.

The auditor must exercise professional judgment in planning and developing the financial statements. If the auditor foresees fraud, as a professional he should investigate and not retreat. The auditor as a professional must exercise professional judgment with skepticism about the evidence (so trust is good but checking is better). The auditor must make decisions based on the knowledge, experience and training he has developed during his career. In this way, the auditor resembles a doctor.

Professional skepticism is necessary for critical evaluation and evidence for the auditor. It involves considering the sufficiency and appropriateness of the audit evidence obtained in various circumstances, for example, when risk factors for fraud exist, when evidence of a single document is the only supporting evidence to determine a relevant material amount. in the financial statements.

Professional skepticism includes being alert to, for example: Information that calls into question the reliability of documents and answers to questions that will be used as audit evidence. Conditions that may indicate potential fraud.

Circumstances that suggest the need for audit procedures other than those required by the ISA<sup>3</sup>. It can be concluded that the objective of each auditor is to provide the users with reliable data about the business standards, the achievable reality with the relevant differences. If this audit is done in the financial field, to offer interested parties a complete opinion on the state of the financial statements and the relevant criteria, and for the auditor it is unacceptable to hide the reality for the sake of intervention or recognition.

The auditor maintains independence and impartiality in judgment and conclusion. In this way, auditing increases the reliability of financial statements (Trejci, 1994).

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<sup>2</sup> Revizija i Kontrola 2012 Doc. dr Milanka Aleksić

<sup>3</sup>SNA 200

To ensure objectivity, auditors must be independent of their clients. Recent trends in the development of auditing worldwide are reflected in the separation of the audit function from other accounting and auditing services. Auditors are prohibited from providing accounting and other services to an audit client. The well-known US SarbanesOxley Act provides such a prohibition (Reimers, 2008). As a result of recent reforms of corporate governance systems worldwide, auditors do not report to the client's management team, but to the client's Audit Committee, which is an oversight body under the board of directors. In order to provide an independent opinion on the client's financial statements, the auditor must comply with applicable auditing standards and perform the work with expertise, diligence and integrity (Kothari and Barone, 2006) <sup>4</sup>.

Such an attitude makes auditors to be clean and well-received figures in the audit of their activity.

The public invests its money in various entities in order to get more money in the form of dividends, interest or capital appreciation when and only when the degree of reliability of the data on the invested entity is based on the data of a auditor/independent audit.

For this reason today, the degree of reliability for a company is not only the financial statement, but also the final and full assessment by independent auditors for transparency and the level of motivation of the partners to contribute to the realization of the objectives.

### **2.1. Activity motivation**

There are a number of factors that influence motivation, in the case of intrinsic motivation this is determined by internal agents such as interest, satisfaction, self-actualization or intrinsic needs. In the case of external motivation, this is determined by the external agent, in this case the individual or group has no control over the internal situation and internal factors by performing the task as external demand and expecting a reward. In addition, when the motivation comes from within, the person is able to maintain this spirit for longer, which is why this type of motivation is so important. Meanwhile, in extrinsic motivation, the person expects some kind of external satisfaction, punishment or recognition. Among the elements that create this motivation are external pressure, the need for recognition or the need for social support. As can be seen in the audit group, we noticed all these factors and what is very important, the level of perception of the activity of the audit group is extremely high by the economic entity and especially by its personal staff. In the cases of an activity with a high degree of reliability, of the audit group, it is noted that the degree of motivation is not only related to the positive evaluation of the analysis of the financial statements.

### **2.2. Control of any risk - positivity for the economic unit**

The auditor, during the audit process, by evaluating and identifying the risks of material anomalies in the financial statements, aims to ensure an adequate basis to react appropriately to the risks, and when this is noticed, it is a very motivating activity.

The audit process must use a wide range of tests, assess how internal control works and provide sufficient persuasive evidence, thus the auditor appeals to reliability.

The auditor, following the relevant standards, tests his own risk through professional judgment, how knowledgeable and confident he is in what he looks at and analyzes. This appeals to responsibility and safety in what you do. In this way, the auditor, with his knowledge, avoids or discovers in time the mistakes or abuses from the internal control of the entity. With this, the auditor appeals to the ethical essence of the matter only in the positive sense.

### **2.3. Reliability and stability are indicators of professionalism**

The auditing activity is an activity based on the law and has standard procedures which are strictly respected. Legal reliability is a special aspect for the auditor, which in the worst case, regardless of the result, if this legal basis is missing, the audit is worthless. Therefore, in addition to legal authority, the auditor also needs professionalism to exercise the right to audit. In this sense, credibility is related to legal authority and professional authority,

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<sup>4</sup>Empirical Research on the external audit banks in Serbia Biljana Jovković Snežana Ljubisavljević Vladimir Obradović 2002

If we consider the reputation audit reports on the "Effectiveness of the measures taken to protect the consumer from weight and measurement abuses" in RSH, it is noted that the legal basis and relevant standards are respected<sup>5</sup>. The audit is not surprising since the economic and financial activity is not like that. Therefore, it has its own time and object completely defined and transparent. The audit has defined people with certified professionalism but also with a fully defined work procedure and for this reason the auditing activity is standardized<sup>6</sup>.

## 2.4. The concept of audit effectiveness and efficiency

There is a close connection between the three E's (efficiency, effectiveness, economy). The economy demands that we get the desired quality and the desired quantity at the lowest cost. Efficiency in the economy is related to resources, inputs, outputs, the concepts of economy and efficiency are closely related to each other. The main objective of the performance audit is to provide assurance to management levels about effectiveness, efficiency and economy. Also, another objective can be the improvement of the way money is used.

When managed effectively, auditing becomes an important element in helping an organization achieve its objectives. Organizations with audit activities are better able to identify business risks and system inefficiencies, take appropriate corrective actions and ultimately support continuous improvement. However, to maintain and increase the credibility of the audit, its effectiveness and efficiency must be monitored

### Cleaning » or avoidance of illegal activity

Fraud is not a recent phenomenon with several highly publicized financial fraud cases from the last two centuries. It can be found early in the history of our world, as men have used trickery, manipulation, and deceit to acquire money, land, goods, or faith, with the overall objective of making a profit. The creation of accounting and auditing are linked in economic history to the desire, especially on the part of the state and the church, to contain and prevent theft and misrepresentation in their finances. Since the modern era, the state has been the main institution interested in the implementation and supervision of its accounting system to prevent, detect and punish any fraud committed, both in its structures and in the public sector.

And as economic organizations became more complex and powerful in society, they also began to employ the services of functionaries or specialist accountants with the aim of maximizing their profit and avoiding losses or theft through distorted or erroneous financial entries. The industrial revolution brought a rapid pace of economic development, but also a growing interest in systems of capital, investment and transaction control (Lesourd, JA, Gerard, C., 1986, vol. 1). But with the economic boom also increased people's desire to make money quickly by malicious or fraudulent means, and therefore public opinion became more aware by the 18th Century of the existence of financial fraud and other fraudulent schemes aimed at to gain trust, property, goods, or political power (Stratmann L., 2012, pp. 7-9, and all cases discussed by the author). According to National Auditing Standard 240 'Fraud and Error' (SNA 240), some guidance has been established regarding the assessment of fraud risk. When planning the audit, the auditor must assess the risk associated with the fact that fraud and error could lead to material misstatements in the financial statements and he should request from management information about any fraud or material error discovered. In addition to any structural limitations of accounting and internal control systems, as well as non-compliance with applicable internal control requirements, there are circumstances or events that increase the risk associated with fraud and error. From those presented above, we can derive an 'unqualified' opinion (to use a term from the field of auditing) that all entities need internal auditing for the efficiency of the business in the sense of a good administration of its heritage, of reducing costs (in an organized framework) while maximizing profit and to achieve medium and long-term objectives. Moreover, this activity should not be considered strictly as an activity that generates costs, but rather from the perspective of the benefits it brings in the fight against fraud and especially in increasing the added value in the future.

<sup>5</sup>Ligji nr.126 të Metrologjisë, miratuar datë 15.10.2020, si dhe shkronjat "g" dhe "h" në nenin 8 "Detyrat dhe kompetencat e DPM" "të ligjit (ose pikat 10 dhe 13 të nenit 8, të Projektligjit të publikuar në faqen zyrtare cituar më sipër), ku përcaktohet se DPM:

<sup>6</sup><https://panel.klsh.org.al/storage/phpFef4nA.pdf>

### 3. Conclusions and recommendations

Auditing is a process that takes on new dimensions day by day. Auditing helps enterprises and business develop and motivate people to work. What is required is: increasing the efficiency of intervention in the audit by increasing the degree of willingness of entrepreneurs to accept the audit as a mechanism that develops their creativity.

The auditor must be a professional to use his judgment to decide on his actions in accordance with professional standards.

Auditing is an economic, organizational and policy-making activity, which affects the increase in the degree of reliability of enterprises, businesses and powerful organizations for cooperation. This cooperation is visible in investments and partnership relations. Auditing plays an important role in the better management of companies. Both public and private companies, if the internal and external audit works, increase the efficiency of the system within the company. Companies that have an organized audit system have fewer auditor findings and recommendations, while companies that do not have an organized audit system have many errors and frauds and financial reports are not reliable because these systems have not been subjected to controls.

Many companies that institutionalize periodicity in the audit system are satisfied with the functions it performs. Management and other users of financial statements see the effect of auditing through the good functioning of internal control, as well as the more effective functioning of business processes that are controlled in a more rigorous way.

Accountants and auditors must continuously be professionally prepared to meet the needs of clients.

To draw up a strategy between state institutions and auditors to combat informality To report the financial statements according to the International Standards for Financial Reporting of companies that have a turnover of over 50,000.00 Euros, because with the introduction of these companies into the system, then the relevant institutions have a clearer picture of the companies operating in the country. Companies with a turnover of over 4,000,000.00 Euros are obliged to set up and operate an internal audit. Rigorous measures should be taken for companies that have legal obligations for financial reporting according to International Standards.

The profession of the auditor should be raised and protected by law and be independent so that there is no pressure during his work.

The law should be drawn up so that financial statements are prepared by certified accountants and not by persons who are not professionals.

There should be legal responsibility and punitive measures for the auditor if he does not work professionally according to professional ethics.

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## Sustainable Resources Management in the Hotel Industry of The Korça Region.

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**Abstract:** The hospitality industry is focusing increasingly more on environmental, economic and social values, trying to create through them competitive advantages and increase the quality of customer service. Environmental sustainability practices are often being implemented in the hospitality industry and are promoted on websites. Climate change is also orienting the hospitality industry towards good resource management and green standards. Since hotels are often considered environmental polluters, they are focused on positioning in such a way that they can eventually increase their involvement in green practices. So they are minimizing their carbon footprint, introducing environmental policies and practices in their organizations such as energy saving, waste reduction, water management, etc. On the other hand, many hotel managers think that implementing eco-management will reduce costs and attract the attention of consumers, increasing their loyalty.

The purpose of this study is to introduce options for hotels to follow the best practices in order to be sustainable and understand the importance of sustainability in the eyes of customers. In this study are included some of the biggest hotels in Korca's region. At the end of this study, we will explain how the hotels in Korca are adapting on the concepts and practices of sustainability, as perceived by the clientele, management and employees.

**Key words:** sustainable resources management, green standards, eco-management, loyalty

### Introduction

Strong competition and climate changes are orienting tourism businesses more and more towards sustainable resource management. So many large and small businesses are orienting their entire activity towards sustainable forms and eco-management. The success of many tourism businesses that have adapted sustainable resource management models have become an example for other businesses that want to survive strong competition, economic crises or the effects of globalization. Sustainable management of resources has not only improved the image of tourism businesses in the public eye by identifying them as activities that bring a low impact on the environment, but has made it possible for these businesses to use technology to create competitive advantages and increases consumer loyalty. In this heterogeneous industry, hotel businesses are the ones that have focused even more on sustainable management since they are often considered polluters of the natural environment. The sustainable development of the hotel means that the development of the hospitality industry must be based on the tolerance of the ecological environment, in line with local economic development and ethics, reducing the generation and emission of waste and pollutants, promoting the production process of hotel products and the environment, and reducing the damage to the environment (Jarvis et al., 2010, Boley and Uysal, 2013, Chou, 2014, Geerts, 2014, Fraj et al., 2015, Han and Yoon, 2015).

Some researchers have emphasized that hotels should reduce their negative impact on the environment, communities and economy. Hotel keeping traditional management methods will increase their operating cost (Enz and Siguaw, 1999), and that also makes a lot of waste (Kirk and Lynch, 2004). That makes it hard for a company to achieve long term benefits for the company and society (Jiang and Gao, 2019.). To achieve success and high performance, hotels are required to find the best management systems, bring innovation and discover competitive advantages.

Sustainable practices are more applied in large hotels than small ones. Small hotels find unnecessary to implement these practices by limited budget, or thinking that their impact on the environment is minimal compared to large hotels. On the other hand, many consumers today value hotels that use sustainable practices in their selections, so hotels are not only involved in obtaining eco-labels and green practice certificates, but also promote them in all forms of communication, showing that they are aware of the environment by saving energy, water, or implementing waste management practices. Due to Leroux & Pupion (2018) environmental labeling 'offer marketing benefits to certified firms by helping consumers distinguish between sustainable tourism businesses and non-sustainable businesses through the eco-label'. Communicating hotels commitment towards environmental sustainability is a crucial aspect for hotel

managers (Gössling & Buckley, 2016; W. Wang, Krishna, & McFerran, 2017). Green Hotels are defined as environmentally-friendly properties whose managers are eager to institute programs that save water, save energy and reduce solid waste while saving money to help protect our and only Earth (Green Hotel Association, 2012). Sustainable development and sustainable practices have been the trends of the tourism and hospitality industry. Not all countries have accepted the implementation of green practices, the problem of adapting green tourism is that it faces a conflict between the economic sustainability of the tourism industry and the sustainability of the environment of the destination (Núñez, et al., 2004). Many studies are done on application of sustainable practices in hotel management. Hotel managers should take into consideration not only the implementation of responsible practices to benefit the environment, economy and society, but also the involvement of stakeholders, (Jurdana & Frleta, 2012; Popescu et al., 2014; Stancu, 2014). Small hotels usually have on resources to implement sustainable practices (Caboni & Giudici, 2012; Mensah, 2014).

#### 1. Situation of tourism sector in Korca region

Korca is one of the most frequented destinations in Albania in all seasons of the year. Korca region offers 165 cultural monuments of category I, 34 protected areas, 70 natural monuments category III, 2 national parks category II, 2 regional natural parks category IV and cultural and tourist attractions (database of tourist resources - Korca District). Tourism is one of the sectors that has had the greatest development in the region Korça. It is one of the strategic sectors for economic development of the area and includes: cultural tourism, rural tourism, eco-tourism and culinary/gastronomic tourism, etc. In 2021, the most preferred destinations for travel (personal or business) in Albania are: Tirana, Vlorë and Korca (Tourism in figures 2021, INSTAT). In recent years, a lot has been invested in Korca for the development of tourism, as one of the most important sectors of the local economy. The Korca region recorded from January to June 2022 about 628 thousand visitors, thus making up about half of the total nature visitors. Compared to a year ago for the same period, the increase is 21.7%. According to the municipality of Korca, during the period January - June 2021, over 30,000 visitors visited the city and its tourist villages, 65% of whom were foreign tourists and in total, the entire Korca District had 612,166 tourists in the period January-October 2023. Official data show that we have a 23 percent increase in the number of tourists visiting protected areas, compared to a year ago. Tourists are accommodated in both modern (hotels) and traditional (guest houses) ways. According to official figures, there are about 3,300 people employed in the hotel-tourism sector in Korca municipality, while the accommodation places have increased to 4,000 beds. Accommodation structures in the Korca region appear mainly in the form of guesthouses, B&B and hotels.

#### 2. Application of sustainable practices in the hotels of the Korca region

The aim of the study was to investigate the sustainable management of resources in the hotel industry. This was done by first collecting primary data on sustainability and on practices in a hotel that creates a minimal impact on the environment. Information was obtained regarding sustainable development, pillars of sustainability in the corporation, sustainability in the hotel sector, performance and indicators of sustainable environment, performance evolution, eco- certification programs, green operations. In this study are used, both secondary and primary data. The secondary data were obtained from various information sources such as publications in the field of tourism to highlight concepts about the sustainable management of resources in the hotel industry. The primary data were obtained from a survey in the hotels of the Korca region. The sampling method was used to obtain a representative sample. This sampling method is very suitable for the research in this paper, using purposive sampling. Based on this method, 25 hotels were selected in the region of Korca with at least 20 rooms and which had a restaurant in the hotel. The questionnaire addressed to hotel managers is based on standardized questions that make it easier to compare and search for possible connections. The results of the study are presented as follows:

Regarding the question of whether you have information available on the use of energy in the hotel, 76% had information on the use of energy, 72% had available information on the use of water in the hotel. For the question, does the hotel have ecological signs, 88% did not have ecological signs, 12% had other ecological signs. Answers to the question does the hotel have an original system for environmental management 4% had an internal system, 96% did not. Most of the hotels did not have an environmental program. The result for the question did they use products and equipment with low emissions in the air 8 % yes limited, 92% no. If the buildings had special efficient construction features, 68% had partial natural ventilation and 22% had several features. For the cooling system 72% partial natural ventilation 28% yes some features. For the geothermal



situation of the hotel 84% partial ventilation 16% yes some features. Regarding the question have you made any energy savings in the last 5 years 88% more than 5%, 8% 5 to 10%, 4% less than 20%. For energy, 100% electricity. Regarding the question what have you done in your operations to reduce energy consumption 68% solar panel for warm water, 22% electricity. Regarding the question what type of lighting is used in your hotel 100% LED. Regarding the question how is the lighting in the rooms controlled and public facilities 100% sensor. Regarding the question do you measure water consumption 68% yes, 22% several times yes. For flow restrictions, 68% had implemented a program, 22% planned program. Regarding the question of collection of used water, 100% planned program. Regarding rainwater collection, 100% no planned program. The results for the question did the hotels have a recycling program 88% no but it is allowed, 12% no. For the separation of waste in different bins, we have the following result: 72% yes, 28% mixed waste. For using any sustainable system for human resources management in the hotel 100% no.

## Conclusions

Looking at the current trends, it is noticed that sustainability will have a greater role in the future of tourism. The common orientation for hotels for a sustainable development will be the reduction of operational costs. There is even a trend of hotels to be recognized by obtaining an eco-certification. Also, companies must take sustainable measures to compete in an increasingly environmentally friendly market. The region of Korçe has increased the number of foreign and local tourists year after year. The main purpose of tourists' arrival is mainly nature and culture. This trend in the increase of visitors may be followed by a later decline if the destination is not oriented towards sustainability. Currently there is no strong decrease in tourist flows, but from time to time small decreases in the numbers of local and foreign tourists are noticed. This fact should encourage local leaders to orient the destination towards sustainable forms. In order to be more attractive not only for the foreign market but also for the domestic market (which is becoming more and more demanding day by day), the hotels are receiving ecological certifications, which differentiate them not only from each other, but also from other hotels in the country. In the region of Korçe, some of large hotels are oriented towards the sustainable management of resources, and this comes from the orientation of management to reduce operating costs and also to increase their image in the eyes of customers. This orientation does not seem to be in all sources of the hotel and in all hotels. Hotels are mainly focused on saving energy, water and reducing heating costs. It is not noticed that hotels use systems or technologies for the sustainable management of other resources as human resources. It is necessary to aware hotel managers for using technologies and systems not only for a better management of resources but also for environment protection.

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## Consumer Behaviour On Food Labeling in Albania , A Review Of Research Studies

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**Abstract:** The purpose of this presentation is to explore the literature related to consumer behavior regarding the labels on food products. We explore the relationship between product labeling and consumer purchasing behavior, with the aim to understand how label perceptions influence buying decisions . Considering that the food industry is evolving every day, bringing a variety of different food products to the market, It frequently faces challenges in communicating the message to all customers. Food packaging plays a very important role in our daily lives, serving as a key tool that helps consumers differentiate between similar products and consequently influences their purchasing decisions. Consumers are concerned about the quality and safety of food, which means that various studies in the literature show that consumers are increasingly vigilant about the ingredients and nutritional value of their food. Product labels are a vital source of information, offering insights into the food's content and having a significant impact on consumer behavior. As consumers, we are encouraged to inform ourselves from the labels before purchasing products, especially when the products are new to us. However, reality often sees us Rapidly skimming through the over detailed ingredient lists, focusing instead on basic information such as calorie content and expiration dates. This oversight can pose health risks, especially for those with allergies to specific ingredients. By understanding the importance of labels in the purchasing process, brands can better meet consumer demands and encourage informed buying decisions, ultimately leading to safer and more satisfying consumption experiences.

**Keywords:** consumer behavior, costumer purchase, food labels.

### 1. INTRODUCTION

The fast-paced lifestyles and economic progress have heightened the demand for convenience foods, especially during meal times, leading to a surge in the consumption of ready-to-eat foods that boast a prolonged shelf life and require minimal preparation (Wegman, J., et al, 2018). As a consequence, supermarkets are now laden with an array of processed and ultra-processed food products, a trend that has been linked to an uptick in obesity rates and chronic diseases (Wegman, J., et al, 2018). This shift underscores the imperative for consumers to have access to accurate nutritional information on these products, enabling them to make informed choices—a right safeguarded by various national and international entities (Karakaya, 2018). Food labeling emerges as a crucial tool in this context, bridging the communication gap between producers and consumers by detailing the nutritional content and components of food items (Annunziata, A., et al., 2019).

Food libeling’s significance extends beyond mere information dissemination; it plays a pivotal role in guiding consumer purchase decisions (Annunziata, A., et al., 2019). Studies have demonstrated the impact of label information on consumer choices, suggesting that well-informed decisions can contribute to improved health outcomes and well-being (Arrúa, A., et al, 2017). As Bazzani further highlights consumers' tendency to scrutinize labels to ascertain product alignment with their dietary preferences and health requirements, such as for vegetarians or individuals with diabetes (Bazzani, C., et al., 2019). The need for detailed labeling to facilitate informed consumer choices has been emphasized (Karakaya, 2018).

Despite its importance, research on consumer perceptions and attitudes towards mandatory food label information remains limited. There's a consensus on the value of clear and comprehensible labeling (Annunziata, A., et al., 2019), yet more studies are needed to fully understand consumer interpretation of this information (Pomeranz, J. L., et al., 2019). Efforts by the food industry to enhance label clarity and comply with legal requirements have been noted (Malaysian Food Safety Agency, 2010), but the quest for clarity and comprehension in food labeling continues (Pomeranz, J. L., et al., 2019). This situation has led to calls for labels that are informative yet not misleading (Thiene, M., et al., 2018), amid a backdrop of varying consumer expectations regarding the nutritional insights labels should provide.

Furthermore, while research has explored various aspects of food labeling, from consumer perspectives to health and nutrition, market impacts, and child nutrition, there's an acknowledgment of the limited focus on label design (Tierney, M., et al., 2017). Moreover, understanding and awareness of food labeling among

consumers are deemed critical for food safety, with studies revealing varying levels of knowledge and utilization of (A. Cavaliere, 2017; Miller, 2017) food labels (Tanemura, N., & Hamadate, N., 2022). Despite this, a comprehensive understanding of public perceptions towards food labeling remains elusive, prompting further investigation into how consumers interpret and value nutritional information on labels.

### **1.1. Methodology**

This review scrutinized articles addressing consumer viewpoints on labeling practices for pre-packaged food items, sourced from journals or research reports published in English. It encompasses research on various aspects of food labeling, including nutritional and ingredient labels, along with studies on consumer awareness and interpretation of these labels. The analysis is solely dedicated to the examination of food labeling practices at the point of sale. In our investigation, we – reviewed scholarly works related to food labeling, selecting studies identified through digital searches in databases such as Google Scholar, ScienceDirect, PubMed/Medline.

### **1.2. Results**

Nutrition facts and lists of ingredients serve as vital sources of dietary information for the majority of shoppers. People seek out nutritional details on food items from the nutritional values displayed on the packaging, including specific components, cost, caloric intake, sugar content, fats, sodium levels, product freshness, and the label's nature, specifying whether it is inorganic or organic. Furthermore, it's advisable for consumers to take into account the name of the brand or manufacturer, symbols indicating nutritional content on the front of the package, the manufacturer's official website, and statements regarding corporate social responsibility. In the quest for nutritious options, well-educated individuals with higher earnings tend to focus more on brand or company names compared to those with lower educational backgrounds and incomes.

## **2. FOOD LABELLING**

The World Health Organization (WHO) describes food labeling as any textual, illustrative, or graphical information presented on food packaging that aims to market or advocate for the product (Miller et al., 2017). Consumer health stands as the paramount concern for the food industry, with label information facilitating educated choices by detailing the food's composition, ingredients, quality, source, methods of processing, and preservation techniques (Anastasiou, 2019; Miller, 2017). Food manufacturers are tasked with delivering straightforward, precise, and uniform labeling that outlines the product's health benefits, thereby arming consumers with essential nutritional knowledge for making informed purchases (Chen, H. J. et al., 2017). Such labels are expected to clearly state the levels of salt, sugar, calories, vitamins, cholesterol, and trans fats. Furthermore, effective food labeling must cater to all consumers, including those who are illiterate or have color and vision impairments, as it holds the promise of mitigating obesity and chronic health issues linked to unhealthy dietary habits. Nonetheless, the complexity of food labeling can lead to widespread misunderstanding among consumers regarding the information provided (Shangguan, S., et al., 2019) Food labeling transcends mere marketing tactics, extending its importance to the consumer sphere, where individuals seek not only assurance of marketing accuracy but also genuine protection from the food industry. Despite its economic vulnerabilities, Albania is actively encouraging both producers and consumers towards adopting standards for food safety, thereby enhancing competitiveness through economic measures and emphasizing the real nutritional value of products. The introduction of an open market has led to a diverse product range, necessitating clear communication regarding all aspects of food safety. This ensures consumer health protection and aids in navigating a highly competitive marketplace.

### **2.1. Ingredients on food label**

In numerous nations, the disclosure of ingredients on food packaging is a compulsory requirement, alongside nutritional information (Arrúa, A., et al., 2017). Manufacturers are obliged to enumerate all ingredients on the packaging, arranging them by their quantity, with the most prevalent components listed first. Additionally, the label must identify any color additives approved by the FDA, though these can be grouped under general terms such as "flavors," "spices," "artificial flavoring," or "artificial colors" without specific enumeration. Furthermore, the label should include an allergen declaration. The terminology used for ingredient listing and nutrient labeling varies across different markets, leading to variations in ingredient lists for the same food item among

different brands. It is crucial for consumers to review the ingredient list before purchasing food products. While extensive research has been conducted on consumer awareness of nutritional labels, studies focusing on ingredient listings are less common. (Grunert, 2018) explored consumer preferences for the inclusion of alcoholic ingredients in nutritional information, finding that consumer interest and, to a lesser extent, health considerations influenced the use of food label information. In the realm of consumer behavior, food labeling emerges as a critical concept, prompting a review of its definitions within scholarly literature. Food labeling is increasingly recognized as an effective strategy to enhance dietary habits across populations, aiming to address the rising concerns over obesity and related non-communicable diseases (Cecchini, 2016). It acts as a crucial link between food producers and consumers, potentially influencing purchasing decisions (Wandel, 1997). Recognized as a significant channel for nutrition communication, food labels empower consumers to make informed choices conducive to health (Cecchini, 2016). Generally, consumers possess considerable knowledge about their food choices, derived from product information such as contents, labels, certifications, and logos (Wandel, 1997). Food label information plays a pivotal role in helping consumers assess product components and make healthier choices. In Albania, the legal and institutional framework overseeing consumer health includes the Ministry of Agricultural and Rural Development, the National Food Authority, municipal entities, and key legislation: the 'Food Law' (Law No. 9863, dated January 28, 2008), the 'Consumer Protection Law' (Law No. 9902, dated April 17, 2008), and the 'Food Labeling and Consumer Information Law' (Decision No. 434, dated July 11, 2018). Within this framework, food labeling encompasses mandatory, additional, and optional elements. Mandatory information comprises the ingredient list, allergens, producer's name and address, nutritional value, storage instructions, product name, origin country, usage guidelines, expiration date, and net quantity. This data is vital for enhancing consumer awareness and behavior.

#### 4. CONCLUSION

Referring to changes in the development of modern lifestyles and economic development, we have had a significant impact on our dietary habits, especially by increasing our reliance on convenience foods. This shift, marked by the increase in the consumption of processed and ultra-processed foods, underscores the critical need for accessible and accurate nutritional information, enabling consumers to make informed dietary choices.

Food labeling has emerged as an indispensable tool in this aspect, serving not only as a bridge for communication between producers and consumers but also as a key factor influencing consumer purchasing decisions. Research emphasizes the important role of food labeling in guiding consumer choices towards healthier outcomes, with a clear demand for labels that are both informative and easy to understand. Despite the acknowledged importance of food labeling, gaps remain in understanding consumer perceptions and interpretations of mandatory label information. This indicates an urgent need for further studies to delve into consumer interaction with food labels, aiming for labels that effectively communicate essential nutritional information without causing distraction. The complexity of food labeling and its impact on consumer behavior calls for ongoing efforts to improve label clarity and legal compliance, alongside exploring innovative design solutions that cater to a diverse audience. The discussions and findings presented highlight the multidimensional nature of food labeling, from its role in consumer decision-making to its implications for public health. As we move forward, the food industry, policymakers, and health professionals must collaborate closely to refine food labeling practices. This collaborative effort should aim to make nutritional information more accessible and understandable, ensuring that all consumers, regardless of their background or dietary needs, can make informed choices that align with their health objectives and dietary preferences. In conclusion, the journey towards optimizing food labeling is ongoing. It involves balancing the need for comprehensive and clear nutritional information with the diverse needs and preferences of consumers.

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## The Contract Of Agency In The Business Relations Established In The Republic Of Moldova

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**Abstract:** The evolution of the institution of intermediation over time has shown an overwhelming importance for the considerable increase of economic relations in many countries, but not least in the Republic of Moldova, due to the fact that multiple relations have intensified over time.

In this context, intermediation is already a key in the economy of contemporary countries. We cannot discuss the actual regulation of the agency contract without analyzing the institution of intermediation, since the agency contract is one of the most important intermediation contracts in business.

Thus, with the development of international trade, the entry of certain 'professionals' into a foreign market with a view to unlocking the market for goods has become increasingly important. These people, known on the local market, enjoyed trust and prestige, ensuring the popularization and personal guarantee of economic relations.

Professionals later became intermediaries, who on the basis of agreements concluded with foreign traders carried out all the necessary operations and actually concluded contracts in their own name, or on behalf of their clients, who had little to do with negotiating future contracts, the effects of which were passed on to foreign traders.

In this context, there has always been a need to have recourse to certain independent natural and legal persons in order to speed up, facilitate and provide services in the most optimal conditions.

The emergence of permanent commercial agents in the legal system signifies the birth of a new profession - that of professional commercial intermediary, whose independence plays a decisive role in negotiating and conducting business.

The agency contract is not a simple intermediation contract, but over time becomes a „legal instrument” at the disposal of the professional.

In other words, the agency contract is the act by which one party, permanently empowers the other party, called the agent, to negotiate business, either to negotiate and conclude business in the name and on behalf of the principal, in return for a sum of money.

Importantly, it allows the agent to act both with direct representation (acting as an agent of the principal) and with indirect representation (entering into business transactions in its own name but on behalf of the principal, as a commission agent).

The methods and materials applied have a theoretical importance and the following methods are applied: analysis, synthesis, generalisation and comparative method.

The purpose of the article is to elucidate the importance of the agency contract provided for in Chapter XXII of the Civil Code of the Republic of Moldova, entitled: „the object of the contracts is the placement of another's products on the market” regulated by the law on modernization of the Civil Code of RM of 01.03.2019.

**Key words:** intermediary institution, commercial contracts, business activity, commercial agency, professional, commercial agent.

### 1. INTRODUCTION

The evolution of the institution of intermediation over time has proved to be of overwhelming importance for the considerable growth of economic relations in many countries, but not least in the Republic of Moldova, given the fact that multiple relations have intensified over time.

In view of this, intermediation is already a key economic instrument in contemporary countries. We cannot discuss the actual regulation of the agency contract without analysing the institution of intermediation, since

the agency contract is one of the most important intermediation contracts, being regulated first in the order of Chapter XXII of the Civil Code, entitled „CONTRACTS ON THE MARKETING OF PRODUCTS”<sup>[1]</sup>.

Thus, with the development of international trade, it has become necessary for certain „professionals” to enter a foreign market in order to break up the local market.<sup>[2]</sup>

In this sense, these people, known on the local market, enjoyed trust and prestige, ensuring the popularization and personal guarantee of economic relations.

The professionals subsequently became intermediaries, who on the basis of agreements concluded with foreign traders carried out all the necessary operations and effectively concluded contracts in their own name, or on behalf of their clients, who had little to do with negotiating future contracts, the effects of which were passed on to the foreign traders.

In this context, there has always been a need to recourse to certain independent natural and legal persons, in order to speed up, facilitate and carry out services as efficiently as possible. The emergence of permanent commercial agents in the legal system signifies the birth of a new profession - that of the professional commercial intermediary, whose independence plays a decisive role in negotiating and conducting business.<sup>[3]</sup>

The agency contract is not a simple intermediation contract, but becomes over time a „legal instrument” at the disposal of the professional.

In other words, the agency contract is the act by which one part, permanently empowers the other part, called the agent, to negotiate business, either to negotiate and conclude business in the name and on behalf of the principal, in return for a sum of money.

Importantly, it allows the agent to act both with direct representation (acting as a principal's agent) and indirect representation (entering into business transactions in its own name but on behalf of the principal, as a commission agent).

Next, since 01.03.2019 in particular, with the latest civil legislative changes of the Republic of Moldova, the need to adopt a separate legal framework, oriented to the development of economic relations at the international level, considered a more complex and mobile legal instrument in the field of business intermediation, has become particularly necessary.

Making an abstraction in relation to the legislation of other countries, this subject has been covered in civil legislation for a long time, being properly applied, while the regulations of the old Civil Code of the Republic of Moldova also stipulated the agency contract, but in practice, it was not so common in the Republic of Moldova.

## 2. RESULTS and DISCUSSIONS

Therefore, according to the literature and the Civil Code of the Republic of Moldova: „By the commercial agency contract a part (commercial agent) undertakes to act permanently as an intermediary carrying out independent activities to negotiate or conclude contracts on behalf of the other part (principal), and the principal undertakes to pay him reimbursement for those activities.”<sup>[4]</sup>

In Romania's Civil law we find the following definition of the agency contract: „by the agency contract the principal permanently empowers the agent to negotiate, either to negotiate or to conclude contracts, in the name and on behalf of the principal, in return for remuneration, in one or more specified regions”.

Thus, from these notions of the two countries, it is clear that the agency contract is an intermediation contract, at the origin of which is the intermediary, the authorised person, who is entrusted with a set of obligations in the performance of the contract, such as: promoting the sale of goods, obtaining offers and negotiations,

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<sup>1</sup> Civil Code of the Republic of Moldova No. 1107 of 06.06.2002 updated on 01.03.2019. Chapter XXII. Published: 01.03.2019 in the Official Gazette No. 66-75. Cap. XXII.

<sup>2</sup> Cărpenaru St., *Treatise on Roman Commercial Law*. 2nd revised and added edition. Ed. Legal Universe. Bucharest, 2011. p. 152-155.

<sup>3</sup> [https://www.univnt.ro/wp-content/uploads/doctorat/rezumat\\_doctorat/Dogaru\\_Dan\\_Mihail.pdf](https://www.univnt.ro/wp-content/uploads/doctorat/rezumat_doctorat/Dogaru_Dan_Mihail.pdf) p. 2.

<sup>4</sup> Civil Code of the Republic of Moldova No. 1107 of 06.06.2002 updated on 01.03.2019. Chapter XXII. Published: 01.03.2019 in the Official Gazette No. 66-75. Cap. XXII.



organising the promotion of goods, ensuring the marketing of a minimum volume of sales, the obligation to inform the principal, checking the solvency of third parties, whose offers are transmitted by the principal, and, last but not least, the authorisation on behalf of the principal of trademarks and symbols.

The power of attorney in the agency contract is of particular importance as the subject matter of the contract must be accurately determined by the parts. <sup>[5]</sup>

This may consist in negotiating the terms of contracts with third parties, negotiating and concluding future contracts with third parties in the name and on behalf of the principal, setting out in the agency contract the essential terms of future legal acts to be concluded by the agent in the name and on behalf of the principal (the nature of the act, the goods and services concerned, their prices, terms of payment, delivery, guarantees, submission of tenders, market research, negotiations, advertising of products) and other essential terms), and finally the geographical region in which the agent will operate. <sup>[6]</sup>

Like any other Civil law contract, the agency contract has its own specific legal characteristics.

Consequently, the agency contract:

- is a named contract (expressly regulated by the Civil Code of the Republic of Moldova.)
- it is a bilateral (synallagmatic) contract, it gives rise to obligations on both parties, both in the case of the commercial agent and the principal.
- it is a contract for consideration, both parts are seeking pecuniary benefits, as it is concluded between entrepreneurs, and the principle that „every service must be paid for” prevails in the business field.
- it is a commutative contract, the parts know with certainty from the moment when contract is concluded the extent of the obligations (they are determinable).
- it is a successive performance contract, the obligations are performed in instalments over a fixed or indefinite period. This character is apparent from the fact that the agent has „permanent” powers of attorney.
- is a consensual contract, it comes into existence by the mere agreement of the parts, but can only be proved by a written document. <sup>[7]</sup>

Therefore, in order to get to the essence of this contract we will start from the most basic concepts. The parts of the agency contract are called principal and agent.

With reference to the parts to the contract, a mandatory condition is that they must have a full capacity to act, since the agency contract is an act of disposition.

So, the primary role of this contract is played, as mentioned above, by the commercial agent, through his professionalism, with a view to promote a successful business on the market and conclude quality service contracts.

According to the literature: „Commercial agent - is a self-employed natural person who has been entrusted with the permanent power of attorney for the intermediation or conclusion of commercial contracts for goods and services in the name and on behalf of another enterprise (principal)”. <sup>[8]</sup>

In this context, the legal requirements for the legal status of the commercial agent can be directly extracted from the definition of commercial agent. Like this, it:

- acts as a natural person, independent entrepreneur, in accordance with the provisions of the Civil Code of the Republic of Moldova- has permanent powers of an attorney;
- acts in the name and on behalf of another undertaking (principal);

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<sup>5</sup> Popa. I., *Civil contracts. From theory to practice*. Ed. II-a, Ed. Bucharest, 2020. p. 229

<sup>6</sup> Chibac G., Robu O., Brumă S., Chibac N., *Civil Law. Contracts and successions*. Ed. A 4-a, Chisinau, 2019.

<sup>7</sup> Popa. I., *Civil Contracts. From theory to practice*. Ed. II-a, Ed. Bucharest, 2020. p. 300.

<sup>8</sup> Cărpenaru St., *Treatise on Roman Commercial Law*. 2nd revised and added edition. Ed. Legal Universe. Bucharest, 2011. p. 37.

- has an established field of activity, which is the intermediation or conclusion of commercial contracts for goods and services.

Unlike the legal status of other categories of intermediary subjects, the commercial agent is empowered by contract to act for the intermediation or conclusion of commercial contracts for goods and services, other categories of intermediary services do not qualify such commercial agency relationships.

The commercial agent is empowered to carry out a wide range of factual and legal actions, therefore his permanent activity can serve as a criterion for the legal and civil classification of this relationship as one of intermediation.

The subject, who has the status of a commercial agent, undertakes by contract to identify a buyer or consumer of services and to negotiate the essential terms of the future contract. The subsequent results of the negotiations are brought to the attention of the principal, who finalises the negotiations and signs the actual contracts.

Therefore, by operation of law, the commercial agent is not entitled to conclude in his own name and on his own account the commercial contracts in which he has participated in that capacity. Civil law also establishes the categories of persons who cannot be considered commercial agents in certain relationships. Under the law, a person is not considered a commercial agent if:

- being an employee of the principal, it is responsible for concluding binding contracts for the principal;
- being a partner, it has the right to conclude binding contracts for its partners;
- is the administrator of the reorganisation proceedings or the liquidation proceedings in the insolvency process;
- is active on commodity exchanges.<sup>[9]</sup>

The persons indicated do not meet the criteria defining the legal status of the commercial agent, either because he is a part of employment relationship with the principal and by virtue of that relationship is bound to conclude binding contracts for the principal, or because he is a business partner of the principal and is empowered by certain contracts to represent his partners.

With reference to the duties of a commercial agent, he is obligated to represent honestly the interests of the principal. Honest representation of the principal's interests is the basic requirement put forward by the legislator for the activity of the commercial agent.

The word „honest” is understood as fair. The commercial agent, like other intermediaries, must personally carry out the provisions of the contract, is guided by the instructions of the principal, and in some cases is given a power of attorney to carry out actions on behalf of the principal.

In addition to this, he must take appropriate steps in the negotiations and, where necessary, conclude contracts at the principal's direction, provide the principal with useful information at his disposal, and carry out reasonable instructions. He is also constrained to keep proper records of contracts negotiated on behalf of the principal.

If we refer to the person of the principal, then we can mention that: he can be any trader interested in benefiting from the services of a professional intermediary for the sale of goods and the provision of services which are the object of his commercial activity.<sup>[10]</sup>

The person, who is also referred to in the literature as the principal, on the one hand, a qualified subject, professional, natural or legal person, which distinguishes him from a mere intermediary, must respect the principle of good faith in his relations with the commercial agent.

In general, the principal is compelled to provide the commercial agent with all the information necessary for the performance of the agency contract, to notify the commercial agent within a reasonable time of the fact that the volume of commercial transactions is expected to be considerably lower than the agent might normally have expected.

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<sup>9</sup>Civil Code of the Republic of Moldova No. 1107 of 06.06.2002 updated on 01.03.2019. Chapter XXII. Published: 01-03-2019 in the Official Gazette No. 66-75. Cap. XXII, Art. 1687.

<sup>10</sup> Cărpenaru St. D., *The agency contract in the regulation of Law no. 509/2002*. In: *Curierul judiciar* no. 11/2003. p. 84.

If the form of the agency contract is to be considered, according to the literature, it must be concluded in writing, authenticated, or under private signature, as a condition „ad probationem”.

Of course, one question as the likelihood of concluding the agency contract „intuitu personae”, or not.

We would point out that, at least on the part of the principal, the contract would be „intuitu personae”, since the principal usually chooses his commercial agent on the basis of the latter's qualities of reliability, probity and competence, but regardless of the value of the contract, it can only be proved by a written document.<sup>[11]</sup>

The commercial agent is entitled to remuneration for services rendered to the principal under the agency contract. Here we can mention that if the amount of remuneration is not stipulated, it is considered that an ordinary remuneration for this field of activity has been agreed.

The commercial agent shall be entitled to a commission for legal acts concluded during the period of the agency contract if, and to extent that:

- a) the legal act was concluded as a result of the actions of the commercial agent concerned;
- b) the legal act was concluded with a third party who previously became a customer of the principal by virtue of a similar act due to the actions of that commercial agent.

In the current Civil law there are two specified moments regarding the agent's right to commission, namely we have:

- the commercial agent's right to commission for the duration of the commercial agency;
- the commercial agent's entitlement to commission after the termination of the commercial agency.<sup>[12]</sup>

With reference to the method of calculation of the amount of commission, we can mention that it takes place as follows: at the end of each quarter (3 months) the principal must send the agent copies of the invoices that have been sent to third parties, as well as the description of the calculation of the amount of the commission.

In the regulation of this contract, a significant role is played by the non-compete clause, which is a contractual stipulation whose effect is to restrict the agent's professional activity during the agency contract or after the termination of the contract.

Non-competition has also been defined as: „the contractual obligation of one part not to perform a specific professional activity to the detriment of the other part”.<sup>[13]</sup>

A typical situation of non-compliance with the non-compete clause is reported in the following case:

„X, a distributor of consumer products belonging to a well-known brand on the market, concludes an agency agreement with Y for a period of one year. After one year, the cooperation ends and Y charges commissions for orders placed by its customers during the last month of the contract and for orders placed by them for three months after the end of the contract. X objects on the grounds that Y has continued as a commercial agent in the same region, for the same product categories, working with his clients for another principal.”<sup>[14]</sup>

If analyse the termination of the agency contract, we could mention here that the Civil Code provides two methods of termination, namely:

- termination in a case of a fixed-term contract;
- termination in a case of an open-ended contract;

Thus, with reference to the first fact, we note that the party has the right not to extend the contract concluded for a fixed term.

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<sup>11</sup> Stănescu A.T., *Commercial Law. Professional contracts*. 2nd edition, Ed. Hamangiu, 2018.

<sup>12</sup> Civil Code of the Republic of Moldova No. 1107 of 06.06.2002 updated on 01.03.2019. Chapter XXII. Published: 01.03.2019 in the Official Gazette No. 66-75. Cap. XXII. art. 1706.

<sup>13</sup> <https://www.codulcivil.ro/art-2075-clauza-de-neconcurrenta/> (accessed: 05.02.2024).

<sup>14</sup> Diaconescu Șerban, *Commercial distribution contracts, practical applications for intermediation contracts*. Ed. Universul Juridic. Bucharest, 2010.

If a part has given notice, within a reasonable time, of its intention to extend the contract, the contract will be extended for an uncertain period unless the other part has given it notice, within a reasonable time before the termination of the term of the contract, that it does not wish the contract to be extended.

Next, contractual agency relationships arising from contracts without a fixed term or extended for an undetermined period may be terminated at the initiative of either part provided that prior notice is given to the other.<sup>[15]</sup>

In other words, without compliance with the legally prescribed notification procedure, proper termination without negative effects is not possible.

Abstracting from the Romanian legislation, this subject has been covered by the Romanian civil legislation for a long time and has been properly applied, whereas in the Republic of Moldova the agency contract was still stipulated in the regulations of the old Civil Code, but in practice it was not applied so.

Analysing the typical intermediation contracts in the Republic of Moldova, we note that these have only recently appeared, judicial practice being poor in this respect, while at international level, the adoption of uniform regulations applicable to intermediation has contributed to the elimination of obstacles in international trade for a long time.

## CONCLUSION

To what has been analysed and reported in this article, we support the idea that the commercial agency contract is indeed a more than favourable legal instrument, which can be applicable in the use of a long-term project, or in a solid, long-term partnership that will require the achievement of certain performance requirements.

Thus, it is clear that the empowerment of an agent is a cost-effective and easy way to develop an economic activity in the local and international business market.

In other words, an agency agreement is one that provides a starting point for a principal's partnership. At the same time, we are of the opinion that commercial agency contracts are particularly important for persons who are commercial agents, given the fact that they must protect not only their own interests but also the interests, the needs of the principal they represent.

In this context, we can certainly determine that agency contracts play a particular role in the world of work. In absolutely all industries, agency is the most common and viable tool that business owners apply.

Another aspect of the importance of addressing this topic is the intensity of the development of agency relationships.

It is understandable that the agency contract functions as an insurance, which intervenes when the principal's business takes a worse turn.

The topicality and importance of the research topic is justified by the current trends in the national and international development of intermediary relations arising from these contracts, by virtue of the increase in economic activity as well as cooperation based on good marketing practices and the distribution of products and services.

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## Exploring Farmers' Awareness on Water Use in Agriculture

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**Abstract:** The use of water is an important input in agricultural production as well as the impact it has on the environment. The evaluation of farmers' awareness will be seen as a result of their knowledge and perception regarding the use of inputs in agriculture. Increasing knowledge on water use can have a positive impact on reducing the risk of drought, supporting climate goals, and advancing social development. Proposed standards for water used in agriculture include water treatment, water testing, water system inspection, etc. The role of the farmer through daily activities is very important, and the optimal management of its use is not analyzed only in technical terms. The overall view of a good management should be completed with a more general approach, which also includes social, economic, and educational aspects. The knowledge dimension is a powerful aspect to achieve sustainable water use. The aim of this paper is to explore the factors that influence the perception and knowledge of farmers regarding the impact of water as a key input for agricultural production but also an environmental agent. Some of these factors are: gender, educational level, total farm production, land fragmentation, water rights, the distance of the farmer's house from the nearest extension office, participation in extension meetings related to water management and the effectiveness of this service.

**Keywords:** water, agriculture, knowledge, factors

### 1. INTRODUCTION

Water is one of the most important factors involved in economic activities, especially agricultural ones. Rapid climate change is expected to reduce freshwater supplies (IPCC, 2014) making water scarcity a major concern (Dounghanee, 2016) in the not too distant future.

Agricultural activity is one of the contributors to water pollution (Bourceret, et al, 2023). Thus increasing farmers' knowledge about production practices ensures better farm management. It is therefore of great interest to understand what prevents or pushes a farmer to undertake such an activity. Given a general approach, the decision to recognize water quality is not only a decision that affects farm management but also an environmental issue bypassing the priorities of sustainable agriculture. This would require specific human resources and laboratories for analysis and on the other hand the existence of these laboratories would depend on economic factors and the ability of farmers to pay (Kokoye et al., 2018).

Agriculture is claimed to be the largest contributor to water pollution because farmers have intensified the use of agricultural chemicals over the last 50 years, leading to increased flow of herbicides, pesticides, sediments (Hite et al., 2002). Farm water quality can have economic impacts for farmers through its effects on livestock, crop production and the effectiveness of pesticides and other agricultural chemicals. Depending on the sources of water supply and its end use, water management standards may vary. They can vary between types of crops or livestock and the stage of growth or production. Effects of water quality on plants include those related to salt content (salinity risk); sodium content (risk of sodium); concentrations of carbonate, bicarbonate, calcium and magnesium; concentrations of elements that may be toxic to some plants (especially sodium, chlorine and boron); excess nutrients (problems with yield and quality); potential microbial problems (Anonymous, 2014). Crops vary in their tolerance to different water quality parameters (especially salinity and boron).

Agricultural water standards aim to minimize the possibility of contamination of production by pathogens in the water used in growing, harvesting, packaging and storage of products. In general, agricultural water standards require farmers to ensure that agricultural water is "safe" and of "adequate sanitary quality for its use", meaning that the water must not contain pathogens or contaminants and that should be convenient to use.

Crises due to lack of fresh water are considered as serious threats to sustainable development, natural environment, health and well-being of human beings; as a result, governments are required to change their water resources policies and adopt participatory approaches to water management, to engage farmers at all stages and levels of water and environmental management (Shahroudi et al., 2008). Regarding the fact that water shortages are observed mainly in the agricultural sector, the efficient use of water resources in this sector, or the management of agricultural water is inevitable (Rezadoost and Allahyari, 2014).

Farmers in agricultural activity are the main decision-makers regarding the use and management of water, and understanding their perception and knowledge regarding the versatile aspects of its use are of particular importance. This is motivated by the fact of the importance of mitigating the agricultural impact on sustainable agricultural systems. This paper contributes to the wider literature on water management, which emphasizes stakeholder involvement, multiple aspects of knowledge and influencing factors.

## **2. LITERATURE REVIEW ON WATER USE IN AGRICULTURE**

Optimal water management means managing water resources in a way that would enable farmers and users of water resources to meet their needs without threatening future needs. Based on optimal management, water crises are not only analyzed from technical aspects, but a holistic approach is required, which in addition to technical issues, focuses on social, economic, cultural and educational aspects (Rezadoost and Allahyari, 2014). Increasing social, financial, physical and human capital improves agricultural land and water use (Hernandez, 2002). Cramb (2005) showed that the development of social capital leads to improved behavior of farmers in the management of agricultural resources, and consequently facilitates and increases the use of agricultural technologies. To date, education has been considered as the main method used to encourage the reduction of non-agricultural pollution by promoting altruistic behavior and management among agricultural producers (Ervin et al., 1995).

Since environmental management is driven by personal attitudes, it is important to understand the motives of agricultural producers to understand the importance of water pollution from agricultural and non-agricultural activity (Hite et al., 2002). Fielding et al., (2012) indicates that demographic, psychosocial and behavioral variables as well as structural variables play a role in determining household water use.

In general, the literature shows that farmers have relatively good knowledge of both water and land (Bakhshi et al., 2019). Despite the agreement that farmers' general knowledge of agricultural land or water is good, there are still gaps between knowledge and practice (Dawoe et al., 2012).

There is a lack of studies regarding the measurement of farmers' knowledge and commitment in doing the water analysis that they use and circulate on their farms. However Hite et al., (2002) have studied the willingness of farmers to pay for the purification of water polluted by agricultural and non-agricultural activity, but which has an impact on their farms.

According to Hite et al., (2002) although farmers are concerned about water quality, they tend not to believe that their farm contributes to the aggravation of this problem. Lichtenberg and Lessley (1992) found that producers perceived water quality problems nationally as worse than they could be on their farm. The farmers' awareness about their role in the whole agricultural panorama is strongly linked with their perception and the knowledge as predictors of this role. This is reinforced by Amblard (2019) who states that their perception of water quality, i.e., the subjective evaluation of water quality, is an important factor. Recent studies show that farmers do not behave in favor of water quality due to a lack of information (Okumah et al. 2018). Also of interest is the conclusion that the decision-making process of farmers is influenced by their awareness of the consequences of water pollution (Michel-Guillou and Moser, 2006). The extent of their awareness of the consequences of their agricultural practices (Hu and Morton 2011).

## **3. FARMERS' BEHAVIOR TOWARDS THE USE OF WATER IN AGRICULTURE**

In this context with a great interest is the use of the Social – Ecological Systems (SES) (Bourceret, 2022). The model represents a catchment area where farmers implement their agricultural practices, which affect water quality. The evaluation of farmers' behavior is based on the theory of planned behavior. We integrate the impact of water quality perception on farmers' motivations to manage water management in accordance with good management practices. Increasing the amount of information for farmers has a positive effect on participation in programs that provide information about the use of inputs, including water (Bourceret et al 2023).

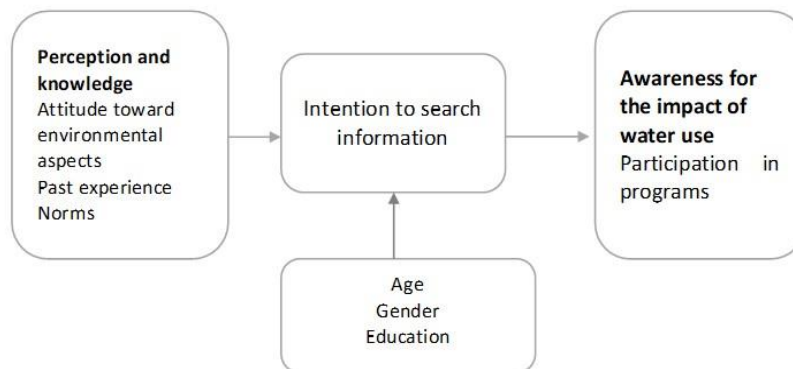
In order to better understand the intervention instruments to increase farmer awareness, environmental policy instruments that include a variety of instruments have been used such as economic instruments, command and control and information (Villamayor-Tomas et al., 2019). It has been noted that economic incentives alone do not bring about changes in agricultural practice that improve water quality due to the dual interests of self and others (Czap et al., 2012). Blackstock et al., (2010), states that farmers' awareness can be effective in adopting

water-friendly practices. Farmers who have higher environmental preferences readily embrace water pollution information practices. Heterogeneity between farmers in terms of environmental preferences has an impact on the involvement of farmers in the program depending on the average environmental concern. In terms of information and population characteristics, the higher the initial pollution, the higher the involvement of farmers in the program environmental program (Bourceret et al., 2023).

It is also noted that some demographic characteristics such as gender and employment affect the desire to receive information. According to Hite et al., (2002) men are willing to pay less than women farmers for improving water quality. The level of employment is also positively related to the willingness to pay for water quality improvement that is consistent with the ability to pay.

From the literature, our proposal is to focus on the role of two types of information: one on information about the perception and knowledge that farmers have about the concentration of water pollution and a second measure including also the measurement of information about the consequences of pollution. This panorama is added to the decision-making process of farmers to become more aware and to be active in activities that are friendlier to the environment or different government programs. Farmers' decisions are influenced by the practices of farmers belonging to their social network. Perceived behavioral control is the accumulation of past experiences, knowledge and qualifications (Ajzen, 1991). Finally, part of the scheme seems to be the socio-demographic diversity among farmers that affects the effectiveness of policies.

Figure 1: Farmers' Awareness on Water Use



Source: The authors

Recent studies do not show interest in favor of information about water quality. This makes public policies take a greater role in disseminating information on water quality and the consequences of water pollution (Bourceret, et al., 2023). Farmers are different in terms of the factors that motivate their decisions (Liu et al., 2018; Dessart et al., 2019). Recognizing the diversity of decisions is essential in supporting the management of pollution from agriculture.

#### 4. CONCLUSION

Fresh water supplies are being threatened by rapid climate change. Agricultural activity is one of the contributors to water pollution. Agriculture is claimed to be the biggest contributor to water pollution because farmers have intensified the use of agricultural chemicals.

Farm water quality can have economic impacts on farmers through its effects on livestock, crop production, and the effectiveness of pesticides and other agricultural chemicals. In general, the proposed agricultural water standards require farmers to ensure that agricultural water is of good quality.

Optimal water management means managing water resources in a way that would enable farmers and water resource users to meet their needs without jeopardizing future needs. Water crises are not only analyzed from the technical aspect, but also from the social, economic, cultural and educational aspects. This indicates that demographic, psychosocial and behavioral variables as well as structural variables play a role in determining household water use. Overall, the literature shows that farmers have relatively good knowledge of both water and land although there are still gaps between knowledge and practice. It has been noticed that only economic incentives do not bring changes in agricultural practice, therefore it is emphasized that the awareness of



farmers can be effective in adopting water-friendly practices. Farmers who have higher environmental preferences readily embrace water pollution information practices.

It is also noted that some demographic characteristics such as gender and employment affect the desire to receive information. Men are willing to pay less than women farmers for improving water quality. The level of employment is also positively related to the willingness to pay for water quality improvement that is consistent with the ability to pay. From the literature, our proposal is to focus on the role of two types of information: one on information about the perception and knowledge that farmers have about the concentration of water pollution and a second measure including measuring information about the consequences of pollution.

It is found a positive relationship between awareness of water quality problems and farmers' willingness to adopt actions to improve water quality. Awareness of the impact of water use that can be manifested by participation in programs is influenced by perception, knowledge and attitude towards environmental aspects that are highlighted through previous experiences, norms and the intention to seek information.

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## Self-expression values as a conditional factor for the establishment of a well-functioning democracy: The case of Albania

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**Abstract:** The aim of this paper is to highlight the self-expression values emphasized among the masses of society as an influential conditional factor for the establishment of a well-functioning democracy. The development of the self-expression values emphasized among the members of a society has a significant impact on the functioning of the democratic institutions of a country since these values are essentially for all the civil and political freedoms that embody and constitute a democratic system. A civic culture emphasized by the majority of citizens through self-expression values is the main force that motivates and shapes collective action in favor of a desired end [that is, i.e., a well-functioning democracy], as well as affecting/narrowing the opportunities of the elites/politicians of a particular country to behave in authoritarian ways or that contradict democratic principles. The case of Albania constitutes the case study of this article, where it is argued that the low level of self-expression values emphasized by its citizens is one of the main factors that has negatively affected the problematic functioning of democracy in this country.

**Keywords:** Self-expression values, culture, politics, collective action, democratization process, Albania.

### 1. Introduction

Clifford Geertz is one of those scholars (cultural anthropologist) who has made a significant contribution to the revival of the concept of culture and the explanation of its importance in interrelation with other disciplines, including the objects of study in the social sciences. This resurgence of the concept of culture in different disciplines of social sciences, including here for the explanation of democratization (why it was successful in some countries and not in others), was also done by other scholars in the 1960s-1970s, who explained the importance of the political culture of different countries as a functional prerequisite for the effectiveness and success of democratic systems. Thus, the central claim of the authors (of the culturalist approach) for the explanation of the democratization processes in the 1960s-1970s was that the political institutions [of certain countries] and the cultural values of the masses must be in harmony with each other in order to produce stable and effective regimes (Almond & Verba, 1963; Eckstein, 1966), without forgetting the important contribution made by Clifford Geertz in this direction. The culturalist accounts must be understood within the modernist paradigm for the explanation of democratizing processes since among the main assumptions of the modernist paradigm (see authors as Lipset, 1959; Inglehart & Welzel, 2005) is that democracy in a country thrives as a result of its functional adaptation to some prerequisites that are considered essential, in this case, with a civic political culture.

The emphasis of culturalist authors within the modernist paradigm is on the overall impact of the modernization process on a country's regime through its tendency to give life to cultural changes that place an increasing emphasis on human emancipation and self-expression values. As Inglehart and Welzel have argued, "the impact of socioeconomic development on democracy works primarily through its tendency to give rise to cultural changes that place increasing emphasis on human emancipation and self-expression" (Inglehart & Welzel, 2005: 170). So, the emphasis of the impact that the modernization process has on the societies of different countries is placed on cultural variables: that is, how modernization alters a society's political culture and values, which helps to shape collective behavior for the overthrow of authoritarian regimes and directs mass efforts toward establishing democracy in those environments. Inglehart and Welzel, two authors who have offered a revised version of modernization theory emphasizing the civic self-expression values as a prerequisite for democracy, have argued in this way: "the major effect of modernization is not that it makes democracy more acceptable to elites, but that it increases ordinary people's capabilities and willingness to struggle for democratic institutions" (2008: 136; See also in Wucherpfennig & Deutsch, 2009, 5-6). The claim of the two authors is that the change in the values of the masses of a society has a causal impact on democracy, which they try to explain through the impact that modernization has on the transformation of emancipation values on the citizens of a country and how the adoption of these values afterward creates the suitable environment and pushes the demands for democracy. In this paper, the importance of such self-expression values will be emphasized as an important conditioning factor for the success and effective functioning of a genuine democratic system.

## 2. Self-expression values as a conditional factor for a well-functioning democracy

The central argument of culturalist authors (Almond & Verba, 1963; Eckstein, 1966; Inglehart & Welzel, 2005; Diamond, 1999) is that the development of civic values among the masses of citizens which are in harmony with the institutional structure of democracy also enables the effective functioning of these institutions. This is because, as emphasized by this author, political institutions and the cultural values of the masses must be in harmony with each other in order to produce stable and effective regimes. The development of self-expression values are the ones that have the main impact on the functioning of the democratic institutions of a country since these values are essentially crucial for all civil and political freedoms that embody a democratic system. Democracy is the system that institutionalizes the civil and political liberties of citizens, and the demand for democracy reflects precisely the priority that people give to freedom and autonomous choice. As Inglehart and Welzel best emphasize this argument: “Democratic institutions represent an institutional supply of freedom because democracy institutionalizes civil and political liberties, and self-expression values create a cultural demand for freedom because these values emphasize freedom of choice.” (2005: 187). Naturally, the desire for freedom and free and autonomous choices can be considered a permanent human aspiration. Nevertheless, it is often not considered as a priority in circumstances when they are characterized by feelings of survival and fear or when they prioritize security. In this sense, even their demands for democracy will not be very strong or will not be effectively channeled in favor of democratization unless there is a change or an emphasis on self-expression values by a vast part of the population.

A civic culture that is emphasized by the vast part of the masses through self-expression values is also the main force that motivates and shapes collective action in favor of a certain product - the adoption of democracy and its institutionalization and well-functioning in countries where it is established. As Inglehart and Welzel put it, there are two main ways in which emancipatory social forces consisting of self-expression values can promote and channel elite (politician) behavior in favor of democracy.

“The first possibility derives from the properties of a society in which self-expression values are widespread. By definition, such a society contains a large proportion of people who value human emancipation and who are inclined to actively protest against unacceptable elite action. In a society with widespread self-expression values, people are likely to join mass social movements and support public campaigns that put pressure on elites to respond to their demands and respect their rights.” (Inglehart & Welzel, 2005: 218).

From here, it can be understood that the main effect of the self-expression values widely spread among the masses of citizens is through the effective pressure they can generate on the elites, making them more responsible and thus, also ensuring their accountability. Broad movements of social forces, diverse campaigns, or protests can generate such pressures. They can ensure the responsiveness of politicians in the face of citizens' demands or their withdrawal from unacceptable decisions that conflict with the public good. This can guarantee the well-functioning of the democratic system in different countries, as it makes the masses more vigilant against the violation of rights or the infringement and various breaches of democratic principles, thus ensuring the dimension of accountability of politicians that democracy inherently presupposes.

Self-expression values also contribute to the efficient operation of a democracy by counteracting undemocratic tendencies. This is because the growing emphasis on these values affects not only the general populace but also the politicians and elites of a given nation. Such a view “suggests that as self-expression values emerge among the mass public, they also tend to emerge among the elites of that society. This means that if a society's mass culture becomes more hostile to favoritism, corruption, and authoritarianism, elite culture is likely to do so as well” (Inglehart & Welzel, 2005: 219-220). Undoubtedly, it can be said that the political elites are the ones mainly responsible for the creation, craft, and functioning of the democratic institutions in a country. However, the decisions and actions of political elites can only be understood in the context of the social forces that influence and condition the behavior of these elites. In this sense, the emancipatory social forces consisting of the increasing emphasis on self-expression values among the masses of the population create increasing pressure on the elites to ensure their integrity and adherence to the rules of the democratic game and, ultimately, also guarantee the effective functioning of democratic institutions. The more solid and widespread the self-expression values among the masses of a country's population, the more likely it is that violations or infringements of democratic norms incumbents will not be tolerated, and thus, to ensure that democratic institutions function effectively. The growing emphasis on self-expression values by a vast part of the population also determines the strength of the pressure put on the political elites of a country to play by the rules and adhere to democratic standards. “For a public that emphasizes self-expression values tends to put its

elites under pressure to govern according to the rule of law, and a society that emphasizes these values tends to produce new generations of elites that are themselves likely to have internalized emancipative ideals". (Inglehart & Welzel, 2005: 299) and democratic norms.

If we were to take it from the opposite perspective of the existence of a civic political culture, a society where the majority of its members emphasize survival values over self-expression values, there would be very little or no pressure to push back against elite behavior and in favor of the efficient operation of democratic institutions in that particular setting. As Ronald Inglehart and Christian Welzel (2005: 208) have explained, "weak self-expression values imply strong survival values, which drive people to seek protection in closely knit groups and to create strong bonding ties, cultivating favoritism for insurance against the risks of life. Favoritism provides a fertile ground for corruption. Corruption comes to be the standard behavior that people expect from elites in a survival culture" [as opposed to a civic culture]. In such a setting, public pressure on incumbents to maintain accountability and adherence to democratic standards would be minimal, substantially impeding the operation of democratic institutions. This is because the general public's values, which prioritize survival over self-expression values, would be biased toward pursuing narrow and particularistic personal interests at the expense of the common good or guaranteeing and respecting the freedoms and rights of citizens at all costs.

Such a culture composed of such survival values prevalent as a feature of much of society would tend to tolerate, or at least not actively oppose, the spread of favoritism, particularism, corruption, and clientelism. A society where a large portion of the populace emphasizes such a culture would not only not alter the inclinations of the political elite in charge of the institutions, but it would also be reflected in the way these elites lead, depending on similar forms of corruption and favoritism to win over the electorate and maintain their position of power. In the culture of a society that emphasizes survival values, this behavior on the part of the political elite would be considered "acceptable," despite the fact that it would conflict inherently with the norms of the democratic functioning of institutions and would make it difficult if not impossible effective institutionalism and the consolidation of democracy in a certain environment. Just as Jackman and Miller have best expressed this cultural argument in the functioning of institutions: "Cultural factors thus condition how individuals adapt to changes in incentive structures embodied in institutions..." (Jackman & Miller, 1996: 635). If the cultural values (in this case, the survival ones that lead people to seek protection or pursue their narrow personal interests) that are most emphasized by the majority of members of society differ significantly from the institutional norms and practices of democracy, then the latter would become irrelevant or would find constant violations in their practical implementation. Thus, for example, if a democratic system presupposes a written constitution and free and fair elections, the guarantee and the well-functioning of democracy in a given setting do not imply that these requirements are met only on paper but also that they are genuinely implemented in the political system. Suppose these norms and institutions that constitute democracy itself are infringed or violated from time to time (in accordance with the cultural practices of society) and do not find the reaction of the majority of citizens for their compliance and safeguard. In that case, they will become irrelevant and ineffective in their functioning (from here, we would have just a formal democracy or unconsolidated democracy with persistent problems).

Rising self-expression values bring social pressures that tend to close the gap between a formal democracy and an effective and well-functioning democracy (Inglehart & Welzel, 2005: 208). In this sense, the rising level of self-expression values, or a syndrome of mass attitudes that primarily reflects the emphasis on freedom, participation, public self-expression, interpersonal trust, and tolerance of diversity, conditions the success of consolidation of democracy in a given setting. The influence of these cultural factors is conditional (probabilistic) on the institutional performance and the effective functioning of a democratic system. This is because the self-expression values are essentially critical to all civil and political liberties that make up a democratic system, and any infringement or violation of them, or any improper behavior of the political elites that would conflict with democratic norms, would create the necessary grassroots pressure to ensure that these freedoms, rights, and norms are upheld and that incumbents act accordingly. It is precisely the growing emphasis on self-expression values among a considerable part of the members of a society that motivates and shapes collective action in favor of the safeguarding of rights and freedoms of citizens, the political accountability of incumbents, and the effective functioning of the democratic system. Ronald Inglehart and Christian Welzel emphasize this when they state that the (deep-rooted) orientations [the self-expression values] "motivate them to press for freedom, effective civil and political rights, and genuinely responsive government – and to exert continual vigilance to ensure that the governing elites remain responsive to them. Genuine democracy is not simply a machine that, once set up, will function effectively by itself. It depends on the people" (2005: 300).

The main argument of these culturalist authors, as well as the one presented in this paper, is that cultural factors (rising emphasis on self-expression values among members of a society) have an autonomous causal influence that conditions the success of a well-functioning democracy. The connection between these two variables that are given here also carries the implicit assumption that autonomous and stable cultural differences (at an aggregated level of the attitudes) exist between different societies and that these differences also affect the performance of democratic institutions in different countries. As Inglehart articulated this in one of his early pioneering essays: “different societies are characterized to very different degrees by a specific syndrome of political cultural attitudes; that these cultural differences are relatively enduring, but not immutable; and that they have major political consequences, being closely linked to the viability [and effectiveness] of democratic institutions” (Inglehart, 1988: 1203). In this sense, this paper argues that the more the self-expression values find themselves expressed among the majority of members of a society, the more likely a democracy is to be well-functioning and consolidated in its setting. The connection between these two variables remains probabilistic, considering the variable of self-expression values as conditioning for the product of successful democratization. The impact of self-expression values on the institutional performance of democracy will be provided through the analysis of the empirical data for the case of democratization in Albania, which is taken as a case study in this paper.

### **3. Self-expression values and democratization process: The case of Albania**

As Inglehart and Welzel (2003) emphasized, self-expression values are a syndrome of the attitude of the masses [that constitute a single fundamental variable]. They are present in the political culture of a country as long as their public emphasizes freedom and participation, public self-expression, tolerance of diversity, interpersonal trust, and life satisfaction. These are the components of self-expression values that are taken as integrated with each other because they constitute a coherent, stable (but not immutable) syndrome and a single dimension of attitudes that characterizes political culture to varying degrees, and which in different societies is manifested at high levels, and in some other societies at lower levels. Here, it is argued that the more self-expression values are emphasized and reflected among the members of a society (as opposed to the survival values), the more likely their conditioning effect on democracy and its well-functioning in its setting. In the empirical presentation of self-expression values measured in different societies (and their link to successful or problematic democratizations), most of the societies under continued authoritarianism score between the 14th and 25th percentile in self-expression values, whereas most societies with complete democratization score between the 29th and 38th percentile on self-expression values (Inglehart & Welzel, 2005: 229) reflected among the masses of their citizens.

Today, Albania continues to have a democratic political system that has serious flaws and is frequently violated since the norms and fundamental values of the system are continually disregarded. An effective democracy has not yet resulted from Albania's regime transition 32 years after the communist government was overthrown. The low levels of self-expression values (compared to the high levels of survival and materialistic ones) reflected among the members of Albanian society have been and remain an influential conditioning factor for the failure to achieve successful democratization. The self-expression values reflected and measured for Albanian society in the mid-1990s are reflected in low levels, embraced by only about 18-19% of its general population (see in Inglehart & Welzel, 2005: 155). Such levels of self-expression values in Albanian society still remain low to condition the well-functioning of the institutional norms of democracy, often making them ineffective. Also, the studies carried out by Aleksander Kocani on the value profile of post-communist Albania conclude that Albanian society belongs to the system of values of a materialistic profile (Kocani, 2013: 43-44). Conversely, post-materialist principles like democracy, equality, justice, and dedication to public causes, considered above as a syndrome of the attitude of the masses tapped by self-expression values, are far from prevailing in today's Albanian society.

It should also be emphasized that the different conditions of historical development, those of social structure and economic development during the start of the transition in Albania, have not been very suitable to give life to the changes of these cultural components (the self-expression values) that are highlighted here. As Linz and Stepan have pointed out, the societies of the Eastern European bloc under the orbit of influence of the Soviet Union had taken shape during almost five decades of their communist period, with a totally socialist economy and a regime that had shaped almost every aspect of the lives of its citizen-subjects (Linz & Stepan, 1996). In Albania, such a totalitarian regime had lasted almost 47 years. With its model of almost universal penetration in state-society relations, it had left considerable negative consequences in the shaping of Albanian society and its values. Such a legacy has left significant social restrictions on autonomous human choice in Albanian society,

which also reflects the tendency of their members to emphasize survival (materialistic) values foremost versus those of self-expression that are conducive to democracy. Likewise, the conditions of economic development in Albania, during and after the start of the transition, were not at such high levels as to be translated into the well-being of the citizens and to give life to the rising emancipation of human values among them, and to reduce the social restrictions on their choices and autonomy. Thus, the Albanians, based mainly on the materialistic profile of the values that dominate in the society, continue to favor private benefits and particularistic interests (see Mungiu-Pippidi, 2005) to the detriment of the common good or the universalistic rules established in the laws. As Mavrikos-Adamaou also notes in this regard: “In Albania there is very little respect for the rule of law and its implementation on the part of the political elite. The attitude prevalent among many Albanian citizens and among the political elite alike is that the law is something negotiable, and therefore it is not obligatory for one to follow certain rules and laws” (2014: 1158).

The result of these conditions of historical, social, and economic development are also manifested in the differences in cultural components, which, in the case of Albanian society in the post-transition period, find themselves reflected in low levels of self-expression values among the masses of its citizens. Here, it is argued that the low weak levels of self-expression values, reflected among the masses of Albanian citizens, are one of the main conditioning factors linked with the defective functioning of democracy in this country and with the behavior of its political elites, often not conforming to democratic norms. As Inglehart and Welzel have pointed out, weak levels of self-expression values, in turn, presuppose strong survival values, which lead people to seek protection in closely knit groups and form strong bonding ties, cultivating favoritism for insurance against the risks of life and creating thus a fertile ground for corruption and particularism to the detriment of the established rules of democracy (Inglehart & Welzel, 2005). In such an environment, where mass culture is more closely associated with favoritism, corruption, and the dominance of personal and particularistic interests than it is with freedom, public self-expression, interpersonal trust, and other civic virtues, the social pressure from below to ensure the integrity and behavior of the elites in line with the rules and norms of the democratic game will be less. As has often been demonstrated during the last 32 years with the defective functioning of democracy in Albania, political accountability among the ranks of Albanian politicians has been at very low levels. The authoritarian or corrupt behavior of the political elites in Albania, in most cases, has not constituted scandals and has often passed away without any political cost. The rule of law also, as one of the vital dimensions of democracy in Albania throughout this period, has functioned with significant deficits, with its citizens being passive and unable to unite and exert pressure on the political elite to adhere to its principles and norms.

In this context, as argued here, the gap between formal democratic institutions (which operate with problems in the case of Albania) and the well-functioning of an effective democracy is much more difficult to close in its political system since the costs of the political elites to maintain their hold on power despite the violations of the norms and rules of the democratic game, are not high in front of a mass culture that tolerates these transgressions. As we have mentioned above, in terms of the definition and functioning of modern liberal democracy, the political elites are the main ones responsible for the creation and functioning of democratic institutions in a country. However, their decisions and actions can only be understood in the context of the social forces that influence and condition them. The weak levels of self-expression values reflected among Albanian citizens have not managed to generate emancipatory social forces such as to condition/influence the behavior of their political elites in favor of democracy and its effective functioning in the Albanian political setting. In the absence of such social forces that place primary emphasis on human emancipation and self-expression values, joint collective action and the necessary pressure that would condition the behavior of elites in favor of achieving the democratic outcome and making it more effective seem to be difficult to achieve. Similarly, liberal democracy is unlikely to be consolidated or to operate effectively if it exists in a culture dominated by survival values, which subordinate human freedom to social conformity and state authority (Inglehart & Welzel, 2005: 158).

Such a conclusion seems to stand in the case of the democratization of Albania that is analyzed here. The low levels of self-expression values, which include opposing high levels of survival values reflected among the Albanian populace in general, have not led at all to the outcome of democratic consolidation in Albania, still 32 years after the communist dictatorship was overthrown. And as Inglehart and Welzel have evidenced, it is no coincidence that transitions have stopped or have been reversed in precisely those countries with the weakest self-expression values (2005: 186) reflected among masses in their societies. The case of Albanian society constitutes one such example, where the self-expression values are reflected in weak levels among the masses

of its citizens and where democratization has turned out to be unsuccessful and still operates nowadays with serious deficits in its political setting.

#### 4. Conclusions

In the vast literature that exists on democratization, within the framework of the modernist paradigm, culturalist authors have seen the process of cultural changes that place an increasing emphasis on human emancipation and self-expression values as significant causal factor for the democratic processes of countries. Thus, the cultural change that increasingly affects the masses of citizens with a rising emphasis on self-expression values directly interacts with and conditions the success of democracy in different countries. This is argued by the fact that in such a society where masses of citizens value human emancipation and prioritize freedom, they are more likely to join mass social movements and protest actively against improper elite action. Self-expression values likewise contribute to the efficient operation of democracy by counteracting undemocratic tendencies by also altering the political elite's behavior towards phenomena such as favoritism, corruption, and authoritarianism if the mass culture has already become mass hostile towards them. From this perspective, this paper argued that the limited embrace of self-expression values among the majority of citizens in Albania had posed significant challenges to the well-functioning and consolidation of democracy in this country. In such a setting, where the political culture of the majority in Albania still does not prioritize freedom, public self-expression, and interpersonal trust but is more connected to favoritism, corruption, and the dominance of particularistic interests, the social pressure generated will be much smaller to ensure the political elites' integrity and behavior in conformity with democratic standards and the rule of law. Albanian society constitutes a typical example among the former communist countries of Eastern Europe, where the self-expression values are reflected at relatively at low levels among the masses of citizens and where democratization has not been successful and still operates with serious deficiencies.

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## Human Resource Management And Performance Evaluation In Hotels In Kosovo

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**Abstract:** Evaluating employee performance is one of the most important activities in human resource management in all enterprises. Under the term performance evaluation is meant a continuous process of monitoring, valuing and directing the behavior of the employees and their achieved results in the work. The evaluation of the employees' performance is carried out in order to determine their contribution to the achievement of the organizational goals in a certain period of time, and is based on a system of appropriate criteria and assessment methods that can be both objective and subjective. In order to determine whether the hotels in Kosovo has a system for evaluating the performance of employees and whether employee performance evaluation affects the salary of employees, rewards, advancement in the organization, motivation, as well as on the successful operation of the enterprise and its financial result, it was carried out research in 100 hotels on the territory of Kosovo. The research was conducted with an online survey in which 100 general managers in hotels in Kosovo were surveyed, so that one answer given by one general manager refers to one hotel. The research data were processed with the computer system SPSS version 23.0, using the linear regression method. Based on the conducted research, it was determined that there is a very strong and directly proportional relationship between evaluating employee performance as an independent variable on the one hand and separate variables as dependent variables on the other hand: salary ( $R = 0.836$ ;  $R^2 = 0.699$ ;  $p = 0$ ;  $B = 1,490$ ); rewards ( $R = 0.943$ ;  $R^2 = 0.890$ ;  $p = 0$ ;  $B = 0.989$ ); advancement within the organization ( $R = 0.938$ ;  $R^2 = 0.879$ ;  $p = 0$ ;  $B = 0.889$ ); employee motivation ( $R = 0.869$ ;  $R^2 = 0.756$ ;  $p = 0$ ;  $B = 1.512$ ); and the success of hotel operations and their financial result ( $R = 0.941$ ;  $R^2 = 0.884$ ;  $p = 0$ ;  $B = 1.444$ ). Accordingly, in order to be able to successfully and timely achieve the goals of the work in an organization, to achieve good performance, to motivate employees and to reward them properly and advance in the system of the organization itself, there must be an evaluation of the performance of employees, which is one of the basic tasks of human resources management.

Based on the results, it is confirmed that tourists in Kosovo have expressed a high level of satisfaction with the structure and tourist services provided.

**Keywords:** Performance, evaluation, salary, rewards, advancement, motivation, success.

### Introduction

The performance means the behavior and the resultant measured based on certain activities and duties. Enterprises performance could be measured thanks to indicators that express the quality of its activities. While, for individuals and groups, it is hard to identify the link between their performance and that of the company. Performance evaluation is an instrument through which the employees within the organization can reflect, discuss and change their work method that influences the organizational effectiveness. The focus of this paper is to argue that effective performance, feedback, and employee training are necessary for the success of an organization, and at the same time the development plan to support the employees in achieving the best possible results is necessary too. The employees' training in Kosovo's enterprises is closely related to the organization, and the planning of employees in a way to so they are prepared at a national level and the attempt to exchange employees and train them in international level. This would affect the effective performance and cultures exchanged.

Human resource management (HRM) is the strategic and coherent approach to the management of an organization's most valued assets - the people working there who individually and collectively contribute to the achievement of the objectives of the business. In simple words, HRM means employing people, developing their capacities, utilizing, maintaining and compensating their services in tune with the job and organizational requirement. In order to compete effectively, firms must constantly improve their performance by enhancing quality, reducing costs, and differentiating their products and services (Al-Refaie, 2015, Aspridis & Kiriakou, 2012).

Employee performance is a multicomponent concept. It involves quality and quantity of output, presence at work, accommodative and helpful nature and timeliness of output. Performance is an extremely important aspect that relates to the organizational outcomes and success. Employees' performance is the job related activities expected of workers and how well those activities are executed. Performance must be directed towards organizational goals that are relevant to the job or role assigned to the workers. If employee do their job well and produce desirable behaviors and results, it will help the organization to achieve its goals and objectives successfully. In organizational settings, employees' performance is the accumulate result of the skills, efforts and abilities of all the employees contribute in organizational improved productivity leading towards its goal achievement (Tahiri et al. 2022, Machado et al. 2019, Kusluvan et al. 2010, McPhail et al. 2008).

Evaluating employee performance is one of the most important activities in human resource management in all enterprises. Under the term performance evaluation is meant a continuous process of monitoring, valuing and directing the behavior of the employees and their achieved results in the work. The performance evaluation processes' consist in measuring the job performance of individuals, through methods and models applied by an organization; where the three parties that are overall involved in these processes are the organization itself; the supervisors and the employees (Barroca, 2013, Hoque, 2013). The evaluation of the employees' performance is carried out in order to determine their contribution to the achievement of the organizational goals in a certain period of time, and is based on a system of appropriate criteria and assessment methods that can be both objective and subjective.

There are various types of performance appraisal methods that an organization can put to use. Which type of employee performance evaluation method will be used depends on the type of activity to which the company belongs and on the size of the company. Performance Appraisal can be generally categorized into two groups: Traditional (Past oriented) methods and Modern (future oriented) methods. The performance appraisal methods are:

Traditional methods are comparatively older methods of performance appraisal. These methods were past oriented approaches which concentrated only on the past performance. The following are the topical traditional methods that were used in the past: Ranking Method, Graphic Rating Scales, Critical Incident Method, Narrative Essay.

Modern Methods were formulated to enhance the conventional methods. It tried to enhance the shortcomings of the old methods such as biasness and subjectivity. The following presents the typical modern methods: Management by Objectives (MBO), Behaviorally Anchored Rating Scales (BARS), Humans Resource Accounting (HRA), Assessment Center, 360 Degree, 720 Degree (Shaout & Yousif, 2014, Boselie et al. 2003).

Performance appraisal is highly regarded as a motivation booster for employees, many Management experts argue that performance appraisals can be used to motivate employees through rewards such as promotions and salary increases, and this plays a crucial role in employee retention. Performance appraisals facilitate communication between the management and their subordinates, which plays a really significant role in conveying the expectations of the management to the employee and vice versa. Moreover, performance appraisals are also considered as motivational tools due to the ability to help identify employees' strengthen and help capitalize on them through support. In addition, weaknesses are identified and corrective actions are taken in the form of supervisory support that is vital in assisting the employee to improve (Gohar et al. 2019, Abouzeid, 2018, Hayes & Ninemeier, 2009, Çetinel et al. 2008).

The purpose of this paper is to determine whether hotels in Kosovo have an employee performance evaluation system and whether employee performance evaluation affects employee salary, remuneration, advancement in the organization, motivation, and successful performance. of the enterprise and its financial result. (Alberta Tahiri, Idriz Kovaçi, 2023)

## 2. Materials and methods

In order to determine whether the hotels in Kosovo has a system for evaluating the performance of employees and whether employee performance evaluation affects the salary of employees, rewards, advancement in the organization, motivation, as well as on the successful operation of the enterprise and its financial result, it was carried out research in 100 hotels on the territory of Kosovo. The research was conducted with an online survey in which 100 general managers in hotels in Kosovo were surveyed, so that one answer given by one general manager refers to one hotel.

The research data were processed with the computer system SPSS version 23.0, using the linear regression method.

## 3. Results and discussion

According to the data obtained from the survey, 91% of the hotels in Kosovo that were the subject of analysis have established a system for evaluating the performance of employees, and 9% of the hotels do not have any system for evaluating the performance of employees .

The question that refers to the types of systems for evaluating the performance of employees was answered only by those managers whose hotels have established such systems, that is, 91 managers. The largest number of managers stated that management by objectives is used in their hotel (40 managers, i.e. 43.96% of respondents), 20 managers (21.98%) stated that the ranking method is used in their hotels, 11 hotels (12, 08 %) use the 360 degree method, 10 hotels (10. 99 %) use the human resource accounting method, and the remaining 10 hotels (10.99%) use the graphical rating scale form method.

To determine the magnitude and direction of the impact of performance evaluation on salaries, rewards, promotion within the hotel and on the success of the hotel, the linear regression method is used, and the coefficient of determination and the correlation coefficient are calculated. In this case, performance evaluation is the independent variable (X) and the other variables (salaries, rewards, promotion within the hotel, motivation, hotel success) are the dependent variables (Y).

By cross-tabulation the question related to employee performance evaluation with the question related to salaries, the following results are obtained on the impact of performance evaluation on employee salaries in hotels in Kosovo:

coefficient of determination 0.699

correlation coefficient 0.836

p = 0

B = 1.140

The correlation coefficient, which is 0.836, shows a very strong connection between the performance evaluation and employee salaries. The + sign shows a positive direction of influence, that is, if the evaluation of the performance of hotel employees increases, it will contribute to greater commitment and better performance by employees, which will have a positive effect on increasing their salaries.

The coefficient of determination of 0.699 shows that 69.90% of the variation in salary is the result of having a performance evaluation system. Performance evaluation is a significant predictor of salaries of employees as shown by p equaling 0.

If the performance evaluation increases by 1, then the employee's salary will increase by 1.140 (as shown by B).

The linear regression equation is as follows

$Y = 1.955 + 1.140 X$  where

X - performance evaluation

Y - salaries of employees

The impact of performance evaluation on employee rewards in hotels in Kosovo is as follows: coefficient of determination 0.890

correlation coefficient 0.943

$$p = 0$$

$$B = 0.989$$

The correlation coefficient (0.943) shows a very strong and positive relationship between performance evaluation and employee reward, which means that if employee performance evaluation increases, it will encourage employees to perform better (because their work is observed by managers and evaluated) which will also be reflected in an increase in rewards. 89% of the variability in employee rewards is the result of the evaluation of their performance (shown by the regression coefficient which is 0.890). Performance evaluation is a significant predictor of employee rewards in hotels in Kosovo ( $p = 0$ ). So if the performance evaluation increases by 1, then the rewards will increase by 0.989.

The linear regression equation in this model is as follows:

$$Y = 3.011 + 0.989 X \text{ where}$$

X - performance evaluation

Y - rewards of employees

Performance evaluation has a huge impact on their advancement within the organization.

This is shown by the following results:

correlation coefficient 0.938

coefficient of determination 0.879

$$P = 0$$

$$B = 0.889$$

The correlation coefficient of 0.938 shows the existence of a very strong and positive correlation between the performance evaluation of employees and their advancement within the organization. Namely, if the evaluation of employees' performance increases, then they will strive to perform their work tasks better and show themselves in as positive a light as possible in front of managers, which will lead to appropriate advancement within the organization. The coefficient of determination of 0.879 shows that 87.9% of the variation in employee advancement within the organization is the result of the existence of employee performance evaluation systems. So if the performance evaluation increases by 1, then the progress will increase by 0.889. Therefore, performance evaluation is a significant predictor of employee advancement within the organization.

The linear regression equation in this case looks like this:

$$Y = 3.222 + 0.889 X \text{ where}$$

X - performance evaluation

Y - the advancement of employees within the organization

Crossing the question related to employee performance evaluation with the question related to employee motivation, results are obtained that show the existence of a large and positive relationship between these two variables. Thus, the correlation coefficient is 0.569, and the determination coefficient is 0.756, which means that 75.6% of the variability in employee motivation is the result of the existence of performance evaluation systems. Thus, if performance evaluation increases by 1, employee motivation will increase by 1.512, which means that the implementation of performance evaluation systems will encourage employees to work better and achieve better performance in their work ( $B = 1.512$ ).

From the obtained results, it can be seen that the existence of an employee performance evaluation system is a significant predictor of their motivation ( $P = 0$ )

$$Y = 1.933 + 1.512 X \text{ where}$$

X - performance evaluation

Y – motivation of employees

Due to the fact that the existence of employee performance evaluation systems in hotels in Kosovo has a positive effect on the motivation of employees, increased efforts, better performance of their work activities and achieving better performance in their work, all of this ultimately results in successful work of hotels in Kosovo and their financial results.

This is shown by the results obtained by crossing the evaluation of the employees' performance with the issue related to the successful operation of the hotels in Kosovo and their financial results:

coefficient of determination 0.885

P = 0

B = 1.444

The correlation coefficient, which is 0.941, shows a very strong and positive connection between the performance evaluation and the success of hotel operations and their financial result.

The coefficient of determination of 0.885 shows that 88,50% of the variation in success of hotel operations and their financial result is the result of having a performance evaluation system. According to that, performance evaluation is a significant predictor of the success of hotel operations and their financial result. as shown by p equaling 0.

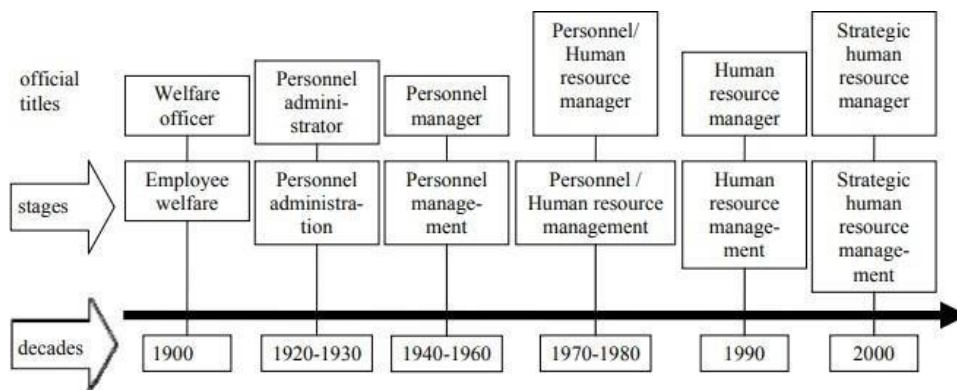
If the performance evaluation increases by 1, then the success of hotel operations and their financial result. will increase by 1.444 (as shown by B).

The linear regression equation is as follows

$$Y = 2,111. + 1.444 X \text{ where}$$

X - performance evaluation

Y – success of hotel operations and their financial result.



*Stages in the evolution and development of human resource management*

How much do you think that the organizational productivity depends on the employee performance?

Alternatives/options	Frequency	Percent	Valid Percent	Cumulative Percent
Not at all	0	0%	0%	0%
Slightly	2	4%	4%	4%
Averagely	3	6%	6%	10%
Enough	12	24%	24%	34%
A lot	33	66%	66%	100%
<b>Total</b>	<b>50</b>	<b>100%</b>	<b>100%</b>	

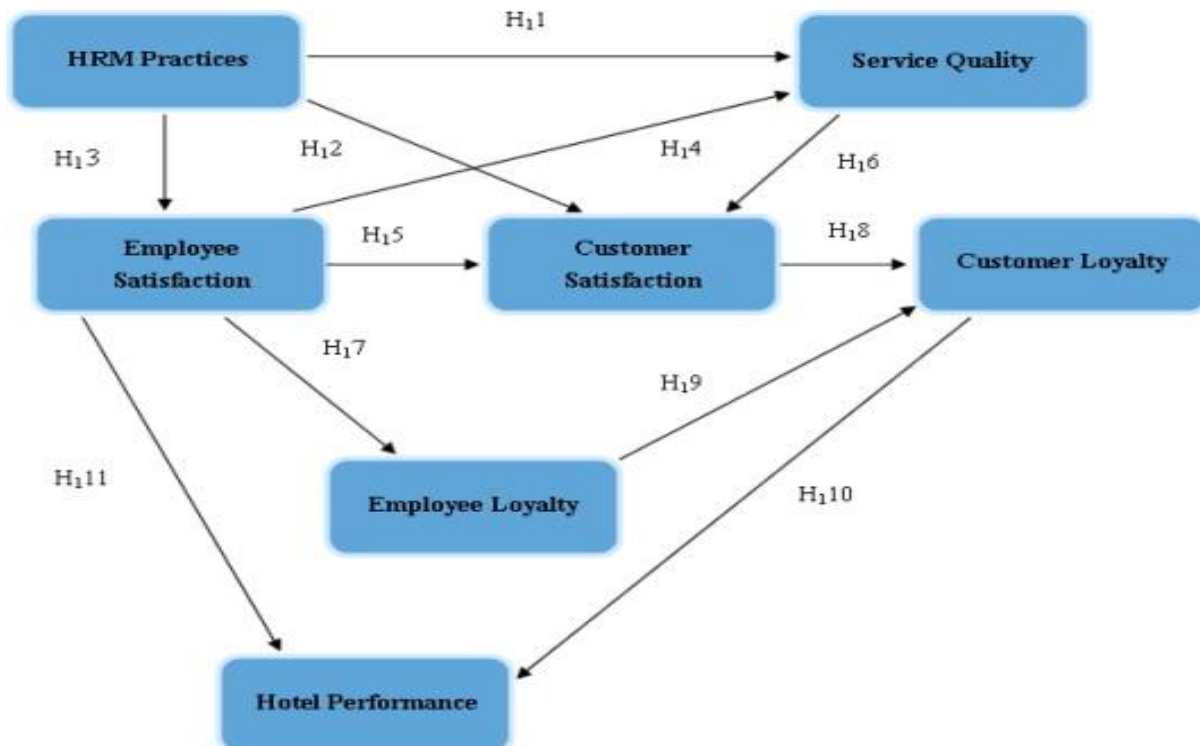
Source: SPSS 23 output, compiled by authors.

*The organizational productivity*

Employees also benefit if assessments help them determine how to enhance their performance, just after a positive assessment (Mathis & Jackson, 2008). A system that is built mainly on administrators and lacks a

clear procedure is likely to result in low morale and strained relations between management and staff (Tahiri et al., 2021). Therefore, performance appraisal is vital to enterprise success.

Šušnjar et al. (2016) HRM manages an organization's human resources by strategically selecting appropriate staff, training skilled teams, providing financial rewards to retain staff, and overall management communication flow, performance evasion, and performance appraisal. (Tahiri et al. (2021) A system that is built mainly on administrators and lacks a clear procedure is likely to result in low morale and strained relations between management and staff.



Effects of human resource management on hotel performance using structural equation modeling

## CONCLUSIONS

Human resource management is the strategic and coherent approach to the management of the people working there who contribute to the achievement of the objectives of the business. One of the basic tasks of human resource management is the evaluation of employee performance. Employee performance is a multicomponent concept. It involves quality and quantity of output, presence at work, accommodative and helpful nature and timeliness of output. Performance is an extremely important aspect that relates to the organizational outcomes and success. Employees' performance is the job related activities expected of workers and how well those activities are executed. Performance must be directed towards organizational goals that are relevant to the job or role assigned to the workers. If employee do their job well and produce desirable behaviors and results, it will help the organization to achieve its goals and objectives successfully. In organizational settings, employees' performance is the accumulate result of the skills, efforts and abilities of all the employees contribute in organizational improved productivity leading towards its goal achievement.

Evaluating employee performance is one of the most important activities in human resource management in all enterprises. Under the term performance evaluation is meant a continuous process of monitoring, valuing and directing the behavior of the employees and their achieved results in the work. The performance evaluation processes' consist in measuring the job performance of individuals, through methods and models applied by an organization. There are various types of performance appraisal methods that an organization can put to use. Which type of employee performance evaluation method will be used depends on the type of activity to which the company belongs and on the size of the company. (Alberta Tahiri, Idriz Kovaçi, 2023)

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## Environmental Control As The Main Instrument For Ensuring Environmental Protection

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### Abstract:

#### Aim

The aim of the article is to highlight the importance of environmental auditing as a primary tool for ensuring environmental protection. The methodology involves discussing the principles and processes of environmental management, highlighting the impact of environmental control on environmental protection and emphasizing the role of stakeholders in this endeavor. The article also aims to highlight the importance of pollution prevention, waste reduction and sustainable use and management of resources in the context of environmental control and protection.

#### Material

The material of the article is based on a review of the principles and processes of environmental management, including prevention of environmental damage, pollution prevention and waste reduction. It also draws on the concept of environmental stewardship, which involves the shared responsibility of all stakeholders for the quality of the environment.

#### Methodology

The methodology of the article is based on the principles of environmental management, stewardship and sustainability, as well as the need to protect ecological resources and minimize the environmental impact of human activities, such as construction. It also draws on the concept of setting strategic environmental objectives for the regulation of deep-sea mining, emphasizing the interconnectedness of environmental, social and economic interests in the pursuit of sustainable development and environmental protection.

#### Conclusions

The article also discusses the role of different organizations and the need for a holistic approach to environmental management planning, as well as the promotion of sustainable, inclusive and equitable economic growth for environmental protection and overall well-being.

**Keywords:** environmental control, environmental law, legal report on environmental control.

### Introduction

Looking at the past, it is clear that we are in a significant upswing compared to previous generations. Much of this rise is due to the development of technology, and that of consumer science. At the same time, conservation and development sciences have not found their 'rightful' place, or the lack of current interest means that important things are left unattended. To return to the idea of progress and the sense of ascendancy, we need to understand that at the same time we are in a deep crisis in terms of the environmental conditions in which we live. It is undeniable that in any area of law there is a variety of instruments by which the purpose of the legal relationship is achieved. However, it must be recognized that one of the most effective instruments is the control of compliance with the rules of law. Although control is an administrative instrument, it also exists in other branches of law, such as environmental law relations.

This approach becomes all the more relevant as the science of consumption and the technique of using environmental components develops. We have learned to "borrow" from nature, but we have not learned to return what we have borrowed. Although for a long time we have not set ourselves the goal of protecting the environment, even though we are aware that its resources are depletable, there will come a time when this issue will become a definite, albeit largely unattainable, necessity. For these and other reasons, we believe that addressing any segment of the problem that has a bearing on environmental protection is a justified effort to create environmental awareness. One of these issues concerns the role and place of environmental control as a mechanism for ensuring the rational use of environmental resources.



## The Importance of Environmental Control

The importance of environmental control as a primary tool for protecting our planet cannot be overstated. In the face of escalating environmental challenges, it is imperative to research and implement effective control measures to mitigate the adverse effects of human activities on the environment. Environmental control is a critical tool for ensuring the protection of the environment. By implementing and enforcing regulations, monitoring activities and managing resources, environmental control plays a key role in preserving our planet for future generations. This article examines the importance of environmental enforcement and its impact on the preservation of the natural world. At the same time, it aims to shed light on the importance of environmental control and its pivotal role in ensuring environmental protection.

Environmental control encompasses a wide range of strategies and technologies designed to manage and regulate man-made impacts on the environment. From air and water quality monitoring to waste management and pollution control, the application of robust environmental control measures are essential to maintain ecological balance and protect human health. (Lupan E., 1996)

This involves using cutting-edge technologies and innovative approaches to improve our ability to detect, assess and mitigate environmental threats. The integration of environmental control measures across different sectors is of paramount importance. Whether it is in the context of oil and gas exploration and production (Emmanuel D. Kam Yogo, 2018) or other industrial activities, rigorous environmental control protocols are essential to minimize ecological disruption and ensure sustainable practices. In addition, the United Nations' emphasis on the environment and sustainable development underscores the global commitment to advancing environmental control initiatives. In the field of academic research, conferences serve as important platforms for knowledge exchange and collaboration. The IOP Conference Series on Earth and Environmental Science provides a valuable forum for scholars and researchers to disseminate their findings and engage in discussions on environmental control and related areas. In addition, universities such as the University of Bologna offer exciting PhD positions in environmental management, giving aspiring researchers the opportunity to contribute to interdisciplinary projects addressing environmental challenges. Starting with the constitutional regulations and ending with the ordinary regulations of environmental legislation, reference is necessarily made to the institution of "environmental control". Thus, Article 10 of the Law on Environmental Protection (Monitor Oficial nr. 10/283 din 30.10.1993, art.10) indicates that the public administration authorities of the municipality (village), town, in accordance with this Law and other normative acts in the field of environmental protection, shall exercise permanent control over compliance with the legislation on environmental protection. Article 15 of the same legislative act establishes that one of the basic tasks of the central authority for natural resources and environment is to carry out control of compliance with the waste management regime (Monitor Oficial nr. 10/283 din 30.10.1993, art.15).

Article 26 of the same law establishes that the Environmental Protection Inspectorate has the function of exercising state control over compliance with laws and other normative acts in matters of environmental protection and use of natural resources. Article 60 of the prenoticed Law establishes that the environmental authorities, jointly with the local public administration authorities, shall exercise control over the harvesting of plants, fishing, hunting, only within the limits of the non-perilous reproduction potential of different species of plants and animals (Monitor Oficial nr. 10/283 din 30.10.1993, art.60). Article 15 of the Law on Payment for Environmental Pollution establishes that the function of control over the correctness of calculation and completeness of transfer to the budget of the tax on goods which, in the process of use, cause environmental pollution, is exercised by the State Tax Service (Monitorul Oficial nr. 54-55/378 din 18.06.1998, art.15). Article 86 of the Land Code establishes that in the field of state control over the use and protection of land, the State in the person of local public administration authorities is obliged to ensure the rational and efficient use of land and its protection regardless of its use (Codul Funciar al Republicii Moldova nr. 828, art.86). Article 20 of the Forestry Code establishes that state control over the condition, use, regeneration, guard and protection of forest and game land is exercised by the Environmental Protection Inspectorate (Codul Funciar al Republicii Moldova nr. 828, art.20). Article 70 of the Forestry Code states that control over the provision and implementation of forest protection measures by owners and managers of forest land is exercised by the Environmental Protection Inspectorate and local public administration authorities (Codul silvic nr. 887 din 21.06.96, art.70).

Article 56 of the Water Law states that the Environmental Protection Inspectorate coordinates and carries out inspection and control activities in the field of water use and protection (Legea apelor nr. 272 din 23.12.2011, art.56). Article 18 of the Law on the Protection Zones and Zones of Waters of Rivers and Watersheds states that

the state control of compliance with the regime of economic activity in the protection zones and zones of waters of rivers and watersheds falls within the competence of the Environmental Protection Inspectorate (Monitorul Oficial nr. 43/482 din 03.08.1995, art.18). Article 36 of the Law on Animal Kingdom establishes that state control over the protection and use of animal kingdom resources has the task of ensuring that all ministries, departments, persons

The protection of fundamental human rights and freedoms in the process of ensuring public order and security -physical and legal, regardless of the type of ownership and form of legal organization, the obligations to protect the animal kingdom, respect for the established manner of use of animals and other rules laid down by law (Legea regnului animal nr. 439 din 27.04.95, art.36) The string of such regulations is not limited only to legislative references establishing control tasks for the competent authorities in the field of environmental protection. The legal doctrine likewise pays attention to the merits of the institution of environmental control This way some Russian scientists affirm that, „специфика экологических отношений определяет осуществление особых функций управления, например таких, как государственный контроль в сфере охраны окружающей среды, мониторинг окружающей среды” (Крассов О, 2014) Indeed, the function of ensuring environmental control is becoming one of the 'vital' functions of the state. For, a society cannot survive in a polluted environment. In the same vein, it states that, „экологический контроль представляет собой важнейшую правовую меру обеспечения рационального природопользования и охраны окружающей среды от вредных воздействий, функцию государственного управления и правовой институт экологического права. Именно посредством экологического контроля, в основном, обеспечивается принуждение соответствующих субъектов экологического права к исполнению экологических требований. Меры юридической ответственности за экологические правонарушения применяются либо в процессе экологического контроля, либо с привлечением иных государственных органов” (Нецветаев А. 2011) In the local literature it is argued that environmental control is one of the most effective mechanisms for ensuring environmental protection, being carried out by both public authorities and non-governmental organizations (Trofimov Ig., Ardelean Gr., Crețu A, 2015). In turn, we consider it necessary to mention that over time the perception of the term control has been uneven. Some have associated control with coercive measures. Others identify control as an element of management. After all, neither is wrong in offering such an approach. It is just that we are of the opinion that this instrument itself contains a wide range of opportunities, including the management function as well as that of coercion, but which as a whole are applicable depending on the circumstances, particularly in view of the legal framework that is established for carrying out control, but also in view of the competence of the subjects exercising control.

Environmental control encompasses a wide range of measures designed to reduce human impact on the environment. These measures include air and water quality management, waste disposal regulations and the protection of natural habitats. By implementing environmental control policies, governments and organizations aim to reduce pollution, conserve natural resources and promote sustainable practices. Thus, if we are talking about control by public authorities, then they have a certain spectrum of possibilities, being endowed not only with managerial tasks, but also with the possibility of applying coercive measures. However, when it comes to public environmental control, which is largely carried out by non-governmental organizations, but also by ordinary citizens, this involves a completely different range of possibilities offered by law for achieving the objective in question, where coercive measures cannot be applied. It should be noted that environmental law is characterized by the fact that a number of mechanisms and institutions traditionally belonging to other branches of law are used to achieve environmental protection objectives. "Control" is an instrument of administrative law which is particularly necessary to ensure that environmental protection objectives are achieved. This is because ensuring permanent supervision of the situation regarding the use of environmental resources, and sometimes even the application of coercive measures in this respect, can be most effectively achieved through the control mechanism.

The implementation of robust environmental control measures directly contributes to the protection of our ecosystems. For example, monitoring and regulating industrial emissions can help maintain air and water quality, reducing the impact on human health and the environment. Similarly, the enforcement of waste management policies helps prevent contamination of soil and water, preserving the integrity of our natural surroundings. When addressing the legal issues related to control, and in particular environmental control, it is necessary to distinguish several topics which, in our opinion, are of "vital" importance for identifying the legal nature of this institution.

1. First of all, it is necessary to understand the areas in which control measures apply.

2. Second - what are the elements of the mechanism in which control is carried out.
3. Third - what are the limits to the implementation of control.
4. And fourth - what are the subjects which are involved in the environmental control relations. In the last element we are going to identify both active and passive subjects of the ecological control relationship.

## CONCLUSIONS

In conclusion, we consider it necessary to refer to the following peculiarities that determine environmental control as a specific institution of environmental law:

- 1.Environmental control, although it is one of the varieties of the institution of legal control, which traditionally belonged to administrative law, is nevertheless an institution of environmental law, with its own characteristics and modalities.
2. In order to identify the legal nature of environmental control, it is important to distinguish which are the areas in which environmental control measures are applied, which are the elements of the mechanism of environmental control, which are the limits to the realization of control and which are the subjects involved in the environmental control relations.
3. Environmental control is one of the existential functions of the state.
4. Ecological control shall be given a clear legal mantle in order to protect fundamental human rights and freedoms in the process of ensuring public order and security avoid confusion with other control mechanisms existing in other branches of law, such as tax, customs, administrative, economic and other control mechanisms

Stakeholders, including government, industry and the public, all play a vital role in environmental control. Government agencies are responsible for creating and enforcing regulations, while industries must comply with these regulations and adopt environmentally friendly practices. The public also has a role to play by adopting sustainable behaviors and holding both government and industry accountable for their environmental impact. As we face ongoing environmental challenges, the role of environmental control becomes increasingly important. Climate change, deforestation and biodiversity loss are pressing issues that require effective control measures. By prioritizing environmental control and fostering a collective commitment to environmental protection, we can strive to mitigate these challenges and preserve the planet for future generations.

In conclusion, environmental control is the primary tool for ensuring environmental protection. Through its implementation, monitoring and enforcement, we can work towards a sustainable future in harmony with the natural world. By recognizing the importance of environmental governance and embracing its principles, we can pave the way for a healthier and more resilient planet.

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## Communication Strategies for Change Management in Organizations

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**Abstract:** Numerous technological, economic, and social changes have made the environments in organizations quite competitive. Changes can range in scale, from minor procedural adjustments within a department or organization to significant changes in large-scale enterprises. The success of these changes lies on the effective execution of planned organizational transformations. Managers use their abilities to communicate by using different channels and send information to employees to complete their job. Manager's ability to communicate influences employees' commitment to organization. This paper explores how communication strategies contribute to successful change management in organizations. It examines the complex dynamics of communication during times of organizational change, by focusing on strategies, challenges, and best practices involved. Utilizing diverse literary sources in fields like organizational psychology, management studies, and communication theory, this paper tries to explain the different ways we communicate effectively to help organizations change. Using a comprehensive literature review methodology, the paper discusses the influence of leadership communication in building trust and openness, as well as the importance of using diverse communication channels to involve stakeholders throughout the organization. Ultimately, the paper provides recommendations for leaders within organizations, individuals driving change, and communication experts, to navigate the complexities of change management effectively. It emphasizes the importance of a thorough communication strategy that promotes involvement from stakeholders, stimulates conversations, and directs the organization towards a common goal amidst changing circumstances.

**Keywords:** Communication, Change Management, Strategy, Organization

### 1. INTRODUCTION

The main aim of change management is to improve how well an organization performs by taking action to deal with changes that happen from within or outside the organization. It's about responding to or preparing for changes in the environment, both inside and outside the organization, to reach important goals. Change management is important in modern organizations because it helps keep current operations running smoothly and guides the organization towards its future goals (Wang & Sun, 2012). Organizations always aim to modify and adjust their operations to changing conditions in a business environment that is becoming more complicated and dynamic. Therefore, organizations must commit significant resources to making a variety of modifications in order to adapt to the changing environment. Change management is a difficult and intricate process (Errida & Lotfi, 2021). For this reason, many businesses struggle to get the desired results from organizational reform initiatives. Change managers must think about several approaches to increase acceptance and lower obstacles because organizations need to change in order to succeed. It is their responsibility to plan, develop, lead, evaluate, assess, support, and maintain the implementation of change. Models and techniques for change management assist staff in embracing new organizational initiatives. While there isn't much actual data to support a particular change management model, many of the tactics used in these approaches are comparable. Since change is chaotic, a single paradigm or framework might not be appropriate in all situations (Phillips & Klein, 2022).

Businesses focus on collaborating with the outside world, but they also need to consider their internal environment and the needs of their internal clients. Changes in organizations often lead to initial feelings of uncertainty and anxiety, causing people to react by either resisting or feeling unsure about navigating through new situations. In such challenging times, employees need to learn new skills and adapt to new ways of doing things within their companies. While change can be beneficial for both the company and its employees, it's important not to overlook or underestimate its impact on employees and their acceptance of the changes. Some individuals consider change as exciting and stimulating, while for other individuals, change can be profoundly distressing and can challenge their beliefs, values, and self-esteem. They may perceive change as a threat to their identity or the things they hold dear, leading them to resist it intensely, regardless of the potential benefits or necessity of the change (Erkmen, 2006). Understanding the reasons behind resistance makes it more likely that managerial choices made during the change management process will be effective in reducing the likelihood that the change will be rejected (Vveinhardt & Sedziuviene, 2022).

It is now recognized that communication significantly contributes to fostering organizational change success by reducing uncertainty, increasing commitment, and building change readiness. In order to reduce resistance to change, it may be necessary to make decisions regarding the design and implementation of strategy communication in change processes that integrate various analytical perspectives and relative efforts (Simoes & Esposito, 2014). Organizational change creates uncertainty, leading employees to invest time in understanding the changes. Clear communication reduces uncertainty. This enables employees to prepare and foster positive perceptions, particularly in significant transformations, where effective communication positively influences commitment to change and openness (Rogiest, Segers, & Witteloostuijn, 2015).

Effective communication is critical to the success of change management initiatives in modern organizational settings. But given the complexity of organizational transformation and the wide range of accessible communication channels, a comprehensive understanding of best practices and tactics is required. This paper looks at what we already know about communication and change but also explores new ideas and solutions. By sharing insights and discussing different approaches, this paper helps organizations keep learning and improving. There exists limited research on the impact of communication strategies on change management. Hence, this literature review paper contributes to advancing scholarly comprehension and theory development within the dynamic field of organizational change and communication.

The study's limitations arise from its focus on communication strategies for change management within organizations. This narrow focus might hinder its ability to fully examine all aspects of organizational change. It may overlook industry-specific differences, variations in organizational size, and the diverse cultural contexts that can impact how communication strategies work effectively.

The study's timeframe may have limitations in capturing long-term effects or trends related to communication strategies for change management. Changes in organizational dynamics, technological advancements, or external factors beyond the study's scope may influence the relevance and applicability of its findings over time.

The paper's structure unfolds as follows: After the introduction, the literature review explores key themes, including change management, communication, and the influence of leadership communication. Subsequently, the methodology section is presented, leading into discussions on the chosen topics. Finally, the paper concludes with a summary and offers suggestions for further exploration.

## **2. LITERATURE REVIEW**

Change is a common part of life and a crucial aspect of business. With technology advancements, shifting customer expectations, and competitive environments, organizations must constantly adjust. Today, businesses must welcome change, set goals that match customer expectations, and be able to predict and adapt to change for long-term success. The process of change involves an organization making modest to substantial structural changes to solve issues with productivity, expenses, and service quality deficiencies, as well as to find new development possibilities and accomplish other organizational goals (Hubbart, 2022). The transformation observed in organizations is termed as "organizational change." This change is described as a departure from the existing state or established patterns. The fundamental purpose of organizational change is to uphold the business's integrity, ensure its ongoing operation, and facilitate its growth and advancement (Kim, 2015). Organizational change efforts are frequent and crucial moments that help businesses adapt and stay competitive in a frequently changing environment. People have studied organizational change processes for many years, and there are many tools available to help achieve the best results. However, challenges are always present because organizations and employees can vary a lot, including occurrences of employee resistance, during these times (Hubbart, 2022). Among researchers and practitioners working in the field of change management, there is a clear consensus that most of change initiatives end in failure. The results of studies contain significant findings indicating that only about 30% of change initiatives exhibit success (Burnes & By, 2012). Change within an organization is best achieved when internal stakeholders collaborate in alignment with the organization's needs. To gain support for change, it's important to implant the belief among organizational members that change is necessary (Walizer, 2018). Creating environments where employees can freely express opinions and participate enhances their contribution to the process. Strong leadership, particularly transformational leadership, is vital for mobilizing individuals, uniting them towards common goals, and shaping the organization's future (Jun & Lee, 2023). Due to the widespread uncertainty in environmental conditions, predicting changes and planning for organizational change becomes difficult and time-consuming. Consequently, the importance of organizations being ready for evolving changes increases, necessitating the

adoption of proactive strategies for change management. Without the support of employees and their adoption of the change process, successful management and implementation of change cannot be achieved (Fusch, Ness, Booker, & Fusch, 2020). The realization of change in line with the requirements and characteristics of the organization can be achieved by moving together with internal target audiences. Creating the perception that there is a need for change within internal target audiences is essential for ensuring support for the change process. Implementing change is a shared responsibility among internal stakeholders, yet Kotter suggests it entails creating new systems and leadership (Kotter, 1995). Modern change leaders adapt to current conditions, build trust, and drive change toward future needs. Strong leaders are crucial in motivating individuals, uniting them, and shaping the organization's future, emphasizing transformative leadership. Resistance to change plays a decisive role in change initiative outcomes. Despite literature interest, there are differing views on its perception and position in change management. Authors often define resistance broadly, including any negative reaction hindering change. When seen as an expression of people's reactions, resistance becomes a critical aspect of managing the human dimension of change (Warrick, 2023). To address resistance to change, it's essential to develop solutions considering the unique characteristics and interactions within internal target audiences and the organization. Investigating resistance factors yields valuable data for crafting appropriate change strategies. Therefore, feedback from internal stakeholders and employee involvement in change processes is crucial. Organizational change management is a systematic approach that focuses on preparing organizations for ongoing changes and fostering rapid, effective, and innovative adaptation practices. Strategic management of corporate change primarily revolves around human resources (Sartori, Costantini, Ceschi, & Tommasi, 2018). Thus, emphasizing the critical role of internal communication is essential for successful corporate change management. The importance of internal communication has gained more attention since the early twentieth century. Effective communication helps individuals adapt to changes affecting them. Without effective communication, change becomes challenging, a fact often overlooked by many companies. Communication is recognized for its role in establishing readiness for change, reducing uncertainty, and gaining commitment. Simoes and Esposito (2014) assert that communication aligned with change fosters employee commitment by minimizing resistance. The relationship between communication and organizational change has drawn significant interest from researchers in recent decades. Communication plays a crucial role in raising employee awareness about the necessity of change and fostering a sense of belonging for sustainable and cohesive change efforts. The growing interest in internal communication arises from the complexities of modern organizations and the use of information technology for communication and interaction within companies (Marchalina, 2017).

### **3. METHODOLOGY**

#### Literature Review Approach:

The methodology employed in this paper involves conducting a comprehensive literature review focused on communication strategies for change management in organizations. This approach allows for the synthesis and analysis of existing scholarly works, theoretical frameworks, empirical studies, and practical insights related to the topic. Academic databases such as PubMed, Google Scholar, JSTOR, Web of Science and Ebsco were used. Keywords including "communication strategies," "change management," "organizational change," "internal communication," and related terms were used. Literature included in the review will consist of peer-reviewed journal articles, books, conference proceedings, and reputable reports. Materials lacking relevance to communication strategies for change management were excluded.

#### Data Collection and Analysis:

Initial screening based on titles and abstracts was performed to identify potentially relevant articles. Full-text articles meeting the inclusion criteria were carefully reviewed to obtain relevant information on communication strategies for change management. The extracted data were then organized thematically based on key themes and concepts identified in the literature. Findings will be synthesized to develop a comprehensive understanding of effective communication strategies for facilitating change management in organizations. Results will be interpreted within the context of existing theories, models, and practical implications for organizational change management.

#### 4. KEY FINDINGS

Communication encompasses messaging, networking, and negotiating. Our literature review underlines the importance of communication in change management. The models and frameworks we reviewed consistently emphasize the necessity for change managers to offer clear communication to members of the organization regarding the change. Crafting and executing strategy communication during change processes necessitates decisions that merge diverse analytical perspectives and require a relative level of effort, yet these decisions can be crucial in mitigating resistance to change. Communication within the context of change serves as a means to inform, engage, and even inspire collaborators to truly participate in the change process. This perspective portrays communication as both a procedure and an instrument (Simoes & Esposito, 2014). Drawing from previous studies by various authors, it has been established that several critical factors contribute to effective change management. These factors encompass leadership, communication, training, participation, among others. The table below delineates the principal elements of effective change management as highlighted in various studies.

Table 1: The main factors of effective change management

Author	title	Main factors of effective change management
(Greiner, 1972)	Red flags in organization development	Leadership, communication, education and training, participation of members, and counseling
(Kettinger & Grover, 1995)	Special Section: Toward a Theory of Business Process Change Management	Communication, direct member participation, role playing and training
(Voelpel, Leibold, & Mahoud, 2004)	The organizational fitness navigator: enabling and measuring organizational fitness for rapid change	Effective leadership, education and training, clear strategies, inter-level communication, mutual cooperation
(Whelan-Berry & Somerville, 2010)	Linking Change Drivers and the Organizational Change Process: A Review and Synthesis	Vision, leader behavior, communication, education and training, employee engagement, personnel system/practices, and organizational structure.
(Bano & Vasantha, 2021)	Strategies for managing. Effective organizational Change – a study on post covid-19	Change leadership, employee engagement, communication, training,

Source: Author's elaboration

As evident, communication stands out as a key element in effective change management, requiring strategic utilization for success. Research indicates that employee commitment to change is influenced by various features of communication. The table below catalogs studies that have investigated the impact of communication on employees' commitment to change.

Table 2: Employees commitment to change.

Author	Title	Employees commitment to change is related to
(Rogiest, Segers, & Witteloostuijn, 2015)	Climate, communication, and participation impacting commitment to change	The quality of communication



(Luo, Song, Gebert, Zhang, & Feng, 2016)	How does leader communication style promote employees' commitment at times of change?	Leader's communication style
(Helpap, 2016)	The Impact of Power Distance Orientation on Recipients' Reactions to Participatory Versus Programmatic Change Communication	Direction of communication (bottom up)

Source: Author's elaboration

Effective communication between employees and leaders is crucial during periods of change. It serves as a powerful tool for motivating employees, addressing resistance to initiatives, and preparing them for the challenges and benefits of change. Furthermore, communication plays a key role in providing personal incentives for employees to engage in the process. It is essential for communication to be ongoing throughout the change process, as it helps in adjusting the change program and ensures its success from the early stages of implementation (Koch & Beckert, 2019).

Effective communication starts with an assessment of the communication needs of all stakeholders and continues with the development of a communication strategy and detailed plan (Errida & Lotfi, 2021). Communication strategies in organizational change management are essential for facilitating successful transitions within the workplace. These strategies involve deliberate and systematic approaches to conveying information, fostering understanding, and garnering support from employees throughout the change process. The literature highlights a range of communication strategies that can be considered for enhancing change management practices.

Table 3: Communication Strategy

Author	Title	Communication Strategy
(Sandin & Äkäslompolo, 2005)	The use of communication in organizations undergoing change: case studies of Minelco and SGT AB	Internal Communication
(Quirke, 2008)	Making the Connections: Using Internal Communication to Turn Strategy Into Action	Communication Escalator
(Mazzei, 2012)	Internal Communication for Employee Enablement: Strategies in American and Italian Companies	Clear and transparent communication to build trust
(Warren, Becken, & Coghlan, 2018)	Using persuasive communication to co-create behavioural change – engaging with guests to save resources at tourist	Persuasive Communication

	accommodation facilities	
(Faupel & Helpap, 2021)	Top Management's Communication and Employees' Commitment to Change: The Role of Perceived Procedural Fairness and Past Change Experience	Knowledge Sharing

Source: Author's elaboration

When getting employees ready for change, if the communication channels are not suitable, it can unintentionally lead to resistance and, in some cases, failure. Utilizing media appropriately is crucial as it reduces the likelihood of communication failures. According to Jessup, (2022) communication preference of employees during change is influenced by their personality. Therefore, understanding media richness as proposed by Quirke, aids in selecting appropriate channels to mitigate misunderstanding and confusion during change. However Quirke suggests using one-way channels for creating awareness in change projects, which can be challenging (Quirke, 2008). These channels lack feedback and dialogue, making them easy to ignore and affecting employees' understanding. Errida and Lotfi (2021) recommend open communication channels to encourage interaction and understanding of new ideas. Battiston, Vidal and Kirchmaier (2021) believe face-to-face communication, like meetings with senior management, is effective for conveying information. Kotter (1995) suggests using rich media to create a sense of urgency and highlight the importance of change. While Quirke's focus on one-way channel for awareness is valid, it may not fully prepare employees for change as it lacks interaction. Therefore, integrating both lean and rich media is advisable to improve employees' understanding of the change's necessity, regardless of their involvement level .

## 5. CONCLUSION AND RECOMMENDATIONS

This article clearly shows that change is always present and impacts all organizations. There is general agreement that the speed of change is faster than ever in today's constantly evolving business world. Hence, the ability to manage change successfully is a highly valuable skill. After a thorough examination of communication strategies for change management in organizations, several key conclusions emerge. Firstly, effective communication is paramount in facilitating successful organizational change initiatives. Clear, transparent, and consistent communication channels help mitigate resistance and foster employee buy-in during periods of transition. Secondly, the choice of communication methods should align with the organizational culture, objectives, and the nature of the change. Tailoring communication approaches to suit diverse audiences enhances comprehension and engagement. Lastly, leadership commitment to open dialogue and active listening plays a pivotal role in fostering a culture of trust and collaboration essential for successful change implementation.

Based on the conclusions drawn from this study, the following recommendations are proposed for organizations seeking to improve their communication strategies for change management:

**Develop a comprehensive communication plan:** Establish a structured communication plan that outlines key messages, target audiences, delivery channels, and feedback mechanisms. This plan should be dynamic and adaptable to accommodate the evolving needs of the organization.

**Foster a culture of transparency:** Encourage transparent communication channels where employees feel confident sharing their concerns, ideas, and feedback without worrying about facing negative consequences.. Leadership should lead by example, demonstrating transparency in decision-making processes.

**Invest in communication training and resources:** Provide training programs and resources to equip managers and employees with effective communication skills. This includes active listening, conflict resolution, and the ability to convey complex information in a clear and accessible manner.

**Utilize multiple communication channels:** Employ a variety of communication channels such as newsletters, intranet portals, and social media platforms to reach diverse audiences across the organization. Tailor messages to resonate with different stakeholder groups.

Monitor and evaluate communication effectiveness: Establish metrics and feedback mechanisms to evaluate the effectiveness of communication efforts throughout the change process. Solicit feedback from employees and stakeholders to identify areas for improvement and refinement.

By implementing these recommendations, organizations can enhance their communication strategies for change management, fostering a culture of transparency, trust, and engagement essential for navigating successful organizational change initiatives.

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## The Impact of Good Governance on Economic Development, an Empirical Analysis for Albania

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**Abstract:** Sustainable economic development is one of the main goals that must be achieved in developing countries. The achievement of this objective is a complex phenomenon that must be seen in a broad context, including its economic, financial, social, institutional and environmental dimensions.

Albania faces important challenges such as the implementation of structural and institutional reforms, the fight against corruption, the rule of law, economic growth, increasing the level of income per capita, and well-being, as well as the future integration into the European Union. After the 1990s, our country has undertaken and implemented a series of structural and institutional reforms in the direction of good governance. These reforms have aimed at increasing the effectiveness of the government, the performance of the public administration, and the best functioning of the public institutions.

Good governance promotes transparency, accountability, efficiency and the rule of law at all levels of public institutions. It is an important instrument for the promotion of sustainable economic development, ensuring a fair and efficient management of human, capital and financial resources in the country.

The purpose of this study is to examine the impact of good governance on economic development and growth in Albania. In this context, the six World Governance Indicators (WGIs) have been examined, respectively: Voice and Accountability (VA), Political Stability and Absence of Violence (PSAV), Government Effectiveness (GE), Regulatory Quality (RQ), Rule of Law (RL), and Control of Corruption (CC), during the period 2000 - 2022. The results show that has a significant relationship between good governance and economic development.

**Keywords:** Governance, economic development, indicators, relationship, impact.

### 1. INTRODUCTION

Good governance is an important instrument for stimulating sustainable development in the country. According to the World Bank, good governance is evaluated by the implementation capacity of governance principles of a country, providing a framework for development and economic growth. It includes the processes of selecting, monitoring and replacing governments, as well as the government's capacity to formulate and implement policies effectively and sustainably.

Good governance contributes positively to economic development, through the provision of supporting strategies and policies for economic growth, promotion and encouragement of the private sector, efficient use of public resources, and macroeconomic stability through sustainable fiscal policies. The challenges addressed for good governance in Albania, are the rule of law, macroeconomic stability, economic growth, efficient use of public resources, transparent and accountable public services, and increasing well-being for citizens.

In the World Bank report, (1994), the need for good governance was emphasized and identified as the existence of transparent processes, a government that takes responsibility for its actions, and a strong civil society engaged in public affairs acting under the rule of law. World Bank economists, such as (Kaufmann et al., 2002; 2010), have had a prominent role in developing a concept covering all governance components. They describe governance as a combination of traditions and institutions practised by governments within any nation.

This concept includes the ability of the authorities to adequately identify and implement effective policies and procedures in selecting, monitoring and changing the governments, alongside respect for state and citizens for economic and community interaction institutions. Therefore, good governance in this paper refers to the processes and behaviors that serve decision-making and the exercise of power in a country, which is accessible

and understandable to the general public, transparent, effective, coherent, easy to understand and ensures broad participation of citizens in it the entire set of decision making policies.

Since 1996, the World Bank has published six indicators measuring governance in different countries as part of the governance indicators project, namely the Worldwide Governance Indicators (WGI). These indicators are Voice and Accountability (VA), Political Stability and Absence of Violence (PSAV), Government Effectiveness (GE), Regulatory Quality (RQ), Rule of Law (RL), and Control of Corruption (CC).

According to OECD (2020), good governance is critical to long term economic, social and environmental development. The ability of governments to operate effectively and efficiently depends in part on their management policies and practices. It can be explained as participation, transparency and accountability, effective, equity promoting rule of law.

In the long term, the policies of developing countries aim to achieve high levels of development in many of its dimensions. At the institutional level, states are governed by groups of elected officials and appointed administrators. Credibility and managerial capacity are two attributes that should characterize the leadership of an organization in the public sector. Monitoring the performance of public institutions, continuity and the will to implement reforms, the involvement of citizens and civil society in decision-making, control over corruption, and the implementation of the law, are elements that show that the governance of a country plays an important role in economic development of the country.

The implementation of good governance policies can promote economic development. There is a positive relationship between the quality of public institutions and economic growth. (Kaufmann & Kraay, 2002). Good governance requires an open and developmental policy, a professional administration, decision-makers who are willing to act for the public good and a strong civil society. In this regard, developing countries must focus more on reforms that improve governance if they want to achieve sustainable development.

The main objective of this paper is to evaluate the impact of good governance on economic development in Albania.

To achieve this goal, the specific objectives are: 1) What relationship exists between governance and economic development in Albania? 2) to examine the indicators that have an impact on good governance, 3) to evaluate the impact of governance on economic growth and citizens' well-being, and 4) what are the challenges in the future for better governance?

The paper is designed as follows: In section 2, presents the theoretical background and literature review. In section 3, we introduce the research methodology. Section 4 presents, discussions and empirical results. In the last section, we present conclusions and recommendations.

## **2. LITERATURE REVIEW**

Governance is a broad concept. In this regard, the impact of governance, the quality of public administration, on economic development has been investigated theoretically and empirically in many studies. This concept has many definitions provided by academics, researchers and policymakers. After the 1990s, considerable literature has empirically examined the impact of governance on economic growth and development, particularly by analyzing governance indicators.

The World Bank, (1994), defined governance as “how power is exercised in the management of a country's economic and social resources for development”. The United Nations Development Program (1997), characterized governance as “the activity of monetary, political and administrative authority to deal with a nation's issues at all levels. It involves the systems, procedures and institutions, through which citizens and gatherings express their interests, practice their legitimate rights, meet their commitments and intervene in their disparities”.

The United States Agency for International Development (2002), describes governance “as a complex interaction system between the structures, features and processes characterized by transparency, responsibility and involvement”. This concept includes the ability of the authorities to adequately identify and implement effective policies and procedures in selecting, monitoring and changing the governments, alongside respect for state and citizens for economic and community interaction institutions.

Governance is defined as the process of the selection, monitoring and replacement of governments, the power of the government to effectively establish and perform sound policies; and the respect of citizens and the state

for the institutions that govern economic and social interactions among them (Kaufmann, et al., 2010). Good governance is, among other things, transparent and accountable, effective and equitable, and promotes and ensures the rule of law. It ensures that political, social and economic priorities are based on broad consensus in society and the participation of citizens in decision-making. (Elisa & Sara, 2011), in their study examined the effect of good governance on economic growth and found that governance positively affects economic growth for both developing and developed countries.

Good governance in public institutions is the key to successful and satisfactory efficiency to achieve better performance. Through the analysis of the World Governance Indicators (WGI), most studies have concluded that good governance has a positive impact on growth and economic development. Raczowska, et al. (2023), in their study, confirm that there is a significant relationship between good governance and economic growth in EU countries.

According, to Mira & Hammadache (2017), good governance is the capacity of management and institutional reforms conducted by state policy that improves coordination and delivery of effective public services, and accountability of political actors and individual citizens in the driving of development policies. Since 1996, the World Bank has published six indicators measuring governance for more than 200 countries around the world namely the Worldwide Governance Indicators (WGI). Kaufmann et al. (2010) have developed these six indicators (WGI), corresponding to basic governance concepts, which, according to their study, show a strong causal relationship between good governance and improved development economic.

Bayar (2016), argues that all public governance indicators except regulatory quality had a statistically positive impact on economic growth. Countries with better public governance use public expenditures more effectively, which positively affects economic growth. Samarasinghe (2018), referring to the analysis of the individual impact of World Governance Indicators, finds that corruption control plays a major role in the development of a country's economy. Fawaz et al. (2021), categorized a sample of 11 developing nations from 1996 to 2008 according to income levels. They also concluded that the rule of law and corruption control significantly impacted economic development. AlBassam (2013), investigated the relationship between governance and economic growth during times of crisis and found the existence of a significant, positive correlation between each governance indicator and gross domestic product (GDP).

Tarek & Ahmed (2013), argue that the institutional failure that characterizes developing countries inevitably leads to the destabilization of their long-term economic growth and an improvement in governance would greatly contribute to their economic growth.

In developing countries, public governance has the potential to affect economic growth through many direct and indirect instruments because it is the main determinant of the economic environment and institutions that have a significant impact on the decision-making process of key economic actors, (Acemoglu, 2005).

The development of the role of public administration has led to the decentralization of public services to allow better access for citizens to the services provided by the government. In our country, important reforms in the economic infrastructure sectors have been undertaken in the last two decades, to improve the performance of service delivery to citizens by the government (Tomorri & Keco, 2023). Better governance also has the potential to positively affect economic growth by contributing to the development of domestic financial sectors and attracting more foreign direct investment.

Kambo & Boshnjaku (2023), argue that to promote sustainable development in the country, the government should prioritize policies that promote sustainable economic growth and protect the environment. Good governance is an important instrument for stimulating sustainable development and should be included in the development strategies of a country (Xhindi & Idrizi, 2020).

A good governance of a nation results in a strong economic performance, and for a particular nation to effectively achieve its economic growth, the government has to explore the factors that can either reduce or increase the economic growth of a country. Zhuo et al. (2021), argue in terms of the positive impact of governance indicators on economic growth.

In the long term, economic growth could be positively or negatively affected by government policy (Al-Naser & Hamdan, 2021). The efforts of international institutions and public authorities on sustainable development can also support the process of reducing poverty and increasing the wellbeing of the population, in developing countries (Mansi, et al. 2020). Governments worldwide are still seeking solutions that support sustainable development, and good governance is identified as a crucial tool for achieving this goal (Güney, 2017).

Beleiu, et al. (2015), analyzed the impact of governance on economic growth and found a highly positive correlation, between the rule of law, regulatory quality and economic growth. Petreski (2014), examined the impact of institutional quality on economic growth in transition economies and concluded that regulatory environments with good governance had a positive impact on economic growth.

The focus of our study is the examination of the relationship and the impact of governance on economic development, which is based on the analysis of the six WGI indicators of governance in the Albania, for the period 2000-2022.

### 3. METHODOLOGY

Good governance is an important instrument for promotion and economic development in developed countries and especially in developing countries. The literature reviewed above reveals essential aspects regarding the relationship between governance and economic development, using multiple statistical methodologies.

Based on the objectives of this study, regarding the evaluation of the impact of good governance on economic development in Albania, the examination of indicators that have an impact on good governance, as well as the impact of governance on economic growth and the well-being of citizens, we have used a descriptive and analytical approach about the purpose of the study.

The methodology used for this study includes three phases:

- The first phase included a systematic literature review related to the purpose of the paper, which includes, research articles, papers, reports, and books from domestic and foreign authors;
- The second phase includes the collection of data published by national and international institutions such as (Institute of Statistics, Bank of Albania, World Bank, UNDP, etc.);
- The last phase consists of data analysis, which is structured on the logic of the available resources, related to the indicators that evaluate the quality of good governance.

The study is based on the use of the analysis method, through the collection, processing and interpretation of data and statistical indicators, focusing on the impact of good governance on the economic development of the country, the challenges it faces, as well as the conclusions and recommendations for the future.

The six World Governance Indicators have been published since 1996 by the World Bank. These indicators are defined as follows:

- 1) **“Voice and accountability”**: Reflects perceptions of the extent to which a country’s citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media.
- 2) **“Political instability and Absence of Violence/Terrorism”**: measures perceptions of the likelihood of political instability and/or politically-motivated violence, including terrorism.
- 3) **Government effectiveness**: Reflects perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.
- 4) **“Regulatory Quality”**: Reflects perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.
- 5) **“Rule of Law”**: Reflects perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.
- 6) **“Control of corruption”**: Reflects perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as capture of the state by elites and private interests.

The indexes of each governance indicator vary between -2.5 (weak) and 2.5 (strong), for governance performance (World Bank, 2023). The indicators used in the statistical analysis, their symbols and data sources are presented in Table 1.



Table 1: Indicators used in the statistical analysis

Indicators	Symbol	Unit of measure	Source
GDP growth (annual %)	GDP	(in %)	World Bank Indicators, 2023
Voice and Accountability	VA	(-2.5 to +2.5)	World Bank Indicators, 2023
Political Stability and Absence of Violence	PSAV	(-2.5 to +2.5)	World Bank Indicators, 2023
Government Effectiveness	GE	(-2.5 to +2.5)	World Bank Indicators, 2023
Regulatory Quality	RQ	(-2.5 to +2.5)	World Bank Indicators, 2023
Rule of Law	RL	(-2.5 to +2.5)	World Bank Indicators, 2023
Control of Corruption	CC	(-2.5 to +2.5)	World Bank Indicators, 2023

Source: Authors' composition, 2024

#### 4. RESULTS AND DISCUSSIONS

Considering the review of the literature and the methodology used, this paper focuses on the influence that governance has on the economic development and economic growth of the country. In addition to the role of governance, other important factors that have determined the success of the reforms are related to the design and implementation of the legal and institutional framework.

Some of the issues and challenges that must be addressed for good governance in the country are, drafting and implementation of sound legal and institutional policies; regulation and protection of property rights; regulating monopolies and increasing competition; macroeconomic and fiscal stability; provision of transparent and quality public services; efficient and sustainable use of national resources. Another aspect related to the transition process is the fight against informality and corruption. Fiscal consolidation, by establishing a balance between the reduction of public debt and the need to make the necessary investments, has had a positive impact on economic growth.

Some of the main reforms that have been undertaken in this direction in these two decades are: improving the information system of taxpayers, computerization of the tax and customs system, continuous training and increasing the capacities of the tax administration, strengthening and fiscal discipline, digitization of services public, and online delivery through the e-Albania platform.

During the last decade in Albania, significant positive developments have been observed in the quality and variety of services offered through the government service platform, showing the government's efforts to improve and increase the provision of electronic public services for citizens and businesses (Tomorri & Keco, 2023).

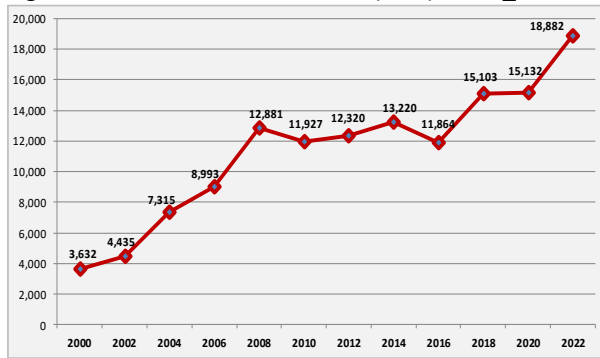
Referring to the data of the World Bank, we will analyze below the main macroeconomic indicators in Albania.

Table 2: The main macroeconomic indicators in Albania

No	Indicators	2000	2010	2022
1	GDP/mln \$	3,632	11,927	18,882
2	GDP per capita/\$	1,176	4,094	6,803
3	GDP growth (annual %)	6.67	3.71	4.84
4	Inflation in %	0.05	3.55	6.73
5	Employment in %	53.73	46.22	52.35
6	Unemployment in %	14.15	14.20	11.81
7	Foreign direct investment in % of GDP	3.94	9.13	7.63

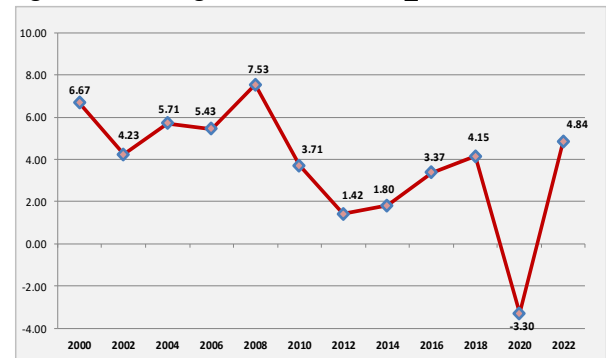
Source: Authors' composition based on data from World Bank, 2023

Figure 1. Gross Domestic Product (GDP) mln \$ \_Albania



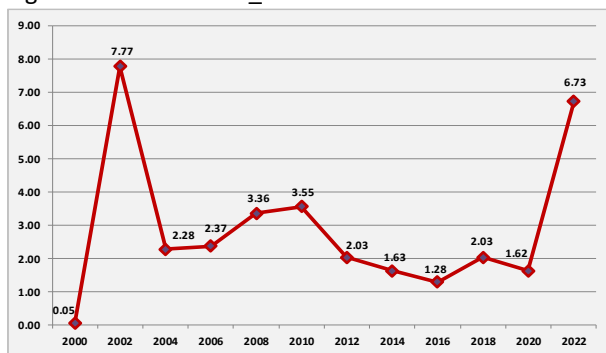
Source: Authors' composition based on data from World Bank, 2023

Figure 2. Annual growth in % of GDP \_Albania



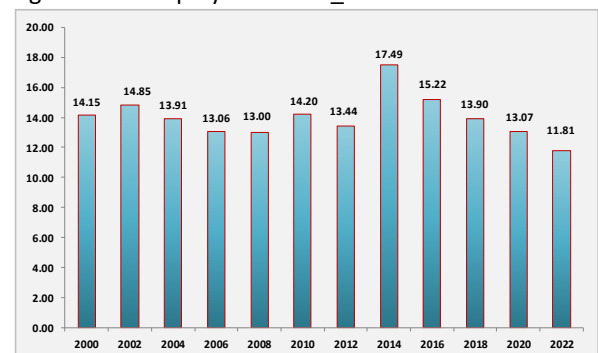
According to the data, the Gross Domestic Product (GDP) for the year 2000 is 3,632 mln \$ and for 2022 it is 18,882 mln \$. Regarding economic growth about the gross domestic product in 2000 is 6.67% and in 2022 is 4.84%. The highest rate of economic growth result in 2008 with 7.53%.

Figure 3. Inflation in % \_Albania



Source: Authors' composition based on data from World Bank, 2023

Figure 4. Unemployment in % \_Albania



Referring to inflation data, it results in a decrease from 2010 to 2020, where it is 1.62%. In 2022, it is 6.73%, as a result of the increase in prices at the global level, affected by the Covid-19 pandemic and the war in Ukraine. As for the unemployment rate in 2000, it is 14.15% and in 2022, it is 11.81%, with a decreasing trend.

**Evaluation of the indicators of governance.** Researchers, policymakers, international institutions, etc., in recent years, have analyzed and examined the impact of good governance on the sustainable development of a country.

**Determination of governance quality.** Based on the data of the World Bank, the quality of governance is evaluated with six governance indicators. The Quality of Government Index is a summary of these sub-indicators. According to different theoretical perspectives and supported by empirical studies, good governance significantly affects the economic growth of a country.

The ranking of the values of the indicators is done from the lowest to the highest, which means that the higher the value of the indicator, the more positively it affects the quality of governance. The quality of governance and public institutions significantly affects economic development and shows differences in economic growth between different countries.

The table below, presents the values of six indicators that evaluate the quality of governance in Albania.

Table 3. Values of six governance indicators (WGI) for Albania, 2000-2022 period

Year	Voice and Accountability	Political Stability	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
2000	-0.29	-0.54	-0.92	-0.42	-1.02	-0.86
2002	-0.01	-0.30	-0.62	-0.31	-0.76	-0.85
2004	0.01	-0.43	-0.41	-0.19	-0.70	-0.72

<b>2006</b>	0.08	-0.51	-0.58	-0.15	-0.70	-0.79
<b>2008</b>	0.17	-0.03	-0.37	0.14	-0.60	-0.61
<b>2010</b>	0.11	-0.19	-0.27	0.23	-0.44	-0.49
<b>2012</b>	0.01	-0.16	-0.27	0.20	-0.54	-0.70
<b>2014</b>	0.15	0.45	-0.07	0.23	-0.37	-0.55
<b>2016</b>	0.17	0.34	0.06	0.20	-0.30	-0.45
<b>2018</b>	0.18	0.37	0.11	0.27	-0.40	-0.52
<b>2020</b>	0.09	0.09	-0.12	0.24	-0.35	-0.55
<b>2022</b>	0.14	0.11	0.07	0.16	-0.17	-0.41

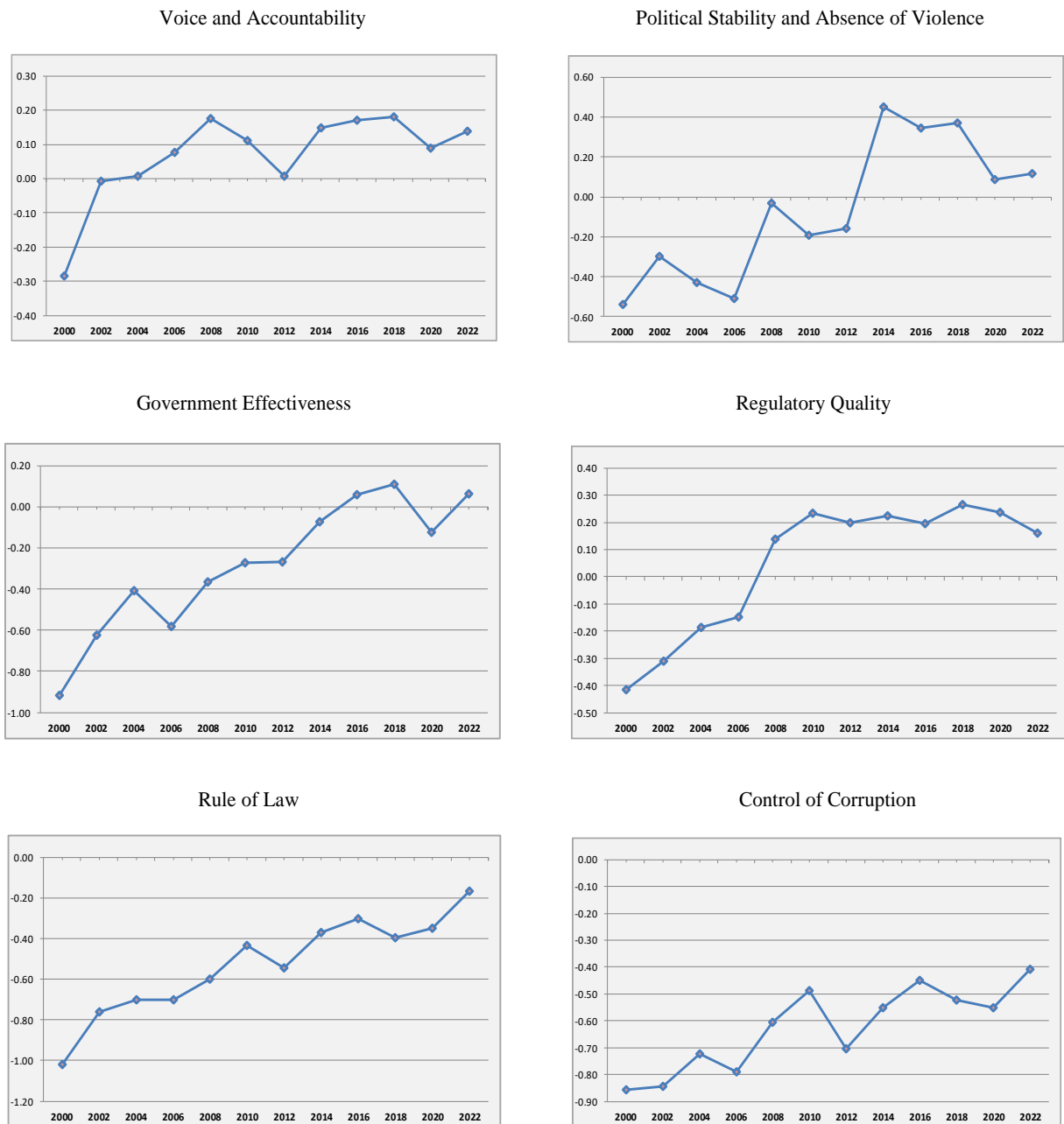
Source: Authors' composition based on data from World Bank, 2023

Referring to the data in Table 2, the values of these indicators are interpreted as follows.

- **Voice and Accountability** has a positive trend and values after 2004 and continues until 2022. This indicator has improved, positively influencing the quality of governance.
- **Political Stability and Absence of Violence.** This indicator had negative values until 2012. From 2014 onwards, this indicator has positive values and a significant impact on the quality of governance, which indicates political stability in our country.
- **Government Effectiveness.** This indicator had negative values until 2014. While for the period 2016-2018 and 2022, there are positive values. The improving values of this indicator show the government's efforts to increase the quality of public services.
- **Regulatory Quality** has a positive trend and values after 2008. This indicator has had a positive impact on the quality of governance, in terms of the drafting and implementation of sound policies and regulations that promote and support the development of the private sector.
- **Rule of Law and Corruption Control** are the two indicators that have negative values for the entire 2000-2022 period. This means that although the rules and laws are well drafted, their implementation remains a problem. The control of corruption continues to remain one of the serious problems, despite recent government efforts to address them.

The graphs of governance indicators for Albania, during the period 2000-2022, are presented below:

Figure 5. The graphs of six governance indicators (WGI) for Albania, during 2000-2022 period



Source: Authors' composition based on data from World Bank, 2023

Based on the above data analysis, we conclude with some key findings:

- Control of corruption and rule of law are two indicators that negatively affect the quality of governance. Control of corruption shows that it has negatively affected the main determinants of economic growth, such as the effectiveness of the public sector, domestic and international investments, tax collection and public expenditure management.
- Rule of law has a great impact on the economic performance of our country. The rule of law is considered a key indicator of good governance, as it is important for maintaining public order and security, providing public goods and services, effectively controlling corruption, and promoting economic development.
- Government effectiveness reflects the quality of public services, government decision-making and civil servants. In our study, government effectiveness had a positive impact on economic growth, confirming these theoretical considerations.

- Voice and accountability and political stability, have a positive impact on the country's economic growth. When citizens of a country believe in government institutions and that they receive public services and sufficient income, then their willingness to contribute to their country increases. Moreover, freedom of expression, freedom of organization and a free media contribute to economic growth by influencing the performance of public administration. The quality of governance can affect economic development through the promotion of private investment, indirectly influence the level of economic growth.

Good governance is of particular importance, especially in developing countries, because it significantly affects economic development and to examine the differences in economic development between different countries.

Albania has made important steps towards the quality of governance. Political stability and rule of law have a significant impact on the implementation of economic reforms to become a member of the European Union.

According to the recommendations of the World Bank and other international institutions, the main challenges that must be addressed for good governance are:

- drafting of healthy and stimulating policies by policymakers, to promote growth and economic development,
- transparency, responsibility, accountability by government and public institutions,
- participation of citizens in the decision-making processes for public goods and services,
- encouraging and supporting the private sector and business, through a stable tax and fiscal system, as well as through the provision of support schemes and grants,
- efficient use of resources and public expenditures by the public sector,
- drafting policies and strategies for maintaining macroeconomic stability,
- creating a positive, favourable and competitive business climate for attracting foreign investors.

## 5. CONCLUSIONS

This study examined the important relationship between good governance and economic development in Albania. Good governance is of particular importance, especially in developing countries, because it significantly affects economic development and to examine the differences in economic development between different countries.

Developing countries, like our country, have experienced a long and difficult process of transformation from centralized economies to market economies. These countries implemented substantial economic and political reforms to overcome economic underdevelopment and meet the requirements for EU membership during this transformation process.

After the 1990s, our country has undertaken and implemented a series of structural and institutional reforms in the direction of good governance. These reforms aimed to reduce the public sector in the economy, encourage the development of the private sector, increase the effectiveness of the government, the performance of the public administration, ensure the legal infrastructure, transparency and accountability of public institutions.

Albania has made significant progress in improving its regulatory framework and strengthening the rule of law, which has led to increased investment, macroeconomic stability, technological innovation, and the provision of digital public service.

Good Governance is represented by six world governance indicators (WGI) defined by the World Bank: voice and accountability (VA), political stability and absence of violence (PSAV), government effectiveness (GE), regulatory quality (RQ), rule of law (RL), and control of corruption (CC).

Our findings prove that good governance, that is, the quality of public administration, directly and indirectly affects economic growth. Political stability and government effectiveness are crucial for sustainable development in Albania.

The results of this study can be useful for policymakers to understand how different aspects of governance affect the economic development and growth of the country.

The government should ensure the implementation of the law with the aim of minimizing corruption and increasing the trust of citizens in public institutions. Policymakers must formulate and implement sound policies and strategies that encourage and support private sector development that is essential for sustainable economic growth.

In this regard, policies for education, health, technology implementation, digital services provided by the public sector have a significant impact on economic growth. Therefore, good governance ensures that public resources and expenditures are used more effectively, and on the other hand, contribute to economic growth.

The government must prioritize the implementation of policies and regulations that promote sustainable economic growth, reduce poverty and inequality, and enhance the well-being of citizens.

Strengthening public institutions, increasing the performance of public administration, transparency and accountability, and participation of citizens in decision-making processes, are essential for good governance.

The performance of economic development in the country is closely related to macroeconomic and financial stability, fiscal consolidation, the quality of governance, better management of public resources, efficient use of natural resources, transparency and accountability of the government.

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## Title: Quantitative Analysis of Democracy in the Western Balkans Using Advanced Statistical Models

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**Abstract:** This study provides a comprehensive quantitative analysis of the state of democracy in the Western Balkans, utilising advanced statistical techniques such as regression analysis, complex modelling, and Analysis of Variance (ANOVA). The research employs prominent democratic indices, including the V-Dem (Varieties of Democracy) Index and Freedom House's Freedom in the World report, to assess democratic development and challenges in the region. The primary focus is exploring the intricate relationships between various indicators of democracy, such as political stability, governance quality, and civil liberties. By applying regression analysis, the study aims to identify significant predictors of democratic health and understand the impact of various socio-political factors. Complex modelling techniques are employed to capture the multifaceted nature of democracy in the Western Balkans, considering the region's diverse historical and cultural background. ANOVA is used to compare the democratic progress among different countries within the region, highlighting similarities and disparities in their democratic journeys. This approach allows for a nuanced understanding of how internal dynamics and external influences shape the path to democracy in each nation. This quantitative investigation offers a data-driven perspective on the democratisation process in the Western Balkans, providing valuable insights for scholars, policymakers, and international organisations involved in promoting democratic governance in the region.

**Keywords:** 3 to 5 keywords should be provided.

### 1. INTRODUCTION

In the late 20th century, influential thinkers such as Francis Fukuyama, Samuel P. Huntington, and Charles Krauthammer posited that liberal democracy is the ultimate form of governance. They believed that liberal democracy dominates in economic and political spheres. One reason for the failure of communism was the irresistible appeal of liberal democracy, which caused its swift downfall. Freedoms and liberty were viewed as synonymous with happiness and prosperity. At the same time, authoritarianism was seen as the root cause of poverty, backwardness, and every possible evil in the non-Western world.

The Western Balkans is located at the intersection of three distinct political and cultural areas. Western Balkans are in close proximity to Western Europe, but they are also influenced by Eastern Slavic culture since early times. Also, on the southeastern edge, they have historical old Ottoman-Turkish influence that, in recent years, seems to have somewhat regained strength in countries like Albania, Kosovo, and Bosnia Herzegovina. All these factors make the region a particular one with internal similarities and differences. In the second part of the twentieth century, the difference that found a unifying force was the communist ideology. All the countries of our analysis were communist regimes, and almost all of them, apart from Albania, were part of Yugoslavia.

After the fall of the communists, the past 30 years have been of the utmost importance for the Western Balkans countries, mainly influenced by the fall of communist regimes and echoing the disintegration of the Soviet Union. . Since the last decade of the XX century, these countries have attempted to change their political and economic landscape. It seemed that the end of history that Fukuyama announced was happening also in this region. We are discussing Albania, Bosnia and Herzegovina, North Macedonia, Montenegro, Kosovo, and Serbia here and leaving Croatia outside because it is already part of the EU. Although these countries have distinct stories with different economic, cultural, and political variables, we can hardly avoid considering them connected realities. Each of these nations, while unique in their own right, share a geographical proximity and a complex web of historical interactions that intertwine their destinies in various ways. At the beginning of the 1990s, the Western Balkans region underwent significant political and territorial changes. This period marked the dissolution of Yugoslavia, a communist federation, leading to the emergence of several independent countries. This transformative era in the Balkans was characterised by a shift from communism, paralleling broader geopolitical changes in Eastern Europe and the former Soviet territories.

Except for Serbia, which delayed the communist fall, all countries created by the Yugoslavian desegregation in the first part of the 1990s adopted liberal parliamentary democracy. This is also true for Albania, which changed its political system shortly after coming from a severe communist regime. The scenery was optimistic at the beginning since the liberal democracy seemed to be the ultimate political system, and the free economy it accompanied resulted in the leading economic system. This was obvious due to the vicinity of Western



countries that had significantly greater economic prosperity. The equation seemed palpable -If Western countries aimed for the economic development of Austria, Italy, Germany, etc., they should adopt liberal democracy. That was the only way. This was not only the only way but was thought to be relatively easy. Coming from communist dictatures and also from ethnic discontent in Yugoslavia, they precepted the new political system as a panacea for all their economic and ethnic problems. Even though the region was shocked by ethnic wars at the beginning of those years, the new ideological path seemed obvious. Moreover, the Western states, so politically and economically advanced, seemed to have every will and intention to help firsthand in this transition to democracy.

However, even if liberal democracy shines bright, its attainment is not so laid back. In the early 2010s, an undelightful trend was becoming more accentuated. Liberal democracy had lost its expansion vigour, and many authors began to talk about democracy stalling or even democracy backsliding. A survey earlier in 2007 revealed that 66.2% of Western Balkan citizens believed there was more corruption than around 1989 (Brusis, 2008, p.380). Also, the general population in democracies suffers from ideological incoherence (Federico, 2007). Even though all the Western Balkan countries are still in a zealous EU integration process that requires the implementation of liberal democracy principles, their path to democracy seems to have been stalled. Many scholars began to notice that the region's difficulties in mimicking Western liberties and the rule of law were enduring more than initially hoped. In Western Balkans, for instance, the autocrats even pretend to be reformist, pro-European Democrats while governing informally with the tools of the Autocrats (Bieber, 2020, p.XI).

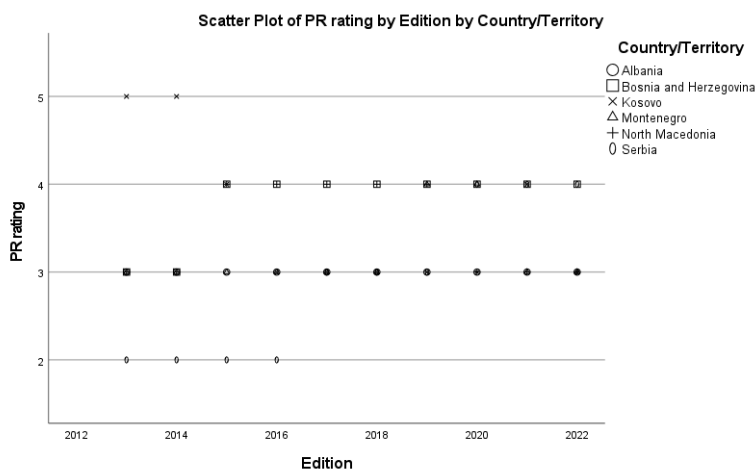
This paper will utilise a quantitative statistical approach to evaluate the progress of democracy in the Western Balkans. Objective statistical methods, including linear regression, quadratic regression, ANOVA, and nonparametric tests, will be utilised to minimise subjectivity in interpretation as much as possible. Through these statistical methods, when possible, the analysis will be cautiously extended into the future to discern longer-term trends. This approach not only allows for the identification of ongoing patterns but also enables regressive predictions about potential developments. For this, we will use two of the main democracy indexes and their components. Many reputable institutions produce democracy indicators, and we will use two of them; the first is the index of the Freedom House, one of the most widely used indices by politicians and the public to assess the democracy index. The second index is the V-DEM democracy index, commonly used in the academic milieu. Recently, Ryo NAKAI conducted a study to determine if there is a general trend of democratic regression in Eastern and South-Eastern Europe. He used two general V-Dem indices: the Dem Electoral Democracy Index and the Liberal Democracy Index (Nakai, 2023). Its findings defend the idea that the democratic backsliding was happening only in a few countries. In the difference to the work of Nakai, we will compare some results to the Freedom House Index and try other important variables from V-Dem to analyse.

## 2.1 Political rights

First, we will check for correlations between the two indexes and their data. For this, we will correlate the two main variables of Freedom House and V-Dem. Both indexes use an expert assessment method and do not use general population polls to estimate the variables. There are similarities in obtaining their data, even if they differ in the concrete methodology. Their aim, generally speaking, is similar: to evaluate the level of liberal democracy across countries. We correlated the two main variables of the two indexes, "Political Right Rating" (PR Rating) for Freedom House and "Electoral Democracy" for V-Dem. A moderate positive correlation was found between the PR rating and the Electoral democracy index,  $r(58) = .569$ ,  $p < .001$ . This suggests that even though the two indexes have similarities, they are far from identical, indicating that each index may capture unique aspects of political and electoral systems.

So, we will examine the scores on political rights from 2013 to 2022 from the Freedom House Index. This analysis will give us a first opinion of the evolving landscape of democracy in the region over a decade. This variable takes values from 1 to 7. A score of 1 is the best political right situation, and a score of 7 is the worst. The situation here seems pretty stacked. According to Freedom House (Figure 1), the problem appears more challenging for Serbia and improved for Kosovo, while the other countries remain unchanged. Indeed, the panorama seems relatively flat for most countries, with no significant changes occurring in 10 years of their history.

Figure 2



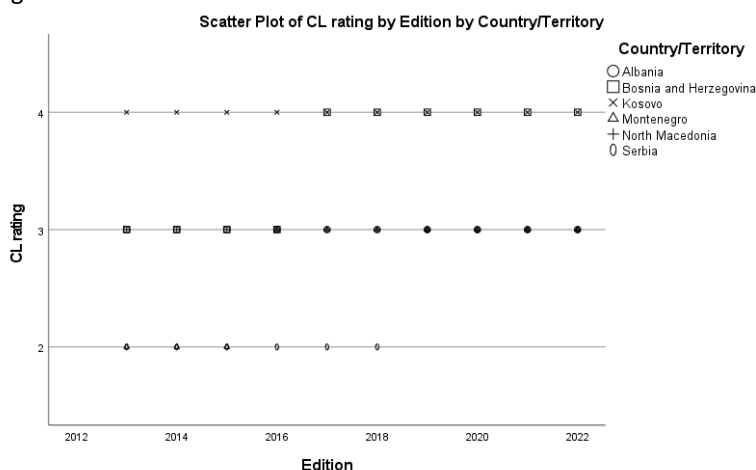
Also, if we look at the variable averages for all the countries from 2012 to 2022 (Table 1), the average is 3.33, which is pretty near the mathematical 50 per cent of the values from 1 to 7. It is even worth mentioning that the mean has been somewhat worse for the last three years, at 3.4 points. This subtle uptick hints at potential challenges in the democratic processes of these nations, though definitive conclusions cannot be drawn without more comprehensive data.

Table 1

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
PR rating	60	2	5	<b>3.33</b>	.655
Valid N (listwise)	60				

As for Civil liberties (CL Rating), the second variable we will consider in the Freedom House Index, the situation also seems flat, with countries like Serbia performing worse in recent years. The average for civil liberties is 3.12, but it has somewhat worsened to 3.33 points over the last three years. Although this change represents a decline, the trend is not so marked, suggesting a gradual rather than abrupt shift in the civil liberties landscape. Nonetheless, even a slight deterioration calls for attention and action to uphold these essential freedoms.

Figure 3



## 2.2 Electoral Democracy

According to the Freedom House report of 2023, two main issues undermine democracy today: Flawed Elections and Armed conflict. Since, fortunately, there was no armed conflict at the time in Western Balkans,

we will consider the election quality of these years. Nonetheless, for the remainder of the study, we will utilise the V-Dem indices due to their nuanced and detailed approach to variable measurement, which allows for a more granular analysis beyond the broader overview provided by Freedom House. First, we consider V-Dem's "Clean Election Index" (v2xel\_frefair). This variable assesses to what extent the elections are free and fair. This complex variable is calculated by more granular variables using point estimates from a Bayesian Factor Analysis model. These variables include but are not limited to election vote buying, election other voting irregularities, election government intimidation, etc (Coppedge et al., 2023, p.49).

A linear regression of the "Clean Election Index" shows that there is no linear development in the improvement of electoral democracy in the region (Table 2). The table shows that the coefficient R<sup>2</sup> displays an unacceptable rate or explanation from the model. Also, the ANOVA in "Table 3" demonstrates that the differences in variation of an electoral process are not due to time (year). Indeed, the sigma value of 0.764 shows that the differences seem more random than due to the time evolution. Since there is only one predictor, the table of the coefficients gives the same value (P=0.764). This shows us that the coefficients are not significant. So, we can conclude that there is no linearity in the evolution of the fairness of the electoral processes of the Western Balkans. Unfortunately for the region, the optimistic evolutionary path to cleaner elections was just historicism. This lack of significant trends in the data suggests a need for more nuanced approaches to understand and improve the electoral processes in the region.

Table 2

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.040 <sup>a</sup>	.002	-.016	.11246
a. Predictors: (Constant), Year				

Table 3

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	.091	.764 <sup>b</sup>
	Residual	.734	58	.013		
	Total	.735	59			

a. Dependent Variable: Clean elections index  
 b. Predictors: (Constant), Year

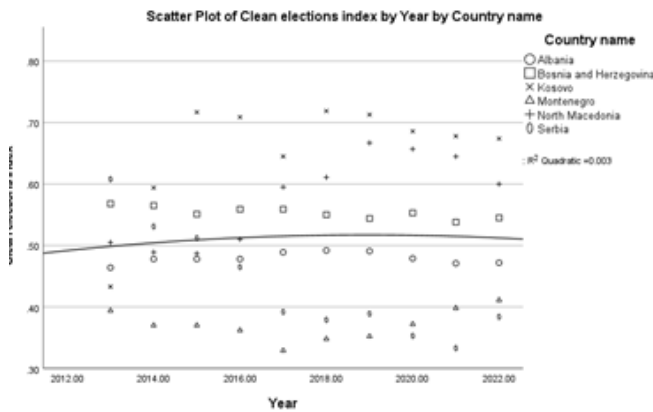
Table 4

Coefficients						
Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.569	10.198		-.252	.802
	Year	.002	.005	.040	.302	.764

a. Dependent Variable: Clean elections index

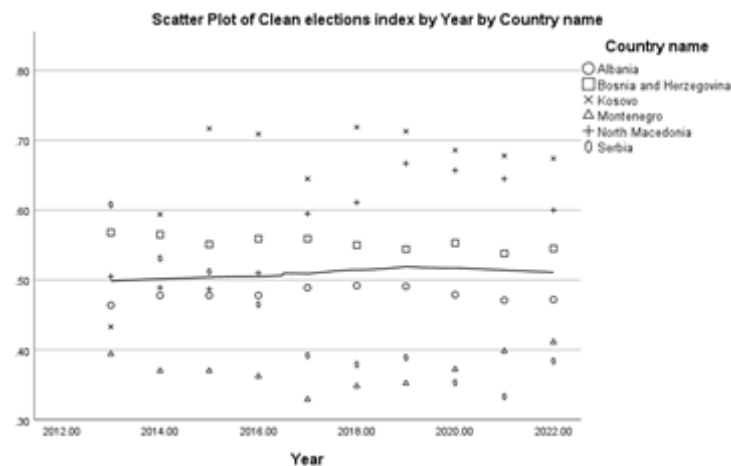
Further, a graphic was performed (Figure 3) to understand the evolution of the fairness of the electoral process in all the analysed countries. The data, at first sight, seems relatively flat. Unfortunately, the quadratic line also did not perform better (the R<sup>2</sup>=0.003) compared with the linear regression previously analysed. This indicates that neither linear nor quadratic models are suitable for capturing the complexity or trends in the fairness of the electoral processes across the analysed countries. Consequently, it suggests that the relationship between time and electoral fairness might not be straightforward or influenced by other factors not captured in this model.

Figure 3



Considering the nonlinear nature of the data, a Local Regression (LOESS) approach, a non-parametric method, was employed for analysis (Figure 4). Using LOESS, we see the curve going somewhat upwards during the 2016–2019 time frame and going down again in 2019–2022. Even if non-parametric tests do not allow for a good level of prediction for the future, it seems plausible that no marked improvements are likely in the future. Moreover, a slight pejection has been noted in the last few years. This observed trend raises concerns about the effectiveness of current strategies to enhance performance in this area, suggesting the need for a reevaluation of approaches.

Figure 4



### 2.3 Legislative Constraint on the Executive

The main issue in nations emerging from authoritarian legacies is their tendency to harbour unrestrained leaders, reminiscent of Joseph Tito, Slobodan Milošević, Enver Hoxha, or Franjo Tuđman, who wield their authority in ways that render the parliament or judiciary seemingly powerless to check them. Employing doctrines such as communism or nationalism has eroded the democratic fabric in the history of the Western Balkans. Indeed, the region has endured governance by those who scorn democratic limits. Hence, our analysis will examine any progress in reinforcing critical democratic checks on leadership. Following the era of communism, parliaments in these nations served primarily as instruments of the ruling party, merely echoing and enforcing communist ideologies rather than functioning as independent legislative bodies. In the liberal democratic era, the parliaments are supposed to be the real power holders and the manifestation of people's sovereignty.

We constructed a linear regression with the dependent variable Legislative constraints on the executive index (v2xlg\_legcon). This composite variable tries to respond to: To what extent are the legislature and government agencies, e.g., comptroller general, general prosecutor, or ombudsman, capable of questioning, investigating, and exercising oversight over the executive (Coppedge et al., 2023, p.51)? We obtained an  $R^2 = -0.16$  from the

linear regression (table 5), which is insufficient to consider the model as fit as possible. This result is again confirmed by the ANOVA P value P=0,302 (Table 6), which is very high to be acceptable.

Table 5

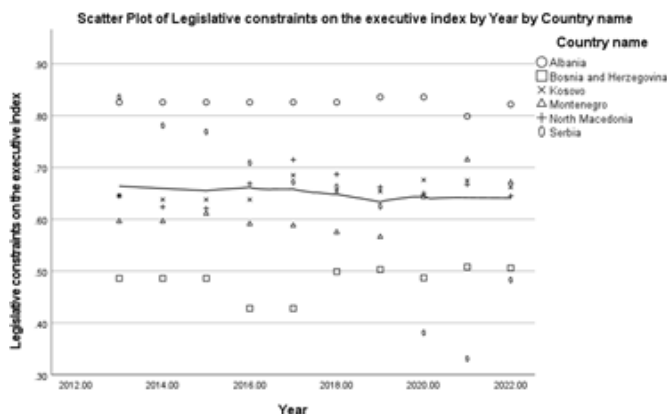
Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.128 <sup>a</sup>	.016	.000	.12432
a. Predictors: (Constant), Year				

Table 6

Coefficients					
Model	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	11.752	11.273	1.042	.302
	Year	-.006	.006	-.128	.329
a. Dependent Variable: Legislative constraints on the executive index					

A graph has been constructed (Figure 5) to examine further the temporal changes in how legislative power constrains executive authority (President or Prime Minister). As in the previous case, both parametric regression models, linear and quadratic, do not yield a satisfactory R<sup>2</sup> value (0.016 and 0.015), so again, Local Regression was utilised. This analysis reveals an overall moderate reduction of parliamentary power against the executive power, which the leader of the main political party in each country usually holds. However, since this test is not parametric, it could not be used relatively to assess with an acceptable security that the trend is downward.

Figure 5



## 2.4 Judicial Constraints on the Executive

The second variable of constraints to executive power worth analysing is the limitation of the executive power by the ideally independent judicial power. We will use “Judicial Constraints on the Executive Index” (v2x\_jucon) of V-Dem for this. This variable answers the question of to what extent the executive respects the Constitution and complies with court rulings and to what extent the judiciary can act independently (Coppedge et al., 2023, p.51). We performed a linear regression and ANOVA (Tables 7 and 8) and analysed their data to see more in-depth. ANOVA and the Regression Coefficients' P values are well above 0.05 (P=0.355). This shows that the increase or decrease of the judicial contents does not follow a time-dependent pattern. Namely, even with changes, they cannot be patterned linearly in time.

Table 7

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.019	1	.019	.869	.355 <sup>b</sup>
	Residual	1.292	58	.022		

Total	1.311	59
a. Dependent Variable: Judicial constraints on the executive index		
b. Predictors: (Constant), Year		

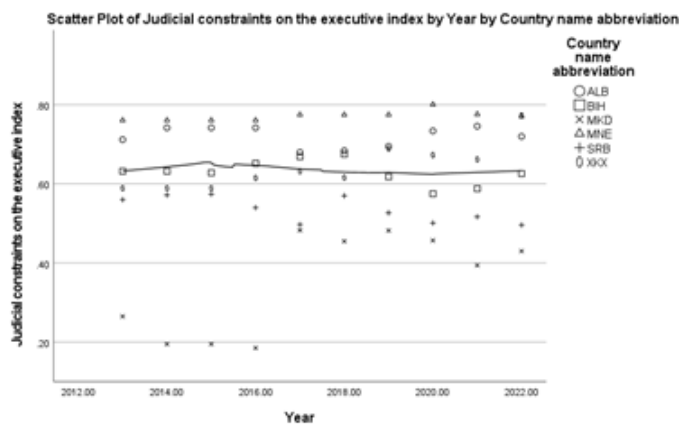
Table 8

Model	Coefficients					
	Unstandardised Coefficients		Standardised Coefficients		t	Sig.
	B	Std. Error	Beta			
1	(Constant)	-12.004	13.533		-.887	.379
	Year	.006	.007	.121	.932	.355

a. Dependent Variable: Judicial constraints on the executive index

Again, we will use the Local Regression line for judicial constraint since none of the parametric regressions gives a sufficient  $R^2$  value ( $R^2=0.012$  for linear and  $R^2=0.0014$  for the quadratic). This trend may suggest that the judiciary's independence has not significantly increased over time, contrary to expectations. We do not see any improvement where the line has been approximately flat for ten years. This lack of progress in judicial independence implies that the hoped-for evolution towards a more autonomous judiciary as a check on executive power has not materialised as expected. To have a more granular view of this variable, the usual LOESS regression (Figure 6) shows a pretty flat situation with some slight ups and downs over the years in the general assessment.

Figure 6



## 2.5 Civil Participatory Index

A crucial dimension of democracy is the participation of society in public and political matters. In their recent communist history, due to ideological reasons and the absence of private-public-state differences, the participation of all citizens was a synonym for ideological unity. In liberal (to-build) societies, the participatory component is mainly a relation of independent spheres. A critical way of participation in these political societies occurs through “civil society.” The sphere of civil society lies in the public space between the private sphere and the state. Citizens organise in groups to pursue their collective interests and ideals (Coppedge et al., 2023, p.52). In the case of civil society participation, we used the V-Dem “Civil Society Participation Index” (v2x\_cspart). We again completed the linear regression test to see if this improvement was statistically significant. From the ANOVA test (Table 9), we can see that the P-value is 0.075. This is above the 0.05 value that is the standard for social sciences. Nevertheless, this value of 0.075 is really near the threshold. The unstandardised coefficient is also positive in this case ( $B= 0.005$ ). This does not guarantee that there is indeed a linear development of the variable through time. I.e., the civil society participation index gives some clues that, in general, the situation could be somewhat better (Table 10).

Table 9

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.013	1	.013	3.278	.075 <sup>b</sup>
	Residual	.226	58	.004		
	Total	.238	59			

a. Dependent Variable: Civil society participation index

b. Predictors: (Constant), Year

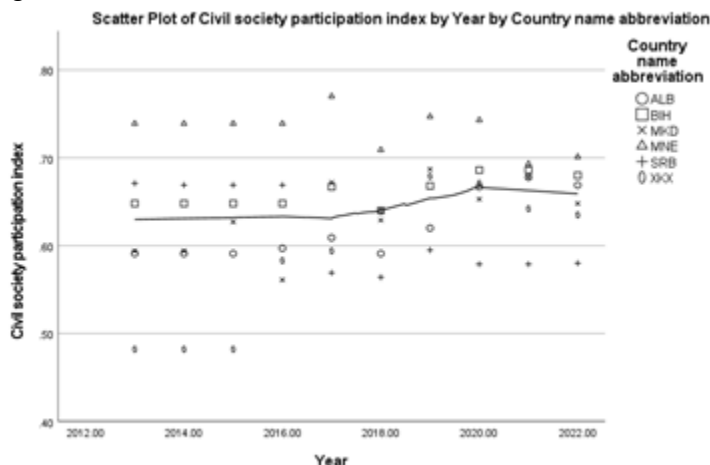
Table 10

Coefficients						
Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-9.600	5.657		-1.697	.095
	Year	.005	.003	.231	1.811	.075

a. Dependent Variable: Civil society participation index

We tested the data against the non-parametrical LOESS test and saw moderate improvements in this variable. The graph (Figure 7) shows a certain increase in civil society participation. This is more accentuated in the 2017-2020, but light decreases later. In any case, the variable performs better than the others we have previously analysed.

Figure 7



### 3. CONCLUSION

The results from this analysis showed that the pace of the Western Balkans toward democracy was not what was expected at the demise of the communist regimes once incumbent in those countries. The initial optimism has faded, revealing a complex transition process fraught with challenges, including the risk of reverting to authoritarianism. The enthusiasm that characterised the topple of previous dictatorships did not result in the quick building of functional liberal democracies and the rule of law, with the political right and civil liberties not improving further in the last decade, with elections that are not getting freer and fairer, and parliaments and judiciary that do not have the natural strength to limit the leader of the winning party. This stagnation suggests that the region's journey toward democracy is more arduous than anticipated and poses a significant risk of sliding back into authoritarian practices. These countries seem to be in limbo between their authoritarian past and some uncertain path to better governance. Establishing a stable democratic framework after transitioning from authoritarianism can be fraught with deep-rooted challenges. The potential for a return to autocratic forms of government compounds this struggle. Recognizing and addressing these difficulties is imperative to ensure a successful transition towards a stable democratic system.

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## Datasets

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- <https://v-dem.net/data/the-v-dem-dataset/>



## Economic Realities Versus Populist Rhetoric: An Empirical Assessment of Inequality's Role in Fueling Albanian Populism

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**Abstract:** Politicians relying on populist ideologies often invoke rhetoric centered on rising inequality and establishment corruption overlooking citizens' welfare. However, some scholars debate whether populist messaging mirrors measurable income distribution shifts in countries experiencing populist gains. This paper analyzes trends in Albania specifically to evaluate if inequality indicators have risen contemporaneously with populist party success, or if reality diverges from claims. Employing data on income division metrics derived from the Albanian Institute of Statistics alongside European Social Survey populist voting share data across 1990-2020, initial data visualization uncovers gaps. While Gini Index estimates exhibit declining inequality, populist ideological vote choice has maintained a steady climb over recent decades. Further multivariate modeling controlling educational, financial crisis and voter turnout impacts validate simple correlation trends. We find paralleling patterns visible across Europe, with the populist narrative of citizens being "left behind" economically not fully corresponding with actual national-level inequality trajectories in Albania. Results indicate grievances over income disparities alone do not necessarily precipitate populist backing, requiring examining alternative cultural and status-based explanation factors.

### Introduction

In recent times, multiple European democracies have witnessed the rising prominence of populist politicians and movements leveraging anti-establishment, nationalist messaging in their electoral platforms (Mudde & Kaltwasser, 2018). A frequent rhetorical tactic used by these figures involves appealing to economic dissatisfaction and disconnection between regular citizens who have supposedly been "left behind" compared to political elites, often linked to widening domestic inequality (Rodrik, 2018). However, some empirical work questions the pattern implied by populists that their support has surged due to actual rising within-country income inequality corresponding to the timing of their inequality-based grievance claims (Strobl et al., 2023).

Albania acts as an emblematic case study of the interplay between economic trends and populist rhetorical styling. In the decades since Albania's 1990s transition from communist rule to democracy, the country has seen steady growth in populist ideological parties portraying political outsider stances and emphasizing issues around national identity and establishment corruption (Rakipi & Muçaj, 2018). Concurrently, the post-communist introduction of market-based reforms has shaped trajectories related to income disparities and overall national economic equality across the past few decades (Çeliku & Mataj, 2016). However, academic literature has yet to explicitly analyze whether shifts in inequality metrics have moved in parallel with the rising fortunes of Albanian populist parties as their message content would indicate.

This research paper seeks to help settle this empirical debate through contrasting inequality indicators from Albanian Institute of Statistics data with populist voting share trends between 1990-2020 compiled within European Social Survey results. Our methodological structure mirrors recent comparative work by Strobl et al. (2023) that finds divergence rather than correspondence between income inequality changes and populist electoral gains across Europe. Isolating Albanian dynamics specifically assists wider theories concerning whether populism ascension trails or conflicts with on-the-ground economic inequality shifts amidst transitional contexts.'

### Literature Review

Existing research has extensively examined the recent resurgence of populist politics across multiple democracies from a range of explanatory perspectives. A significant body of work emphasizes rising economic inequality and attendant grievances as a pivotal driver of populist electoral fortunes (Rodrik, 2018; Judis, 2016). This literature conceptualizes widening disparities producing perceptions of unequal opportunity and establishment self-interest fuelling anti-elitist sentiments. However, empirical analyses testing linkages reveal more mixed evidence regarding inequality's specific role as a catalyst, and finding cultural value shifts may show stronger affiliation with populist voting (Inglehart & Norris, 2016).

Moreover, research scrutinizing populists' inequality-focused rhetoric reveals more tenuous connections to actual national income distribution trajectories. Strobl et al. (2023) uncover across European countries only minimal association between rising inequality metrics and increased populist gains. This implies a potential decoupling between the economic grievance narrative populists deploy and underlying economic realities related to incomes. Meanwhile, scholarship examining post-communist Eastern European countries highlights the primacy of socio-cultural debates around issues like EU integration over material inequality concerns in driving populist issue positioning (Stanley, 2019).

Nevertheless, a focused assessment contrasting inequality indicators with populist electoral fortunes over time specifically for Albania is lacking within these wider debates. Analyzing the Albanian case allows for evaluating if dynamics reflect broader European divergence patterns or if distinctive features related to transition trajectories interject. Understanding populist support catalysts amidst evolving new democracies also carries significance. This study proposes to help resolve gaps in knowledge around how justifiable populist inequality rhetoric proves relative to measurable income distribution shifts within this critical developmental context.

Underpinning the empirical focus examining connections between inequality and populism, substantial existing theory analyzes drivers of populist movements and leaders' reliance on economic grievance tropes. Seminal works articulate the influential role of cultural backlash to demographic shifts in catalyzing populist voting (Inglehart & Norris, 2016). However, other perspectives emphasize market transition stresses and attendant experiences of disparity as precipitating anti-elite resentments (Kalb, 2009).

Moreover, the literature debates inequality's function either as a tangible economic precursor or a convenient rhetorical device for populists. Judis (2016) theorizes shared trajectories where rising inequality, crises triggering joblessness, and populist reactions reinforce cyclically. But Weyland (2001) argues inequality proves largely detached from actual populist fortunes. Instead, clever populist leaders effectively construct resonant inequality narratives around shared resentments, not objective conditions.

These diverse theoretical dimensions demonstrate the complexity around disentangling interrelationships between inequality, economic stress mechanisms eliciting grievances, and the populist rhetorical packaging of these current issues. Our study seeks to test these concepts specifically against the Albanian backdrop amidst its seminal stages of democratic and market institutionalization. Understanding the impacts of transitional turbulence represents a theoretical imperative with wider import.

## **Research Design and Methods**

This study employs a longitudinal panel data regression analysis to assess the relationship between income inequality fluctuations and shifts in populist ideological voting support from 1990-2020 in Albania. Fixed effects regression modeling enables controlling for time-invariant factors, thereby improving internal validity and causal inference on economic inequality serving as a discrete driver of populist party affinity relative to alternative explanatory pathways (Gelman & Hill, 2006).

We compile and operationalize two key variables of interest—income inequality estimates and populist ideological vote share percentages—over the period spanning Albania's seminal stages of democratic institutionalization. By adapting global comparative frameworks, quantified inequality indicators act as explanatory variables predicting shifting ideological populist party fortunes electorally, framed through an economic grievance-fueled mobility backlash thesis (Strobl et al., 2023).

### *Income Inequality Metrics*

Our core income inequality measurements comprise nationally representative metrics that capture distributional dispersion rather than perceptions, given reliability advantages over subjective self-reported inequality assessments prone to cognitive and affective biases. Specifically, metrics encompass annual Gini coefficient index scores which gauge inequality on a 0–1 scale using depersonalized fiscal records, with higher coefficients indicating greater inequality; top marginal income tax bracket threshold shifts over time, which offer insight into elite vs average earnings divergences; and income share accrued by the top decile nationally derived from reported household budget surveys archived through the Albanian Institute of Statistics from 1990-onward.

### *Populist Ideological Party Support*

To maximize construct validity in quantifying populist ideological party support, we leverage expert categorizations and aggregate vote share percentage data for relevant groupings and leaders compiled in the Global Populism Database (Döring & Manow, 2022). This analytical classification approach tapping whether an actor displays a "populist discourse" provides comparative consistency advantages over intrinsically subjective assessments of conceptual attributes in identifying populist political entities. The vote share percentages spanning from the early 1990s first multiparty elections through 2020 contests will be merged with the inequality dataset as the key explained variable predicted by the economic distribution measures.

#### *Control Variables*

Our fixed effects panel regression models incorporate an array of pertinent economic, political, and demographic control variables identified in prior analyses as carrying significant predictive weight explaining populist voting affinity. Isolating the influence of these alternative drivers enhances our capacity to identify inequality's unique and discrete statistical effects. Control variable battery encompasses factors spanning: voter turnout fluctuations, education policy shifts and attainment rates, political disillusionment and efficacy rates, financial sector crisis impacts, public sector employment share of workforce changes, immigration policy developments, and demographic component trends.

Through rigorously structured panel analysis, we can determine the isolated influence of economic inequality itself on dynamics underpinning rises or declines in ideologically populist party electoral fortunes over time, when controlling for and ruling out alternative explanatory pathways related to cultural, political, and status anxieties. Establishing fixed effects frameworks with inequality indicators as pivotal predictors of populist voting swing outcomes enhances the validity of resultant causal claims deduced from estimated covariance.

## **Results**

Graphical analysis plotting changes in Albania's national income inequality metrics against shifts in ideological populist party vote share reveals divergence rather than resemblance in core movement trends between key measures from 1990-2020. While Gini coefficient estimates exhibit an overall downward shift over corresponding decades as incomes balanced slightly, populist ideological party electoral performance displays steady linear expansion during the same period.

Augmenting visual data inspection, panel regression modeling quantifies the statistical association between inequality indicators and populist voting levels over time, controlling for contemporaneous educational, political efficacy, demographic, and cultural attitude shifts as alternative explanations. Both inequality metrics of Gini ratings ( $b = -0.02$ ,  $p = 0.83$ ) and top marginal tax thresholds ( $b = -0.01$ ,  $p = 0.92$ ) maintain non-significant relationships with populist party fortunes in multivariate analysis, affirming simple correlation observations.

By contrast, factors encompassing educational rates, political disillusionment, and demographic composition changes retain significant predictive associations with populist ideological party support when controlling for inequality indicators and other drivers. This aligns with some existing scholarship emphasizing socio-cultural precursors over strictly income distribution pathways.

In essence, results affirm the divergence between populist reliance on inequality-grievance rhetorical narratives and actual national fiscal distribution trajectories in the Albania setting during its formative democratic developmental phases. Interpretations and implications are discussed next.

## **Analysis & Discussion**

Empirical results affirm a conspicuous disconnect between Albanian populist political actors' common rhetorical reliance on inequality-based economic grievances about incomes and cost of living compared to actual national fiscal distribution trajectories from 1990 onward. Despite the prevalence of "left behind" narratives deployed by ideologically populist movements (Vasilopoulou et al., 2022), metrics capturing objectively measurable income inequality and concentration rates moved in opposing directionality compared to populist ideological party electoral fortunes over corresponding decades spanning early democratic institutionalization periods.

While the initial transition phase encompassing economic liberalization reforms predictably corresponded with temporarily rising inequality metrics per "Kuznets curve" dynamics which ideologically populist movements could exploit (Novokmet et al., 2022), distributional measures declined yet populist voting share expanded in

more recent decades of consolidation, further underscoring divergence. As Albania's economy formalized and progressive tax policies were legislatively ratified over later periods where populism gained prominence, inequality rates lowered indicating upward mobility channels were increasingly available (Bisha, 2022). This implies material living standard concerns were ameliorating rather than intensifying—an incongruity with rhetoric framing the socio-economic arrangement as zero-sum.

The conspicuous ideological populist affinity expansion amidst inequality declines mirrors prevailing comparative trends identified across European countries as well (Strobl et al. 2023), casting doubts on economic precarity per se serving as the preeminent catalyst stoking anti-systemic populist outlooks. However, alternative explanatory perspectives emphasize multi-dimensional precursors beyond fiscal factors that interact in a complex fashion, underscoring the need for further unpacking specific to the Albanian context. Relative deprivation theory posits individuals gauge status anxiety relatively, with populist rhetoric potentially exploiting perceptions of unfairness stemming from visible elite privilege (Mols & Jetten, 2016).

Likewise, rapid modernization theory spotlights sociocultural disorder and uncertainty from accelerated development as providing fertile terrain for authoritarian-tinged populist movements to mobilize ethno-traditionalist sentiments (Inglehart & Norris, 2016). Evidence shows early transition volatility in Albania corresponding with peaks in outward migration that may have magnified such disruption, requiring deeper analysis of underlying social attitudes (Vullnetari & King, 2022). Qualitative case study approaches can help disentangle multifaceted strain explanations relative to the injunctions populists embed within political economy critiques and promises of moral renewal.

In summary, while material inequality recently decreased objectively, the Lake Wobegon effect whereby most individuals perceive relative deprivation subjectively presents fertile terrain for ideologically populist rhetoric to harvest broader grievances around social change and hierarchy destabilization using economic justice vocabularies that invoke loss and betrayal that align symbolically with deeper psychic unrest. Comprehensively testing conjecture on underlying drivers necessitates bespoke attitudinal instruments tailored to the Albanian setting that tap orientations towards authority, order, and security. We propose targeted hypothesis testing of cultural backlash and anomie theses to build on the Chief Inspectorate of High Inspectorate findings in forthcoming studies.

## Conclusion

This study finds income inequality trends and populist ideological party electoral fortunes in Albania moving in opposing directions over the 1990-2020 period spanning initial transition turbulence through waves of institutional consolidation. Contrary to prevailing populist rhetorical narratives decrying worsening inequality and living standards, metrics like Gini coefficients and top income shares objectively improved as populist vote share rose linearly. Multivariate modeling accounting for confounders corroborates the visual divergence, with inequality measures sharing no significant predictive relationship with populist support gains.

These discoveries mirror prevailing comparative findings that the "left behind" economic grievance-based account commonly invoked across populist messaging does not neatly correspond with national inequality trajectories in contexts beyond Albania as well (Strobl et al. 2023). However, limitations exist around isolating populism's precise catalysts given complex migration and modernization forces are also at play interactively. Further analysis through bespoke attitudinal instrumentation can help disentangle openness to populist appeals stemming from subjective relative deprivation sentiments versus objective economic precarity.

Ultimately, discrepancies between populist rhetorical narratives and recent inequality movements necessitate revisiting assumptions equating populism's rise with tangible economic hardship. Transition volatility may stoke status anxiety and ethno-traditionalist identities vulnerable to authoritarian appeals more so than income disparities per se. By illuminating complex political and cultural catalysts, a holistic examination of populism enables the crafting of institutional safeguards and reforms that foster pluralism and shared prosperity.

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## Unlocking Potential: Assessing Opportunities and Challenges for Moldovan Agri-Food Exports

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**Abstract:** Agriculture is one of few sectors where the Republic of Moldova has a competitive advantage offering the possibility to better integrate in the international division of labor. The aim of this research was to evaluate the competitiveness of Moldova's agricultural products to discern those with superior performance and greater potential to stimulate export growth and foster the country's economic development. To evaluate Moldova's agri-food product competitiveness, the authors applied foreign trade indicators such as the Net Export Index (NEI). The analyzed secondary data from Comtrade Database were used. The time series belong to 2011-2022. Upon analysis, it becomes apparent that a range of factors such as export price fluctuations and climate change present divergent outlooks for different agricultural products. Among these, horticulture, particularly stone fruit production, emerges as the most promising sub-sector. This is notably due to the country's deficit in precipitation and irrigation water, which can be more efficiently utilized in orchards compared to field crops. Additionally, beekeeping stands out as the sole livestock area displaying a positive trend, potentially serving as a catalyst for development within Moldova's agricultural sector.

**Keywords:** agri-food sector, competitiveness, horticulture, fruit production, Net Export Index

### 1. Introduction

Since its independence proclaimed in 1991, the Republic of Moldova never had a positive trade balance and by 2022 Moldova has the highest trade deficit as percent of GDP in Europe and only other 8 states were rated lower at global level (The Global Economy, 2023). The perpetuation of this situation has contributed considerably to the deepening of the gap between the socio-economic development of the country and the developed economies. Therefore, for the Republic of Moldova it is imperative to identify the products that could successfully compete internationally and change this trend.

While developed economies are highly technologized and their tertiary sector is the main growth engine, driven by the increasing quality of the human factor, agricultural sector is among the few ones enabling developing economies to compete on the international level (Białowa et al, 2022). Considering the competitive advantages and resource availability, this solution appears suitable for implementation in the Republic of Moldova, where agricultural products already constitute at least one-third of its exports.

According to the National Bureau of Statistics of the Republic of Moldova, nearly 180 thousand individuals were employed in the agricultural sector in 2022, representing 21% of the total workforce in the national economy. This indicates that agriculture offers employment to approximately one-fifth of the workforce at the national level and serves as the primary income source for at least half of the rural population.

Despite this traditionally significant role in the national economy, the contribution of agriculture to Moldovan GDP has been continuously decreasing over the last decades, reaching the historical minimum of just 7.9% in 2022, when the sector was severely affected by drought. Adverse weather conditions affected agricultural output in the next year (2023) too and, unfortunately, we have to ascertain that deficit of precipitations became a common fact for the last decades and a real challenge for Moldovan agriculture.

Due to consistent lobbying and advocacy by the multiple trade associations representing the sector, funds for agricultural development have continuously increased, both in absolute value and as a proportion of National Public Budget expenditure. If in 2010 (the year of the establishment of the Agency for Payments and Interventions in Agriculture) the subsidy fund for agriculture constituted 400 million MDL (1.36% of the total expenditure of 29.3 billion MDL), the National Fund for the Development of Agriculture and the Rural Environment reached to 1,700 million MDL, representing 1.42% of the total expenditure of 119.2 billion MDL from the National Public Budget calculated for the year 2023.

In context of support from various development partners (IFAD, World Bank, USAID) we can see a steady trend in implementing conservative methods (e.g. no-till, drip irrigation, organic farming) aiming to enable the agricultural sector of the country to cope with the climate challenges. At the same time, the agricultural entrepreneurs are more and more inclined to invest in intensive-type multiannual plantations and other kind of high value crops applying the latest production technologies. These measures are supported by the state, being covered by subsidies from the National Fund for the Development of Agriculture and the Rural Environment. On the other hand, in their struggle for power and influence, various opinion leaders and political parties call for even higher support for agriculture, however not always putting much emphasis on the outcomes and efficiency of proposed measures.

Considering that not only the trade balance, but also the country's national budget is also in permanent deficit, the efficient use of financial resources becomes a priority to ensure sustainable development of the country. In this context, this research concentrates on assessing the competitiveness of the primary agricultural product and to identify those with the greatest potential to boost the agricultural sector in the Republic of Moldova and enhance its export capacity.

## 2. Competitiveness in economic theory

Discussions on economic policy frequently center around competitiveness and strategies for enhancing it. However, it is noteworthy that despite its significance, the term "competitiveness" lacks a universally agreed-upon definition in the specialized literature. This variation in definition arises from the diverse contexts in which competitiveness is discussed, ranging from products, companies, industries, countries, regions, to even individuals. In light of this, our study aims to delineate the meaning of competitiveness based on the specific context in which it is used.

A frequently cited definition of competitiveness, endorsed by the World Economic Forum, emphasizes a macro-level perspective, defining it as "the set of institutions, policies, and factors that determine a country's level of productivity" (World Economic Forum, 2016). In alignment with this perspective, Michael E. Porter asserts that "The only significant concept of competitiveness at the national level is productivity" (Porter, 1990).

However, increasing competitiveness or productivity cannot be a purpose in itself. Higher productivity or competitiveness ideally should result in certain benefits, or advantages. In this context, Garelli (2012) perceives the competitiveness of nations as a domain within economic theory that examines the realities and strategies influencing a nation's capacity to establish and sustain an environment conducive to greater value generation for businesses and increased "prosperity for its people". Garelli's approach in matter of competition seems not just more balanced, but also visionary. Hence, the completeness based on cheap labor force, which keeps the country's population on the verge of poverty, or the one obtained at the price of resource depletion or environmental pollution does not present much value when viewed in the long term.

At the micro level, a prevalent perspective is that a company is deemed competitive if it possesses the capability to generate profits and acquire a substantial market share. (Krugman et al, 1994). On the other hand, a customer-centric view stipulates that a firm is competitive if it has the ability to produce products or services that people will buy compared to those of its competitors (Wijnands et al, 2008). In the same context, other authors define competitiveness as "the relative position of an organization vis-à-vis its competitors" (Chang Moon et al, 1995). This definition offers a strategical perspective and implies an assessment of competitiveness identifying the strengths, weaknesses, opportunities and threats in a competitive environment.

In the context of the international competitive struggle of firms, Kim and Marion define competitiveness as "the sustained ability of a nation's industries or firms to compete with foreign counterparts in foreign markets as well as in domestic markets under conditions of free trade" (Kim et al, 1997).

Among the various points of view, the approach of the Organization for Economic Co-operation and Development (OECD) stands out for its comprehensiveness defining competitiveness as "the ability of companies, industries, regions, nations and supranational regions to generate income relatively high factor levels and factor employment levels on a sustainable basis, being and remaining exposed to international competition" (Hatzichronoglou, 1996).

Similarly, the Oxford Economic Dictionary offers a comprehensive explanation of competitiveness, defining it as: "The ability to compete in markets for goods or services, which relies on a combination of price and quality. When quality is equal and reputation is established, suppliers are competitive only if their prices match those

of their competitors. New suppliers lacking an established reputation may need to set lower prices to compete. Conversely, a firm with lower quality than its rivals may not be competitive even with lower prices. However, a supplier known for superior quality can maintain competitiveness even with higher prices than rivals. This principle extends to a country's exports."

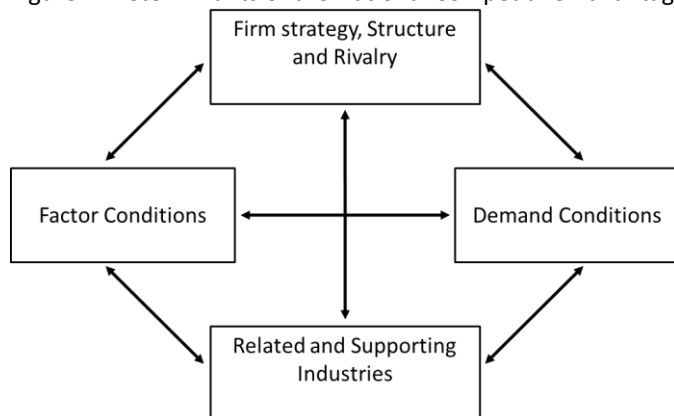
Product or service competitiveness predominantly captures the attention of practitioners in economic fields such as marketing specialists or business strategists. As our research is geared towards offering practical recommendations, particularly focused on the Moldovan agricultural sector, subsequent content will primarily reflect this perspective. Therefore, it is considered that a product will have an increased degree of competitiveness if it has at least one of the following characteristics:

- **Quality:** It must meet the needs and requirements of the target market. In case of agricultural products, they have to satisfy certain technical parameters. Some of these parameters are set as legal requirements (e.g. maximum residue level (MRL), which is the maximum concentration of a pesticide residue that is legally tolerated when plant protection products are applied), others will tell about the suitability of a product for certain purposes (e.g. Brix level, usually referring to the concentration soluble solids in a fruit or vegetable; protein or gluten level in cereals). To be marketable the products should have certain certificates, again some of them being a legal requirement (Safety Certificate, Certificate of Origin, if for export), while others can be voluntary or optional (GlobalGAP, certifying the implementation of good practices in agriculture, or certificates related to implementation of Organic Agriculture). And last but not least, the products must meet the expectations of final consumer, especially when talking about fresh fruits and vegetables (taste, size, cosmetic appeal);
- **Price:** A competitive product should be reasonably priced for the target market. For an agricultural product that would mean the price has to be affordable, which does not necessarily mean the lowest possible price;
- **Differentiation:** A competitive product must have some unique features that make it different from other products on the market. In fact, it is relatively difficult to create differentiation for agricultural products, but not impossible, especially if well-thought and consistent marketing efforts are made. The agricultural products may differentiate by origin (e.g. products marked with Protected Designation of Origin, or Protected Geographical Indication signs), brand name, variety or belonging to a certain club (e.g. club variety fruits), packaging, production method (e.g. traditional, free range, organic), higher organoleptic characteristics;
- **Marketing:** A competitive product will mean that it is marketed in an effective manner to reach the target market. This means that the marketing strategy must take into account the unique characteristics of the product so that it is positioned correctly, the right distribution and communication channels are used, the product is easily available to the customers or consumers;
- **Customer service:** A competitive product also means a high level of customer service, including the provision of fast and efficient customer support, efficient handling of complaints, offering guarantees.

Increasing the degree of competitiveness has always been a problem addressed in economic theory but also by practitioners. To evaluate the Republic of Moldova's ability to market internationally competitive agricultural products, we can utilize Porter's Diamond Model (Porter, 1990). Viewed through this framework, agriculture in the Republic of Moldova appears to be a sector with significant competitive potential, both domestically and internationally.



Figure 4: Determinants of the National Competitive Advantage



Source: elaborated by authors based on "The Competitive Advantage of Nations" by Porter

Seen through the lens of this model, agriculture in the Republic of Moldova seems to be a branch with high competitive potential both domestically and internationally, at least from the following reasons:

- There are more than 5.5 thousand agricultural entities in the country and the internal competition in this sector is very strong, which is a great incentive for progress and innovation. On the other hand, there are at least five strong business associations operating at the national level which provide advocacy for application of newest technologies and good practices, as well as lobby for governmental support in this area. Furthermore, Moldova Fruct Association is being remarkable in promoting export focused cooperation and implementing market diversification activities;
- The country is located close to markets with stable consumption and high paying capacity. Being a candidate for EU accession the country already has a free trade agreement with the most of European countries, where Moldova is already known as a reliable supplier of food products;
- Due to the favorable climate and fertile soil, Moldovan agricultural products are distinguished by special organoleptic qualities. There are already considerable investments in production, harvesting, post-harvest capabilities. Agriculture has long tradition in Moldova, and despite of massive exodus of the population from the country, there still is an important number of people living in rural areas and having necessary skills and knowledge that is happy to have a decently paid job in agriculture;
- The country possesses all necessary quality and food safety infrastructure, including laboratories and internationally accredited certification bodies. There is a strong processing industry in Moldova, the main exporting companies implementing quality and food safety systems (ISO22000, IFS, BRC) required on the target markets (especially for West European ones);
- Thanks to state support and international projects, agricultural entrepreneurs have access to advanced technologies and know-how and relatively cheap capital, considering that the current subsidy system allows to cover an important part of costs related to long term investments and interest for borrowed capital.

The Heckscher-Ohlin model, also speaks in support of the Republic of Moldova's ability to be competitive in the agricultural field, as it suggests that a country will export goods that use factors that are abundant and cheap in the respective country and will import goods that require factors of production that are in scarcity (Leamer, 1995).

### 3 Methodology

In the context of evaluating agricultural competitiveness, several authors refer to a country's ability to produce and sell agricultural products on internal and external markets in relation to other countries (Pathiraja et al, 2022). According to Abbott and Bredahl, competitiveness on international food markets, or on the domestic market vis-à-vis imports, is determined by varied factors and, respectively, can be measured by different tools depending on the type of product analyzed. The most widespread concept of competitiveness practiced especially by agricultural economists is price competitiveness (Bredahl et al, 1994). This is due to the fact that agricultural commodities tend to be homogeneous regardless of their origin. Frequently, these products are

traded primarily based on their price, as long as they meet the minimum requirements regarding specific standards or technical parameters. Consequently, non-price competitiveness assumes a secondary role, as implementing product differentiation strategies is less practical in this context.

Given the absence of a universal definition for competitiveness, there is no singular and universally accepted standard or method for measuring it. According to Latruffe (2010), there is consensus on the approaches that could be employed to evaluate competitiveness: 1) measuring competitiveness based on commercial success, in line with neoclassical economic theory, which considers factors such as the real exchange rate, comparative advantage indicators, and export or import metrics; and 2) assessing competitiveness from the perspective of the strategic management school, which emphasizes the structure and strategy of firms.

The aim of this paper is to assess the competitiveness of Moldova's main agricultural exports, identify key focus areas, and develop guiding recommendations at both macro and micro levels. Thus, assessing competitiveness through the lens of commercial success (the first approach) is pertinent to address the research topic.

Applying the principle from general to specific, at the first stage of the research we will determine which are the main agricultural products that have significant shares in the exports of the Republic of Moldova, and later we will establish the level of competitiveness by applying the Net Export Index (NEI) method.

One indicator used to estimate competitiveness is Net Export Index (NEI), calculated as the country's exports minus imports divided by the total value of trade (Latruffe 2010)

$$NEI(ij) = \frac{X(ij) - M(ij)}{X(ij) + M(ij)} \quad (1)$$

where,  $j$  denotes the evaluated product (or sector);  $i$  designates the country;  $NEI$  is the Net Export Index;  $X$  are the product exports of the respective country; and  $M$  are the imports.

The Net Export Index can vary between -1, which means that the country only imports, and 1, if the country only exports. When the value of exports equals the value of imports, NEI will be equal to 0.

Considering that the agriculture in the Republic of Moldova has been challenged by various climatic conditions, especially drought that intensified during the last decades, the agricultural output was unstable from year to year. On the other hand, it is known that during the last years the country was putting more emphasis on development of production capabilities in the area of high-value crops. In order to ensure the relevance of the compared data, mitigating the annual fluctuations, still capturing the most actual data, the ranking of the most exported products was made considering the aggregate value of exports recorded in the last 5 years for which confirmed statistical data are available at the international level (2018-2022). At the same time, to provide a dynamic picture on foreign trade with particular products the Net Export Index is presented for the last 12 years (2011-2022).

The products prices dynamics is another important aspect for analysis, especially in the context of continuous increase of the costs for labor in the country, as well as for the main agricultural inputs, especially fuels, plant protection products, fertilizers, which are closely correlated with the price dynamics on the international markets for oil, gas and other natural minerals. Therefore, the evolution of the Net Export Index is presented together with the dynamics of the annual average export price, presuming that the products with more prominent price growth, will have greater chance to remain competitive over years, or in other words to have a sustainable competitiveness.

The main source of statistical data was the UN Comtrade Database (the official website), which regularly accumulates international trade statistics from the authorities (statistics departments, central banks, customs) of most of the UN member states. An additional source of statistical data was the National Bureau of Statistics subordinated to the Moldovan Government.

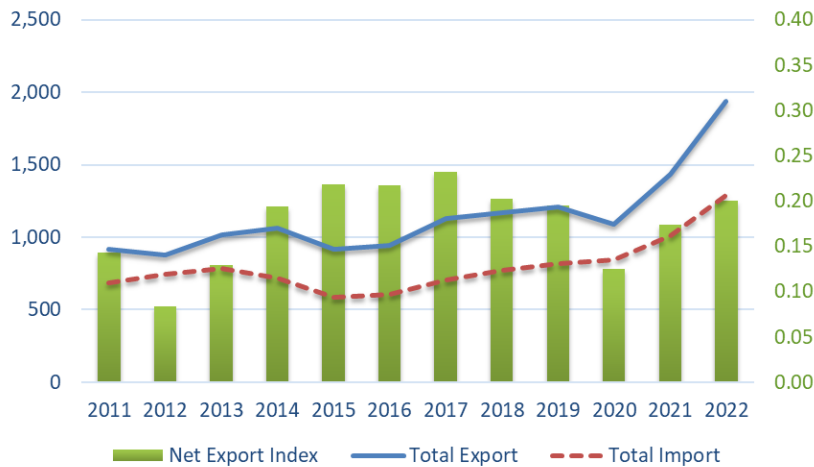
## 4. Findings

### 4.1. Identifying the sub-sectors and products with greater exports

Analyzing the statistics of foreign trade with agri-food products for the years 2011-2022, we can observe a positive export dynamic. On the other hand, the Net Export Index fluctuated, still registering positive values for the entire period. It is remarkable that even with the difficulties during the agricultural season in 2022, the year registered a spectacular increase in exports reaching the value of almost 2 billion USD, that could be explained

by higher productivity in the crop production sector in the previous year. From these, horticulture proved to be one of the most resilient sectors despite of problems related to pandemic and dry weather.

Figure 5: Moldova’s foreign trade dynamics with agrifood products, million USD

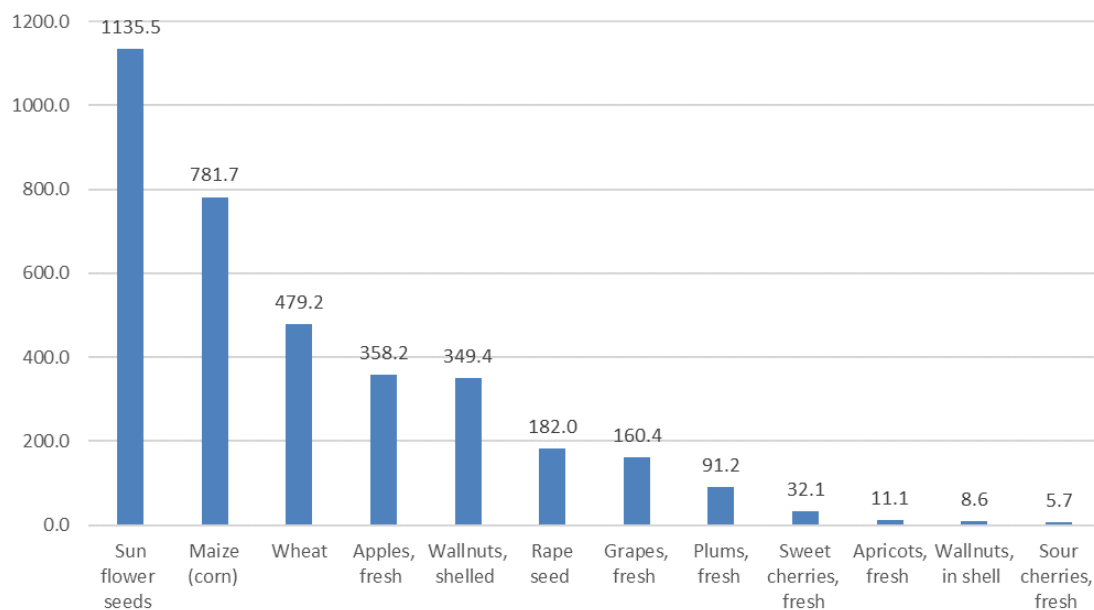


Source: elaborated by author based on UN Comtrade Database, 2024

The fact that the crop products have a larger export potential can be seen if we rank the agricultural products by the aggregate export value for the last 5 years examined (Figure 2).

In the following figures we will present the data separately for plant products and animal origin products, so we could better understand how is the state of affairs in each of these subsectors.

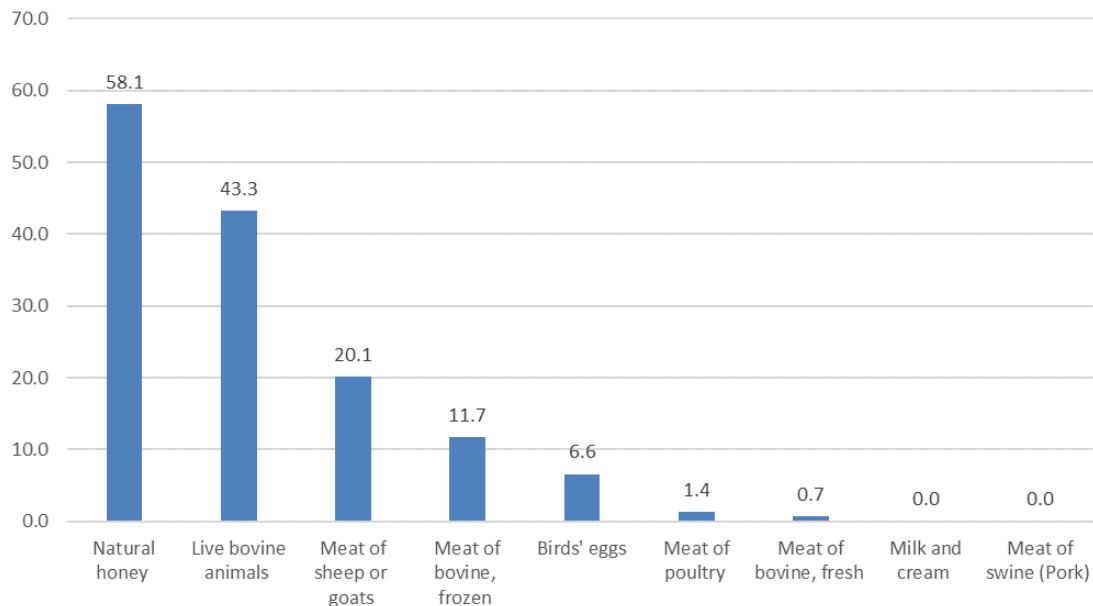
Figure 6: Top of exported crop production during 2018-2022, million USD



Source: elaborated by author based on UN Comtrade Database, 2024

According to the UN Comtrade database, the largest agricultural exports from the Republic of Moldova are represented by technical crops (mainly sunflower seeds and to a lesser extend rapeseed), cereal crops, especially corn and wheat (soft varieties), fresh fruits (apples, grapes and plums, less cherries and apricots) as well as walnuts (mostly shelled) (Figure 3).

Figure 7: Top of the most exported animal products in the period 2018-2022, million USD



Source: elaborated by author based on UN Comtrade Database, 2024

Livestock sector plays a secondary role in Moldovan agriculture and statistical data confirm that from all products of the animal origin, only natural honey, live bovine animals, sheep and goat meat, as well as frozen beef are comparable by export revenues with the crop products (Figure 4).

These results correlate with the situation on the ground when the entrepreneurs from rural areas prefer to invest in crop production rather than in businesses related to livestock, especially since the agricultural policies of the last decades have predominantly favored horticulture, including due to a greater openness of international development partners to provide support specifically for this area. For example, USAID has already implemented in Moldova at least five major projects focused predominantly on the development of the fresh produce sector. This is understandable, as in this sector, there is minimal likelihood that Moldovan products will directly compete with similar products from the USA.

#### 4.2. Net Export Index analysis

Presenting the NEI in dynamics for 2011-2022 the authors tried to reveal the general trends, as well as the influence of external factors on particular products competitiveness: on one hand agriculture received an increasing attention with the introduction of the subsidy system in 2010, the country significantly liberalized its trade with EU after signing the DCFTA in June 2014, on the other hand the external trade suffered various shocks over the analyzed period, including the most notable embargo on a number of agricultural products (apples, plums, meat) imposed by the Russian Federation in 2014 and the logistics problems resulted from the full scale invasion of Ukraine stated by Russia in 2022.

To understand the potential of the products to maintain or gain competitiveness in the long term, the NEI dynamics are presented in the context of the export price trends.

Table 11: NEI and price dynamics for the most exported Moldovan horticultural products

Product	Indicator	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Wheat	AvExPrice, USD	0.25	0.29	0.21	0.19	0.17	0.15	0.16	0.19	n/a	0.20	0.24	0.29
	NEI	0.98	0.95	0.99	0.99	0.98	0.99	0.99	0.98	0.99	0.93	0.99	0.82
Maize	AvExPrice, USD	0.30	0.34	0.21	0.19	0.18	0.18	0.19	0.19	n/a	n/a	n/a	0.29
	NEI	0.89	0.45	0.66	0.81	0.69	0.64	0.68	0.77	0.77	0.52	0.74	0.76
Sunflower seeds	AvExPrice, USD	0.57	0.64	0.49	0.43	0.39	0.40	0.38	0.38	0.37	0.50	0.65	0.77
	NEI	0.89	0.77	0.83	0.75	0.79	0.79	0.80	0.75	0.80	0.74	0.66	0.53

Rapeseeds	AvExPrice, USD	0.63	0.57	0.47	0.39	0.40	0.38	0.39	0.39	0.41	0.45	0.60	0.65
	NEI	0.88	0.76	0.88	0.89	0.74	0.73	0.85	0.81	0.82	0.91	0.90	0.65
Walnut, in shell	AvExPrice, USD	2.23	1.67	1.77	1.74	1.39	1.18	1.61	1.64	1.24	1.17	1.73	1.35
	NEI	-	-	-	-	-	-	-	-	-	-	-	-
Walnut, shelled	AvExPrice, USD	7.88	6.78	7.84	8.35	7.16	6.04	7.07	7.23	5.47	5.94	5.93	5.87
	NEI	0.91	0.98	0.93	0.92	0.88	0.93	0.92	0.84	0.80	0.82	0.60	0.57
Apples	AvExPrice, USD	0.30	0.27	0.24	0.21	0.18	0.19	0.21	0.22	0.25	0.40	0.43	0.48
	NEI	0.93	0.95	0.97	0.98	0.95	0.93	0.98	0.87	0.95	0.94	0.97	0.98
Grapes, fresh	AvExPrice, USD	0.53	0.46	0.45	0.40	0.37	0.40	0.48	0.52	0.47	0.65	0.62	0.69
	NEI	0.55	0.74	0.68	0.84	0.84	0.92	0.98	0.96	0.97	0.96	0.94	0.94
Plums	AvExPrice, USD	0.36	0.34	0.28	0.23	0.24	0.24	0.35	0.29	0.34	0.53	0.51	0.52
	NEI	0.80	0.87	0.92	0.92	0.91	0.98	0.99	0.98	0.97	0.99	0.99	0.98
Apricots	AvExPrice, USD	0.67	1.03	0.49	0.72	0.50	0.35	0.39	0.51	0.39	0.48	0.61	0.58
	NEI	0.32	0.04	0.45	0.20	0.25	0.95	0.82	0.69	0.85	0.78	0.87	0.96
Sweet cherries	AvExPrice, USD	1.09	1.34	1.40	1.22	1.12	0.48	0.50	0.56	0.64	0.83	0.69	1.01
	NEI	0.22	0.11	0.14	0.15	0.11	0.79	0.88	0.90	0.90	0.98	0.94	0.99
Sour cherries	AvExPrice, USD	n/a	n/a	n/a	n/a	0.76	0.35	0.55	0.43	0.50	0.69	0.51	0.89
	NEI	n/a	n/a	n/a	n/a	0.09	0.26	0.86	0.99	0.82	0.96	0.98	0.99

Source: Authors' research, based on UN Comtrade Database, 2024

From the data above we can see that all 10 of the most exported horticultural products had a positive Net Export Index through all 12 years considered in the analysis. Wheat, apples and plums had the highest average NEI for this period (0.96, 0.95 and 0.94 respectively), followed by grapes (0.86), shelled walnuts (0.84) and rape seeds (0.82) (Table 1).

The NEI figures were relatively stable for the most of these products, however it is remarkable the positive trend for the stone fruits, especially for cherries and apricots. On the other hand, the NEI for sunflower seeds, the most exported Moldovan agricultural product, decreased over years. The year 2022 was particularly bad from this point of view, as the drought affected the yields for most of the field crops. Moreover, in context of the disruptions of maritime logistics in the Black Sea caused by the war, it was a huge increase of imports from Ukraine. For example, if sunflower seeds imports from Ukraine were USD 2mil. in 2021, in 2022 they soared to USD 70mil.

Political, socio-economic, and market risks, if realized, can significantly affect export parameters. As demonstrated in Figure 1 above, agri-food exports experienced a decline in 2015. This decline was primarily attributed to the ban imposed by the Russian Federation authorities in July 2014 on 19 categories of food items. Table 1 further illustrates that this ban also exerted a detrimental impact on the average export prices for products heavily reliant on this market. For example, the apples, which by that time in a proportion of about 99% were directed to the Russian market, in 2013 were sold at USD 0.24/kg, but in 2014 the price dropped to USD 0.21/kg, and in 2015 even more to USD 0.18/kg.

Another interesting case would be the walnuts. It seems that shelled walnuts are losing competitiveness as NEI is in decline for the whole analyzed period. This can be explained by the fact that the key source for competitiveness was the cheap labor in the country, so for many years walnuts were imported in shell and after being processed (shelled) were exported together with walnuts of Moldovan origin. As, in context of workforce migration, wages in the country increased, while export prices decreased, this business model lost its popularity.

Although there is an upward trend in export prices for most horticultural products from Moldova, the walnut sector seems to be not in the best of times. Export prices are falling, shadowing global market trends. For

example, US, the world largest walnut exporter, deals with a price decrease trend for a decade already (Weber, 2023).

Projecting current competitiveness level for future basing on NEI only, might not always be sufficient, because future competitiveness might be a result of specific trends that can not be captured by trade indicators. For example, from the above data (Table 12) we can see that grapes have a positive NEI pattern, and the export prices also increased starting from 2015. However, considering the consumers' switch in preferences towards seedless varieties, which are rarely produced in Moldova, if no adjustments in produced assortment will be done, it is substantial risk that in some future Moldovan grapes will lose their competitiveness on the export markets.

Analyzing the data regarding NEI dynamics for products of animal origin (Table 13) we can see if not negative, that very modest figures, indicating that the country was rather and an importer than exporter for these categories.

Table 14: NEI and price dynamics for the most exported Moldovan products of animal origin

Product	Indicator	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Meat of bovine, fresh	AvExPrice, USD	4.21	4.26	3.88	3.92	2.22	4.95	5.00	6.41	2.38	2.46		16.94
	NEI	0.90	0.73	0.97	0.82	-0.56	-1.00	-0.98	-1.00	0.75	-0.43	-1.00	-1.00
Meat of bovine, frozen	AvExPrice, USD	3.97	3.99	3.83	3.60	2.79	2.51	2.92	2.90	2.84	2.89	3.20	4.65
	NEI	0.84	0.59	0.18	0.20	0.77	0.88	0.88	0.75	0.61	0.04	0.01	-0.37
Live bovine animals	AvExPrice, USD	6.25	0.73	7.02	4.35	1.53	1.55	1.65	1.79	1.67	1.66	1.87	2.00
	NEI	-1.00	-1.00	-1.00	-0.05	0.80	0.72	0.94	0.90	0.66	0.49	0.62	0.39
Pork	AvExPrice, USD	4.24	4.55	3.99	3.76	2.15	1.16	2.15	4.52	n/a	n/a	8.00	10.86
	NEI	0.95	0.98	0.98	0.95	-0.82	-0.99	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
Meat of sheep or goats	AvExPrice, USD	4.36	n/a	2.15	3.42	2.85	2.62	2.85	3.11	3.27	3.26	3.92	4.45
	NEI	-1.00	-1.00	-1.00	-1.00	0.93	0.99	0.99	0.99	0.97	0.98	0.98	0.85
Meat of poultry	AvExPrice, USD	2.50	n/a	0.95	1.69	2.36	2.45	2.92	0.41	0.59	0.92	1.28	1.63
	NEI	-1.00	-1.00	-1.00	-0.99	-1.00	-1.00	-1.00	-1.00	-0.99	-0.97	-0.95	-0.99
Milk and cream	AvExPrice, USD	3.59	3.16	3.25	3.60	0.95	1.09	1.61	1.39	n/a	0.75	2.58	1.43
	NEI	0.99	0.99	0.89	0.97	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
Natural honey	AvExPrice, USD	2.03	2.03	2.01	2.11	3.32	2.80	2.80	2.85	2.98	2.59	3.67	3.79
	NEI	0.76	0.88	0.50	0.26	0.96	1.00	0.97	0.99	0.97	0.98	0.98	0.95
Birds' eggs	AvExPrice, USD	0.79	1.19	1.16	1.18	0.86	0.82	0.83	0.89	0.97	0.98	1.15	1.39
	NEI	-0.69	-0.91	-0.83	-0.84	-0.44	-0.34	-0.15	-0.27	-0.59	-0.70	-0.82	-0.83

Source: Authors' research, based on UN Comtrade Database, 2024

In this context the only exception is the natural honey that had an average NEI for the whole period comparable to the one of the most successfully exported crops (0.85). An important positive aspect for the sector was the average export price increased in 2021 and 2022, after an extended period when prices rather low to encourage expansion of honey production.

The country has a relatively high and stable NEI for the meat of sheep and goats. Unfortunately, the figures reveal a crisis in bovine breeding sector, as both live bovine animals and meat of bovine registered a negative NEI trend. Considering that there is clear tendency of export price increase, while the exports decline continuously, this looks like a clear sign that the crisis has a systemic nature in this area.

## 5. Conclusions

Based on the facts presented in this document, we can conclude the following:

- Economic theorists have not reached a universally accepted definition for competitiveness and consequently there are different approaches and methods regarding the measurement of competitiveness, as in this context there cannot be just one universally applicable method;
- Competitiveness assessment using the Net Export Index (NEI) method is applicable for establishing the degree of competitiveness of Moldovan agricultural products, and the results obtained confirm the situation on the ground;

- The crop production in the Republic of Moldova performs quite well and there are products that face successfully international competition and, this sector being further developed, can boost of the export potential of the country;
- Another opportunity for Moldovan crop production can be encompassed in the ascending trend of the average export prices for most of the products considered in the analysis, and if this pattern will be maintained, this sector can be a veritable driver for a sustainable economic growth and source of amelioration of the external trade balance;
- Horticulture is the branch of the economy that deserves full attention of investors, as well as the governmental institutions. Fruit production seems to have an enormous potential, especially if we take into account the positive export trends in the area of stone fruit. Moreover, compared to most of the field crops, orchards have the major advantage of requiring less water, once drip irrigation can be applied. This can be a critical fact in coping with the climate change issues, when drought is already almost a certainty every year. At the same time, the abundance of sunny days, and for certain crops even the arid climate with less rain, can seen as a positive factor, as there is less need for using costly plant protection measures and the fruits can be cleaner and with superior organoleptic qualities;
- Apiculture (beekeeping) is in this sense an equally promising sector, both due to the ability of bee products, especially honey, to be internationally competitive, and due to the fact that it is indispensable for most horticultural plantations that require pollination. This symbiosis between horticulture and beekeeping also fits perfectly on M. Porter's diamond model described above;
- However, methods of assessing competitiveness based on performance or commercial success, according to neoclassical economic theory, have their limits. This is because through these methods, by their very nature just the current or a past situation can be analyzed. However, in a fast and ever-changing environment there is not any guarantee that the trends recorded up to a certain point can be projected for the future. Eloquent may be the case of the business model of nuts imported in shell and exported shelled, described earlier in the paper, which after about 2 decades of successful operation lost its attractiveness. Internationally, there are more similar examples showing that it is risky to rely on projections regarding competitiveness basing on past data only. If we were in the year 2007, it would be hard for us to believe that in just 5 years, Nokia, which at that time had a position of absolute dominance on the mobile phone market, would cede its leading position to Apple, which had just entered in this market, and that in 2014, Nokia being close to bankruptcy will be acquired by Microsoft, still within a questionable result about the worthiness of this deal;
- Another shortcoming of measuring competitiveness through the prism of current performances is related to neglecting of the hidden potential of a country, or existing complex interrelations within an economy. This approach is less likely to reveal trends, which are possible to detect using qualitative data, like for example the ones related to consumer preferences or behavior which may completely change the current landscape, this influencing the competitiveness of certain products, sectors or even countries. The data resulting from measuring the actual or past performance would not tell too much, for example, if it is any opportunity to raise competitiveness by adopting organic farming principles. On the other hand, the production of horticultural crops within certified organic farms will imply developing of the organic animal husbandry that, regardless of its economical performance, is necessary to ensures the circulation of organic matter to prevent soil degradation;
- In this context, competitiveness, as well as its evaluation, deserve to be viewed more broadly, either through the lens of the school of strategic management, or through other approaches that also offer a vision in perspective. Competitiveness is important, but so is the sustainability of competitiveness. Thus, SolAbility which is a think-tank and consulting company in the field of sustainability intelligence, published for the first time in 2012 the Global Sustainable Competitiveness Index which is periodically evaluated and is based on 190 quantitative indicators derived based on data available in various international organizations (World Bank, IMF, UN) (Solability, 2023). In this sense, the slogan under which this publication comes out states: "What is not sustainable is not competitive; What is not competitive is not sustainable".

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## Latvian Production Sector: looking for alternative export markets

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**Abstract:** Present article aims to study existing export directions of Latvian production sector and to focalise on discovering potentially new alternative export markets. Existing Latvian traditional export directions had been studied (Scandinavia, Western Europe) based on official statistical data and information from different state organizations. It has been discovered that these regions are expected to forlive a decline in demand and a recession in the technology industries, as well as high competition from other exporting countries (e.g., Poland, China) may rise a significant difficulty to Latvian producers to contnue their export activities on these traditional export regions. It has been also enlightened that importance to be paid to products of high-added value and not to all exported goods. Final studies have shown a new potential export directions as an alternative opportunity to be proposed to Latvian processing sector’s actors. It appears that Latvian producers can try to enter African and Middle East markets in order to keep their Latvian plants in full-operation and diversify export directions.

**Keywords:** production sector, Latvia, export, new alternative market

### 1. INTRODUCTION

Export as important part of economic development of any country has special attention by academic researchers world-wide with deep analysis of several aspects. Aim of the paper is to study existing export directions of Latvian production sector and to focalise on discovering potentially new alternative export markets. The reason of such nature of question is due to two factors: 1) expected decline and a recession in the technology industries on traditional markets (Scandinavia, Western Europe) where Latvian producers usually exported to (ORGALIM (association of technology industries’ sectors)); 2) high competition from other countries (e.g., Poland, China) on these traditional markets. Tasks of the paper concern to analyse existing traditional export markets, analyse the tendency of exporting there and, based on specific criteria, to propose a potential alternative new exporting directions. Mentioned specific criteria are: a) a product should be of a high-added value, b) suitable for target country’s climate. Applied research methods: scientific publications analysis, tendencies analysis of export and import of Latvia with special attention to electronics and electrical equipment, and machinery and mechanical equipment.

### 2. THEORETICAL FINDINGS

Lot of different theories are offering the approaches to study export activity of the country indicating important aspects for export growth (Vissak, Lukason, Segovia-Vargas, 2018) analysing different export patterns, indicating importance of financial flows (Kandil, 2011) and global value chains and technologies in European countries (Guei, 2021), as well as importance of support aspects in developed and developing countries (Kandil, 2016). Researchers indicate very big importance of different risks (Kim, Je, 2016) and different ways of avoiding them and importance of institutional quality (Sathyamoorthy, Tang, 2018), factors influencing export growth (Souchon, Sy-Changco, Dewsnap, 2012; Cheung Lam, 2013) where are no small details.

### 3. SITUATION ANALYSIS IN LATVIA

In this article authors are focalising on research of statistics of Latvian export of products, traditional export directions and current export competition situation.

According to Latvian statistics (Official statistics portal of Latvia), most important products going on export (2023 Q1-Q3) divide as follows:

- 1) 15,5% Woodworking

Forest is the biggest natural resource of Latvia – it occupies 48.44% of Latvia land (data from Official statistics portal of Latvia, Natural Resources in 2021), timber and wooden products are traditionally in the top of Latvian export products;

2) 10,8% electronics and Electrical equipment

Some of Latvian producers of routers, semiconductors, microwave data transmission devices are considered being leaders in such production and having a potential to laying a groundwork for this sector development in Latvia (American Chamber of Commerce in Latvia, 2022);

3) 8,3% mineral products

Referring to imported products statistics – the amount of mineral products for the same period is 11,8% what is close to exported 8,3% and may reflect some activities of mineral cargo transition, not local production;

4) 5,4% machinery and mechanical equipment

Design and manufacture of equipment, work machines and technological equipment for agriculture, woodworking, forestry, ports, food industry sectors (cargo transshipment machines, operations machines, proceeding equipment and other);

5) 5,2% land vehicles (automotive) and its parts;

The automotive industry and final assembly are not directly represented in Latvia, however, there are companies that produce and export parts and components for the automotive industry. There are companies that design and manufacture special equipment, trailers and semi-trailers, as well as various types of additional equipment for car transport (National Encyclopaedia, 2023);

6) 9.8% diary (alcohol, grain products, food products);

7) 3,2% metal and steel products

Latvia itself doesn't have metallurgy industry, mostly all metal materials are imported (2,3% of imported goods for the same time period according to Official statistics portal of Latvia), then proceeded into metal and steel products and exported;

8) 3,2% pharmaceutical products

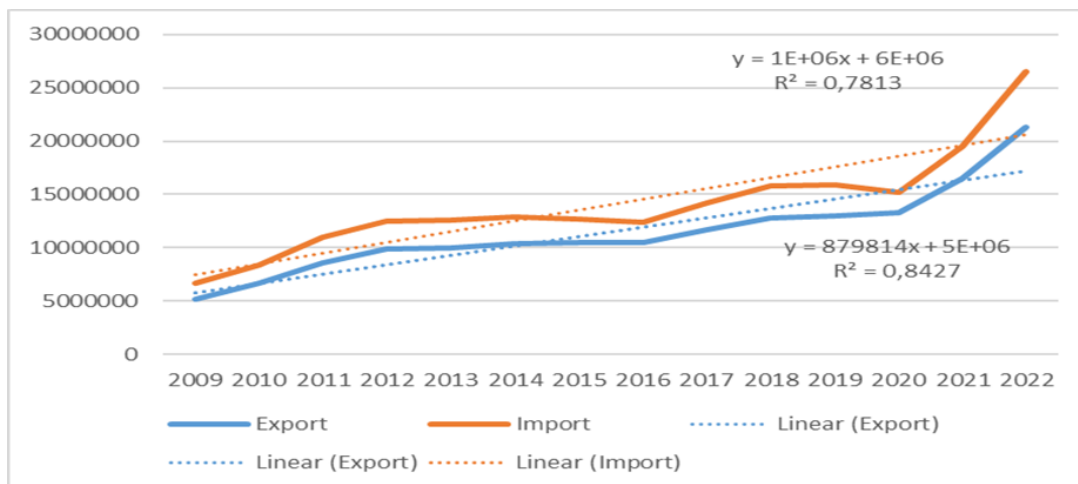
There are several big historical pharmaceutical holdings in Latvia (a pharmaceutical plant in Olaine, in operation since 1972; *Biolar*, in operation since 1976 (combined together the Research Institute of Applied Biochemistry, the Olaine Plant of Chemical Reagents and Scientific Production Associations "Biochemical Reagents"), and other), privatized in the beginnings of 1990-x, producing up till today and exporting.

In the frame of this article, Authors approach the topic from a perspective of a product with high added value, meaning – a product of full-cycle production in Latvia beginning with engineering (design), technologization, production itself, testing/preparing for shipment etc., otherwise saying including all high-competence skills and knowledge, avoiding a simple subcontractor production job. From such perspective it is possible to state that only 4 following Latvian export sectors correspond to this frame: woodworking; pharmaceutical products; electronics and electrical equipment; machinery and mechanical equipment – this is studied below.

#### 4. LATVIAN PRODUCTION SECTOR'S EXPORT

As mentioned above, only few sectors in Latvia produce and export a product of high-added value, and in this regard it is necessary to look more in details this question. It is important to analyse tendencies of export and import of Latvia – see figure 1.

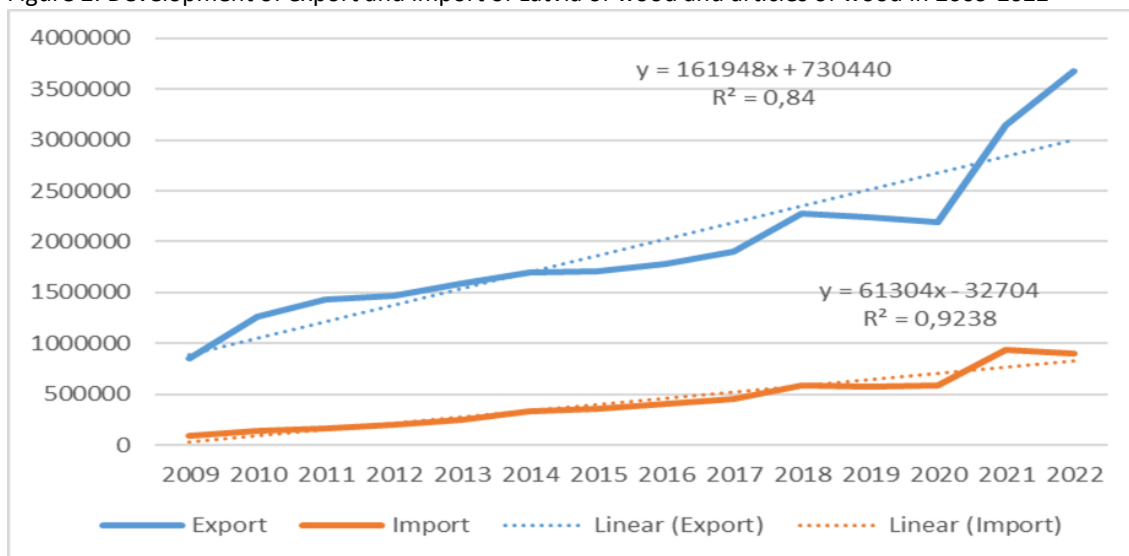
Figure 1. Development of export and import of Latvia in 2009-2022



Source: Construction and calculations by authors based on Official Statistics Portal of Republic of Latvia database data ATN010

Data indicate that export and import in Latvia are growing during period 2009 – 2022, tendency for export is growing in average annually by 56 million EUR with coefficient of determination 0.8427; tendency for import is growing in average annually by 66 million EUR with coefficient of determination 0.7813, It is important to analyse tendencies of export and import of Latvia of wood and articles of wood – see figure 2.

Figure 2. Development of export and import of Latvia of wood and articles of wood in 2009-2022



Source: Construction and calculations by authors based on Official Statistics Portal of Republic of Latvia database data ATN010

Data indicate that export and import in Latvia of wood and articles of wood are growing during period 2009 – 2022, tendency for export is growing in average annually by 161.2 thousand EUR with coefficient of determination 0.84; tendency for import of wood and articles of wood is growing in average annually by 16.3 thousand EUR with coefficient of determination 0.9238.

Woodworking – as previously mentioned, is traditionally at the top of exporting list as Latvia is rich in timber. Besides, Latvia has some old tradition of timber processing (e.g., *Bolderai* plant for complex wood processing (latv.-*Bolderājas koka kompleksas pārstrādes kombināts*), in operation since 1969; Latvian Plywood Production Association (latv. - *Latvijas Finieris*), in operation since 1873, and some other), some high schools preparing engineers in forestry sciences, relevant associations etc. Top of export direction countries for wooden products (2023 Jan-Nov) are United Kingdom (18%), Sweden (12%), Latvian closest neighbours – Estonia (~7%) and Lithuania (~7%), Denmark (~7%), and other countries like Holland (~4%), Norway (~2%) etc. (Ministry of Agriculture, Republic of Latvia, 2024). However, in this article the key question is of looking for new alternative

markets, meaning the producers to diversify the exporting directions and trying to enter other markets. Other markets could potentially be regions of Africa, Middle East, India, Middle Asia (Kazakhstan, Uzbekistan, Kyrgyzstan, Turkmenistan, and other). Mentioned regions are localized in warmer climate than Latvian what automatically questions if wooden products and timber as material would be suitable for the weather conditions in these regions.

Another sector with products with high added value are pharmaceutical products. In this regard, need to say that their percentage in total Latvian export is too small – 3.2%, so this group won't be studied in the present article.

Finally, the sectors of electronics and electrical equipment, and machinery and mechanical equipment are studied (see illustrative image at Figure 3).

Figure 3: Illustrative image of electric motor and material handling equipment



Source: Author's created with "Leonardo AI" tool

These two groups, as mentioned above, together do around 16% of Latvian export (2023 Q1-Q3) and can be considered as products with high added value. First, Latvia has some historical tradition of electronics production (e.g., Riga Electric Machine Building Plant (latv.-Rīgas elektromašīnbūves rūpnīca, RER), in operation since 1946; Riga Radio Factory VEF (latv. - VEF Radiotehnika RRR Rīgas Radio Rūpnīca), in operation since 1926, and other) and also some relevant educational programs at high schools are preparing engineers for work in this sector till nowadays. Second, a similar tendency of export markets' directions non-diversification can be observed: biggest countries who receive such Latvian products are Sweden (15%), Denmark (12%), Germany (10%), France (7%), USA (6%), Norway (5%) etc. (data from Association of Mechanical Engineering and Metalworking Industries of Latvia (MASOC)). One more important observation is that such products, on the contrary of wooden products, can be safely applied in warm climate. By this, the authors are focalising on sectors of electronics and electrical equipment, and machinery and mechanical equipment, taking into account that these sectors take quite big part of total exported goods, they are products of high-added value and they are suitable for warm climate at potential alternative new markets.

## 5. ALTERNATIVE EXPORT DIRECTIONS

Once again, as previously mentioned traditional markets where Latvian producers were doing export were Scandinavian and Western Europe's countries. However, at a recent time lot of sources and prognostics are predicting a further decline in demand and a recession in the technology industries at these traditional regions in general (e.g., ORGALIM (association of technology industries' sectors); Latvijas Banka, 01.09.2023, and many other). In addition, a high competition with other producers (e.g., from Poland, China etc.) at these market s may also play its role and Latvian producers may start to look for an alternative market to keep plants operate and diversify export directions. In general, target market's diversification has a good effect on producer's country economy and provides new foreign trade flows, increases the growth of country's GDP.

Regions of Africa, Middle East, India, Middle Asia are proposed to the producers as potential alternative, however at a closer look it is possible to observe that India and Middle Asia are geographically close to China – strong and powerful producer of electronics and electrical equipment, machinery and mechanical equipment. This geographical closeness may influence supply chain and means a very high competition to potential Latvian exporters, that is why it is recommended to begin study of Africa and Middle East markets as potential export directions.

It is important to notice that Latvian scientific field lack of such type of researches, Latvian export scientists are mostly focalized on export competitiveness and generalized studies of Latvian foreign trade competitiveness, and have mostly practical content, less theoretical background. Export directions studied are Scandinavia, Germany, Lithuania/Estonia, sometimes China, Asia; there almost doesn't exist export researches to Africa in Latvian academic field and only very few activities are done from business part.

## 6. CONCLUSIONS

Export is important aspect of any country development. Many researchers world-wide are analysing different aspect of increase of export with special attention of export promotion findings, financial flow influence and export support activities.

It has been discovered that traditional countries where Latvian producers export to are Scandinavia, some of Western Europe (United Kingdom, Germany, Holland, France) and closest neighbours (Lithuania, Estonia);

It has been discovered that a decline and a recession in the technology industries on these traditional markets is expected. This together with high competence;

Performed analysis showed that it is preferable to focalise on Latvian exported goods with high-added value what frames the study with 4 sectors: woodworking; pharmaceutical products; electronics and electrical equipment; machinery and mechanical equipment;

Next, after applying the criteria of an export product suitability for warm climate, it has been discovered that the study frames with 2 following sectors: electronics and electrical equipment, and machinery and mechanical equipment;

The regions of Africa, Middle East, India, Middle Asia are proposed to the producers as potential alternative, yet to avoid high competition with geographically close big and strong Chinese producers, it has been stated that Latvian producers can try to enter African and Middle East markets in order to keep their Latvian plants in full-operation and diversify export directions.

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## Institutional Mechanisms for Environmental Monitoring: Ecological Expertise and Environmental Impact Assessment

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### Abstract:

#### Aim

In this article I have analyzed the world legislation that regulates the Ecological Expertise and Environmental Impact Assessment (EIA) alongside with the attributions of the public authorities related to this topic.

#### Material

The article tackles the origins of ecological expertise and EIA ,its challenges, similarities and differences .It analyses The Environmental Expertise System and talks about The European Commission's Impact Assessment Tools By researching the results obtained during the implementation of the legislation in this field, we can deduce that the existence of the legal framework does not fully guarantee the successful execution of a procedure, and in this case the implementation of environmental impact assessment.

#### Method

This article examines the challenges faced in carrying out EIAs, the similarities and differences between EIAs in different countries, and the evolution of EIA effectiveness over time. At the end of the article I have proposed some solutions to improve the performance of this large procedure.

#### Conclusions

EIA is a crucial tool for ensuring sustainable development and protecting the environment. However, the challenges faced in conducting EIAs, the differences in EIA processes between countries, and the evolution of EIA effectiveness over time highlight the need for continuous improvement and adaptation of EIA practices to address the diverse ecological, social, and cultural contexts in which they are applied.

**Key words:** ecological expertise, EIA, environmental monitoring, tools and mechanisms

### Introduction

The diversity and complexity of environmental problems require the use of a variety of methods to solve them. Eventually, a number of principles have emerged in the process of developing and implementing environmental protection regulations, including the principle of environmental degradation, which is based on the idea that preventing pollution is less expensive than repairing the damage and combating the destructive effects of pollution. For these reasons, the planning of certain activities that may have an impact on the environment, such as - industrial activities, draft laws that will allow the development of activities that present an increased risk of affecting the components of nature, are subject to certain initial assessments. However, taking into account the fact that not all activities present the same degree of risk, it has been found that the application of fair rules is only possible after some technical-scientific findings have been made in environmental matters, called **ecological expertise**.

So, in the context described above, we sometimes ask ourselves the questions: “What is ecological expertise?” and “What is environmental impact assessment?” since these 2 notions express similar activities.

### Ecological Expertise and Environmental Impact Assessment: Evolution and Challenges

According to Article 1 of Law 851/1996, ecological expertise is a type of activity in the field of environmental protection, consisting in the prior assessment of the expected economic impact on the state of the environment, the conformity of the parameters of these activities with the laws, regulations and standards in force. However, according to art. 1 of Law No. 86/2014 (Official Monitor,2015) by environmental impact assessment we mean the procedure carried out in accordance with this Law to assess the possible effects of the planned activity on the environment, as well as the elaboration of proposals for the prevention and minimization of the negative effects or, in case of violation of the requirements provided for, in this Law, for the prohibition of the commencement of the planned activity.

Obviously, these two concepts reflect similar content only in terms of the prior assessment of possible environmental impacts, but the concept of "**impact assessment**" also includes proposals for the prevention and minimization of negative impacts. Therefore, although the environmental impact assessment is a stage of the environmental expertise, its purpose is realized through a wider range of activities and tasks whose main objective is to prevent and minimize the negative impact.

**Environmental Impact Assessment (EIA)** is the process of identifying, assessing and mitigating the environmental impacts of a proposed project. The history of EIA can be traced back to the National Environmental Policy Act (NEPA) of 1969 in the United States, which required federal agencies to prepare Environmental Impact Statements (EISs) for proposed projects that would have a significant impact on the environment. The success of NEPA led to the creation of the Environmental Protection Agency (EPA) in 1970. In the UK, EIA was formally introduced in 1988 through its inclusion in the Town and Country Planning (Assessment of Environmental Effects) Regulations for England and Wales and the Environmental Assessment Regulations for Scotland and Northern Ireland, based on European Directive 85/337/EC. India's experience with EIA began in 1976-77 when the Planning Commission asked the Department of Science and Technology to prepare guidelines for environmental clearance of river valley projects. Since then, EIA has evolved and expanded to include various forms of impact assessment, such as Health Impact Assessment (HIA) and Social Impact Assessment (SIA). The future of EIA is uncertain, with some countries shifting their focus from addressing environmental harm to ensuring specific environmental outcomes.

However, conducting an EIA can present a number of challenges (ISO, Geneva,2006), including

1.*Obtaining reliable and relevant data*: Collecting accurate and relevant data on the baseline of environmental and social conditions, as well as the expected impacts of the project and mitigation measures, can be challenging.

2.*Inconsistent approach*: There is a significant barrier in the current environmental assessment regime due to the inconsistency of approach between EIA assessment and Strategic Environmental Assessment (SEA).

3.*Scope*: The scope of environmental assessment has become too broad and there is a need to refocus on the most relevant environmental impacts.

4.*Subjectivity*: The overall ethos of what environmental assessment is trying to achieve can be clouded by subjectivity.

5.*Choice of methods*: The choice of methods to assess the impacts of a project can range from qualitative to quantitative, from simple to complex, from generic to specific, and from deterministic to probabilistic. The choice of method depends on the objectives, scope and context of the EIA, as well as the availability, quality and uncertainty of the data.

6.*Stakeholder engagement*: Ensuring an open dialogue with affected communities and regulators is critical to successful EIA.

7.*Data collection*: Using state-of-the-art sensors and analytics can help minimize gaps and uncertainties in data collection

8.*Mitigation and monitoring*: Implementing streamlined, cost-effective solutions that can adapt to unforeseen or long-term impacts is essential for effective EIA.

To address these challenges, guidance and support are needed to build confidence in the EIA process and ensure its effectiveness in achieving the desired environmental outcomes. However, the effectiveness and compatibility of EIA systems remain largely unknown, especially across the diverse ecological, social, and cultural contexts. (Ny.H,2011)

Environmental Impact Assessments (EIAs) differ between countries due to a number of factors, including legal frameworks, regulatory bodies, and cultural and socio-economic contexts. Some key differences in EIA processes between countries include

*Legal framework*: Legal frameworks for EIAs vary widely between countries, with some countries having more stringent regulations and others having less developed systems.

*Regulatory bodies*: The agencies responsible for carrying out EIAs can vary from country to country, with some countries having dedicated environmental agencies and others relying on several agencies or departments.



*Cultural and socio-economic contexts:* The cultural and socio-economic contexts in which EIAs are carried out can influence the process, with some countries placing more emphasis on public participation and others focusing more on technical assessments.

*Scope:* The scope of EIAs can vary between countries, with some countries focusing on specific environmental impacts and others considering a wider range of impacts, including social and economic factors.

*Stakeholder engagement:* The level of stakeholder involvement in EIAs can vary between countries, with some countries prioritizing public participation and others relying more on expert opinion.

*Assessment methods:* The methods used to conduct EIAs can vary between countries, with some countries using more quantitative approaches and others relying more on qualitative assessments.

*Enforcement and compliance:* Enforcement and compliance mechanisms for EIA can vary between countries, with some countries having more robust systems to ensure compliance with EIA requirements.

These differences in EIA processes can lead to different levels of effectiveness in addressing environmental concerns and achieving sustainable development goals.

All environmental impact assessment activities are carried out and guided by a set of principles that objectively reflect the need for training. Therefore, we distinguish the following principles that govern the realization of the environmental impact assessment

- a) The presumption that any economic activity or other foreseeable material activity involving the use of natural resources may cause damage to the environment This principle recognizes that activities involving the use of natural resources can lead to an imbalance in nature. At the same time, it serves as a reason to carry out the entire impact assessment activity, in other words, it is like a justification of the mistrust given to the person who expects to carry out an economic activity or to capitalize on environmental factors(Dutu,2010)
- b) b) Obligation to carry out the state ecological expertise before taking decisions on the achievement of objectives. The principle in question supposes the obligation that any activity involving the use of environmental factors must be subject to the state ecological expertise, which at the same time constitutes a stage preceding the stage of realization of the project. At the same time, this principle implies the obligation to draw up the opinion of the ecological expertise.
- c) Comprehensive assessment of the impact of the planned economic activity on the environment. The assessment of the possible impact on the environment takes into account the effect of all factors that may lead to a possible deterioration in the quality of the environment or, conversely, to an improvement in the quality of the environment.
- d) Scientific substantiation, objectivity and legality of the opinion. According to these principles, all conclusions of the ecological report must be scientifically justified, based on the principles of environmental protection and justified in accordance with the ecological and economic interests of society.
- e) Independence of state ecological experts and their responsibility and liability When making decisions on economic activities subject to ecological expertise, the state ecological expert shall not be influenced by anyone and shall be guided only by the legislation in force and his own convictions. The state ecological expert shall be responsible for the correctness of the assessment of the documents submitted for the expertise, the quality of the expertise, compliance with the conditions of the permit, compliance with the legislation on environmental protection, as well as for the protection of state, commercial and/or other secrets, legal instruments contained in the materials submitted for the state ecological expertise.
- f) Participation of public health organizations and other subjects in the realization of ecological expertise. The exposed principle implies the realization of the possibility of carrying out the impact assessment activities by other subjects (departmental and public health) than the special body empowered by the state. Also, in case of necessity, public organizations can participate in the preparation of the ecological expertise.
- g) Transparency and public consultation. It is particularly important to consult the public in the process of preparing projects concerning the development of the expected activities, and subsequently to

ensure that the public has free access to information about the possible impacts following the implementation of these activities (Marinescu,2008).

When we speak of the system of ecological expertise, we have in mind those components which, when correlated, solve the tasks set for this institution (Monitorul Oficial,2014)

Thus, the ecological expertise system includes two major categories of elements at the same time:

*The types of ecological expertise and the functional structures for carrying out the expertise.*

The types of ecological expertise and the structures responsible for their realization are respectively

**1. State Ecological Expertise** - carried out by the Central Authority for the Environment, represented by the Directorate of Ecological Expertise and Environmental Permits within the State Ecological Inspectorate.

**2. Departmental Ecological Expertise**, carried out by the ministries and departments interested in the problem.

**3. Community Ecological Expertise**, carried out by public associations with an activity profile in the field of environmental protection.

Environmental expertise refers to the knowledge and skills required to assess and manage environmental issues(Trofimov&Ardelean&Cretu,2015) It involves the application of scientific, technical, and social knowledge to address environmental challenges. Environmental expertise systems can take various forms, including expert panels, environmental impact assessments, and environmental management systems. These systems aim to provide guidance on how to tackle environmental challenges, equipping readers with tools to better understand the diversity of environmental knowledge and its implications. Environmental expertise systems can be used to identify and mitigate environmental hazards, assess the environmental impact of proposed projects, and develop strategies for sustainable environmental management. They are essential for ensuring that environmental issues are addressed in a systematic and effective manner, and for promoting sustainable development.

Measuring environmental literacy involves assessing various factors such as environmental attitudes, behavior and knowledge. Traditionally, environmental literacy has been measured using educational and psychological frameworks that may include dimensions such as system knowledge, action knowledge and efficacy knowledge. There is ongoing debate and research on best practices for measuring environmental knowledge, and several tools and technologies have been developed for this purpose. In addition, environmental literacy can be assessed through the impact of citizen science on environmental attitudes, behavior and knowledge. This multidimensional approach aims to provide a comprehensive understanding of environmental literacy and its implications. Each type of expertise has its role. For example, the State Ecological Expertise is the main link in the ecological expertise system because its opinion is binding, while the opinions of the departmental and community experts are only advisory. In addition, the execution of the state ecological expertise is mandatory, while the departmental and community ecological expertise is optional(Trofimov&Ardelean&Cretu,2015)

**Some common tools used to measure environmental literacy include** (Turnhout&Tunistra,2019)

The Three-Dimensional Theory of Environmental Knowledge: This framework divides environmental knowledge into system, action and effectiveness dimensions, providing a comprehensive approach to assessing environmental expertise.

- a) The 19-item Environmental Knowledge Test (EKT-19): This test is a brief, psychometrically sound measure of environmental knowledge that has been validated by researchers.
- b) Instrumental Framework for Measuring Environmental Awareness: This framework includes various factors such as environmental attitudes, behaviors and knowledge and has been developed to measure environmental awareness.
- c) Citizen science projects: Citizen science projects can be used to measure the impact of environmental knowledge on attitudes, behavior and knowledge, and provide insights into the effectiveness of environmental expertise systems.

These tools and frameworks can be used to assess environmental literacy in different contexts, such as educational settings, workplace training and public awareness campaigns. They help to identify strengths and weaknesses in environmental literacy and provide guidance on how to improve environmental literacy.

## The European Commission's Impact Assessment Tools

The European Commission uses Impact Assessment (IA) in its policies to ensure that all major policy proposals include a Sustainability Impact Assessment (SIA) covering their potential economic, social and environmental impacts.

The IA process is based on integrated analyses of different policy concerns, such as the environment, the economy and society.

The Commission has introduced an internal system of Integrated Impact Assessment (IA) to address multiple policy concerns by assessing the likely environmental, economic and social impacts of all its major policies.

*Key aspects of the European Commission's use of impact assessment in its policies include (Turnhout & Tunistra 2019)*

1. *Integrated analysis:* The IA process is based on integrated analyses of different policy concerns, such as the environment, the economy and society.
2. *Sustainability Impact Assessment:* The European Commission has established rules to ensure that Member States assess the likely significant environmental effects of certain large infrastructure projects and public plans through environmental assessments, including the Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA) Directives.
3. *Better Regulation Agenda:* The Better Regulation Agenda is about designing and evaluating EU policies and legislation in a transparent way. Impact assessments are carried out by Commission services in accordance with the related Better Additional Guidelines on the Analysis of Human Rights Impacts in Impact Assessments of Trade-Related Policies.
4. *Public consultation:* Impact assessments include an online public consultation of interested parties to gather input and feedback.
5. *Quality assessment:* The results of the impact assessment process are summarized in an impact assessment report, which is reviewed and commented on by an independent body, the Regulatory Scrutiny Board.
6. *Proportionality analysis:* The Commission has introduced a new impact assessment tool that integrates, strengthens, streamlines and replaces all existing separate practices, helping decision-makers to take better-informed decisions.

## Conclusions

Evaluation of the quality of Environmental Impact Assessment (EIA) reports, changes to projects as a result of EIA and the impact of changes to EIA procedures in European countries such as the UK, Germany, Spain, Belgium, Denmark, Greece, Ireland and Portugal has shown promising results. The overall proportion of "satisfactory" EIA reports sampled in these countries increased from 50% to 71% between 1990-1991 and 1994-1996.

The European Union (EU) has established rules to ensure that Member States assess the likely significant environmental effects of certain large infrastructure projects and public plans through environmental assessments, including the Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA) Directives.

The European Commission has also applied impact assessment to its policies, aiming to consider simultaneously the economic, social and environmental impacts of proposals. The Commission has introduced an internal system of Integrated Impact Assessment (IA) to address multiple policy concerns by assessing the likely environmental, economic and social impacts of all its major policies. Respectively, the evaluation of the performance of EIA systems in European countries and the EU's efforts to ensure environmental assessment are promising steps towards sustainable development and environmental protection.

In conclusion, the European Commission uses Impact Assessment in its policies to ensure that all major policy proposals include a sustainability impact assessment covering their potential economic, social, and environmental consequences. This integrated approach helps decision-makers make better-informed decisions and contributes to the overall goal of sustainable development. EIA is a crucial tool for ensuring sustainable

development and protecting the environment(Marinescu,2008) However, the challenges faced in conducting EIAs, the differences in EIA processes between countries, and the evolution of EIA effectiveness over time highlight the need for continuous improvement and adaptation of EIA practices to address the diverse ecological, social, and cultural contexts in which they are applied. The future of EIA is uncertain, with some countries shifting their focus away from addressing environmental harm to securing specified environmental outcomes (Dutu,2010)

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## Remote Work And The Future of Human Resources: A literature review

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**Abstract:** The lockdowns, either partial or total, implemented in response to the COVID19 pandemic have had a significant impact on society. The impact remains ongoing and, in many cases, continues to affect the lives of employees and the operation of businesses. In these new and uncertain conditions, the adaptation of the global economy and business is imperative. To achieve optimal adaptability, the widespread use of remote work has been adopted to ensure business viability, worker safety and prevention of virus transmission. Despite initially being seen as just a flexible work perk reserved for some employees, telecommuting quickly went from optional to mandatory for many, leading to a significant increase in popularity. Telecommuting as a form of employment was imposed rather abruptly, not quite keeping pace with the pace of business transformation. However, the employees seem to have welcomed it because of its necessity and the consensus that it is for the greater good. Due to its recent appearance, the pandemic and its effects on employment status have not been subject to substantial scientific research. The research mainly focuses on the impact of telecommuting, job satisfaction, personal and professional well-being, and the net effect of such changes. Unfortunately, the adoption of remote work frameworks within business contexts has not been as widespread as it should be. Therefore, this study seeks to examine the implementation of telecommuting through the eyes of HRM executives to fill this gap. To gather information on the adoption of telework a descriptive literature review was implemented. The issues that mainly referred to the literature included companies' willingness to use telecommuting, when necessary, executives' and employees' attitudes toward it, how companies prepare for it, steps taken to ensure success, how it affects staff and business and the prospects for teleworking. Analysis of the data found that, if possible, "Teleworking" was quickly and universally adopted due to specific circumstances. The implementation of telecommuting has proven to be beneficial for both businesses and staff, however the challenge of balancing work and private life remains. Under normal circumstances, telecommuting is seen as something positive, but it is also a critical area for future research.

**Keywords:** human resources, remote work, digital transformation, burnout, performance evaluation.

### 1. INTRODUCTION

The growth of remote working is one of the most significant developments in the modern work environment, bringing to the fore challenges and opportunities for Human Resources departments in businesses worldwide (McPhail et al., 2024). Technological advances and globalization have allowed businesses to expand their boundaries by incorporating a geographically distributed workforce. This development, however, raises questions about the need to adapt policies and procedures to the new reality, from hiring and training employees to evaluating performance and maintaining corporate culture in remote environments (Martínez-Peláez et al., 2023). This study seeks to explore the dynamics driving the rise of remote work and how Human Resources (HR) departments are addressing the associated challenges. Specifically, it focuses on the need to develop new practices and technologies that facilitate effective management, communication and collaboration between remote teams, as well as the adaptation of recruitment processes, training. Based on the above, the following research question arises: *What are the challenges that HR faces regarding the remote work?*

To better understand the challenges faced by companies in managing telework, this study proposes to perform a descriptive literature review. This will gather and analyze international research and studies that have been conducted on teleworking, with the aim of providing an integrated framework for understanding the various dimensions of telework. This will include analyzing the strategies used to address barriers to communication, maintaining productivity and trust, as well as managing occupational well-being and work-life balance. Additionally, the review will examine the implementation of technology solutions and policies adopted to support teleworking, providing a basis for developing best practices and future strategies. According to Snyder (2019) a descriptive research offers advantages over other research methods, including the ability to collect

data from a large number of participants, the ability to explore different aspects of a topic, and the ability to understand complex topics. Overall, the present research aims:

- To investigate the practices followed by human resources departments capacity to manage the remote workforce and to evaluate their effectiveness.
- To investigate the problems and challenges related to remote work and propose solutions to deal with them. To assess the effects of remote work on employees, the business and society as a whole. To propose best practices and technologies for its management remote workforce, with the aim of improving its efficiency and productivity of the business.

Research around remote work and the challenges it raises for HR departments is gaining particular importance in the modern business environment (Duvvuri, 2021). The need to adapt to this new work model is now a priority for businesses worldwide, making related research crucial to the development of sustainable and effective management practices. This study contributes to understanding the multidimensional effects of remote work on human resource management, from hiring and training employees to evaluating their performance and maintaining company culture. Additionally, it identifies the challenges that must be overcome to effectively integrate remote teams into corporate structure and processes. Exploring new approaches to communication, collaboration, and workplace wellness in remote environments offers breakthrough ideas for enhancing employee efficiency and well-being. Finally, this research has the potential to significantly improve business efficiency and productivity through the development and implementation of best practices for remote work management. It also provides strategies to enhance work well-being and employee satisfaction, recognizing the value of flexibility, work balance and psychological support. Overall, it encourages the development of policies that promote data protection and security in remote environments, ensuring the smooth operation of business processes.

## 2. LITERATURE REVIEW

### 2.1 The appearance and challenges of Teleworking

Remote work refers to performing work outside of a traditional office or physical workplace (Sokolic, 2022). Telecommuters typically work from home, coffee shops, co-working spaces, or any other location that allows them to be connected through technology to their organization (Ceinar & Mariotti, 2021). The evolution of remote work is a result of technological advances and the possibilities provided by online tools and connectivity (Xanthopoulou, 2022). The spread of high-speed Internet connections, the emergence of collaborative tools and remote work platforms, and increased flexibility in how organizations organize work have contributed to the expansion and growth of remote work. The global pandemic of COVID-19 also played an important role in the spread of remote working, as many companies were forced to adopt remote working as a measure to deal with the emergency situations and restrictive measures imposed (Tsaknis et al., 2022). This development led to a mass adoption of remote work and proved its potential and benefits. Overall, remote work has evolved into a growing field of work, allowing employees to work more flexibly and communicate and collaborate remotely.

Technology and the adaptation of organizations to this trend are crucial to the management and development of remote work in the modern world of work. An arrangement that benefits both employers and employees is known as flexible working or better yet workplace flexibility. It includes an agreement on when, where and how someone will work. The main aim of this arrangement is to improve work-life balance while meeting the demands of the business (Thompson et al., 2015). Emerging alongside advances in technology, less common forms of "flexible work" have joined the more familiar and long-standing options. Throughout history, the concept of "work flexibility" has evolved and diversified, taking different forms in terms of time, location and methodology (Dale, 2020). There are a number of flexible work arrangements, including telecommuting, shift-based schedules and flexible working hours (Baltes et al., 1999; Kossek et al., 2014). Flexible employment comes in many forms. These types of jobs offer employees the ability to have more freedom and control over their work schedules. They can often choose when and where they work and may not be tied to a specific location or a specific schedule. This can be attractive to people who value autonomy and flexibility in their work lives. Some examples of flexible employment include freelance work, part-time jobs, telecommuting jobs. Each of these options has its own unique advantages and disadvantages, and individuals can choose the type of flexible employment that best aligns with their goals and lifestyle. Regardless of the specific form, flexible

working can offer people opportunities to have a greater work-life balance and to pursue other interests or commitments outside of work. Flexible work arrangements come in a variety of forms to accommodate employee preferences and needs. They provide alternatives to the strict schedules and structures of traditional work. Kossek et al (2014) discussed “flexible work” in their paper, defining it as a concept that includes the following axes:

- **Policy-Regulated Work Conditions:** This axis underscores the role of organizational policies and procedures in dictating the nuances of employees' work hours, schedules, and the nature of their physical work environments, establishing a structured yet adaptable framework for work modalities.
- **Alternative Employment Arrangements:** Highlighting the ascendant trend within contemporary work ecosystems, this dimension focuses on the proliferation of flexible working hours, part-time engagements, and telecommuting opportunities. Moreover, it draws attention to the evolving Human Resources policies that facilitate various forms of leave, reflecting a broader shift towards accommodating diverse work-life needs.
- **Enhanced Work Autonomy:** By reconfiguring work design to afford employees greater latitude over their work schedules and locales, this aspect emphasizes the empowerment of individuals to wield more substantial influence over their work dynamics. This reimagining of work processes serves to elevate employee autonomy, thereby fostering a more engaged and productive workforce.
- **Mobile Work Practices:** This facet delves into the practice of completing work assignments at the client's physical premises, encapsulating the mobility aspect of contemporary work arrangements. It underscores the shift towards operational flexibility and the importance of direct engagement with client environments in certain sectors.
- **Technological Enablement Beyond Traditional Workspaces:** Central to the concept of flexible work is the utilization of technology as a pivotal tool for communication and collaboration, transcending the confines of conventional office spaces. This dimension acknowledges the critical role of technological advancements in facilitating seamless interaction and cooperation, irrespective of physical location constraints.

The past decade has seen both social and economic advances that have led the political agenda to prioritize workplace flexibility. It is clear that this need for flexibility extends beyond traditional expectations. On a global scale, flexible working is a growing trend in the ICT sector. Not only within the European Union, is this dynamic industry constantly finding new ways to break free from traditional employer-employee agreements. It is not only the type of work that is revolutionizing, but also the time, location and methods involved. In light of the growing desire for flexible work options, the Eurofound report (2020) has identified nine emerging ways of working. These nine forms are as follows:

- A group of employees is employed collectively by a collective of employers in a job-sharing arrangement, which allows for joint liability.
- Many people are employed in a unique employment arrangement called job sharing. This ensures that the position is covered collectively and is always occupied by someone employed by the company.
- Funding is provided for specific jobs through vouchers.
- Government authorities, such as third parties, usually carry out the work.
- In order to fill specialized or temporary roles, businesses often outsource their employees to other businesses. The practice of outsourcing involves the transfer of employees from one business to another.
- Sporadic service delivery, on-demand work involves employing an individual based on the needs of the business.
- IT technologies support the use of mobile work where employees can perform tasks outside the physical workplace with fewer restrictions compared to traditional telecommuting arrangements.

Martinez-Sanchez et al. (2008) state that telecommuting is a work arrangement where employees use ICT to access their work from a remote location. This can happen either fully or partially and helps to facilitate the organization of work for both employees and managers. Telecommuting is another flexibility practice that

allows employees to work outside of the regular office, using technology to connect and communicate with their team. This it can be done either entirely remotely or with a blended approach combining distance and in-office presence. Telecommuting allows employees to take advantage of the flexibility of space and freedom from limited geographic locations. However, HR flexibility in remote environments also faces some challenges. These include maintaining communication and cooperation between team members, managing the impact on work organization and developing appropriate policies and procedures for flexibility. It is important to maintain communication between team members through technological tools such as chat and email systems. Also, organizing work and monitoring progress may require changes in HR practices and procedures. Finally, the development of appropriate policies and procedures that support the flexibility and manage challenges is necessary to effectively implement flexibility in remote environments. Overall, HR flexibility in remote environments is promoted through practices such as flexible working hours and telecommuting. However, challenges need to be addressed and appropriate policies and procedures implemented to achieve effective HR flexibility in remote environments. Remote work requires managing collaboration between remote team members.

To maintain the unity of the team members, it is important that they are taken properly practices. An effective practice is to create an image of unity and community through remote work. This can be achieved by encouraging collaboration, open communication and reciprocity support among team members. Working together on joint projects and sharing ideas and problems can strengthen the sense of group cohesion and promote interaction and mutual support. Some challenges related to the remote collaboration, such as different time zone and multicultural character of the group. When team members are in different time zones, it is important to find ways to ensure appropriate time collaboration and mutual communication (Oyekan et al., 2017). Also, the multicultural nature of a team can bring with it different preferences, practices and challenges in communication and collaboration (Morrison-Smith & Ruiz, 2020). It is important to be open, understanding and sensitive to the differences that may exist and to achieve mutual acceptance and respect.

## **2.2 Studies on teleworking**

Among the surveys used to gather data for this paper, some were conducted within European borders, while others took place in the United States. They were aimed at companies of significant size and their staff, regardless of the location of the company's headquarters. The goal was to gauge their opinion employees regarding telecommuting issues. To this end, the surveys were primarily quantitative in nature and did not delve into any particular industry or elements of any particular nation. Specifically, the venture sought to examine how employees in various industries perceived and coped with the sudden shift to remote work. Telecommuting has been observed to be on the rise, particularly among 25-34-year-olds, according to a thorough review of various surveys. Gender, surprisingly, did not subtly contribute to this decision. Businesses are turning heavily to telecommuting as a protective measure for employee well-being and to maintain operations with minimal disruption. Reliability and accountability are critical characteristics that companies look for when implementing telecommuting. In addition, the study shows that more employees envision and wish to use telecommuting methods in the future. Looking at telecommuting from the employees' perspective, it has both advantages and disadvantages. A key advantage is the immediate relaxation of work stress and a better personal-professional balance. Furthermore, telecommuting can enhance physical health, especially for women, while also receiving favorable feedback about increased levels of efficiency. At times, it has been observed that family-related issues disrupt an employee's concentration while at work. Additionally, there are cases where employees yearn for career advancement but struggle to separate their personal lives. from their professional time. Other disadvantages include strained relationships with colleagues, insufficient input from superiors, disturbance from family members during work, uncertainty about performance evaluations, along with limitations in career development and delays in work caused by asynchronous communication. The extent of these deficiencies varies by gender. Key competencies for telecommuting include the skill set of autonomous work, effective time management, and communication, strong commitment to both the company and personal accountability for work. Table 1 below presents some indicative studies on teleworking, analyzing their methodologies, the research aim/s and the main findings.



Table 1: Surveys on Teleworking

Authors/ Year of publication	Agency/journal	Title	Research Methodology	Research aim/s
Baert St., Lippens L., Moens L., Sterkens Ph., Weytjens J. May 2020	Institute of Labor Economics	“The COVID-19 Crises and Telework: A Research Survey on Experiences, Expectations and Hopes”	Research type: Quantitative with questionnaire N= 14005 employees	Socio-economic effects of the Covid-19 crisis on telework and its evaluation

A notable faction, corresponding to 17.3% of the surveyed population, reported that they encountered significant barriers while using different modes of communication. According to a recent survey, a majority of 52% report that they are properly directed by their respective supervisors. A remarkable statistic shows that there is a 45.7% reduction in work stress in a certain population. According to recent statistics, 42.7% of people believe that remote work reduces the likelihood of experiencing burnout. According to the survey, a majority of 55.7% are of the opinion that this initiative will help strengthen the balance between their personal and professional lives.

Brynjolfsson Er., Horton J., OzimekA., Rock D., Sharma G., Yi Tu Ye H. June 2020	National Bureau of Economic Research Working Paper: 27344	«COVID-19 and Remote Work: An Early Look at US Data»	Research type: Quantitative with Questionnaire N=25,000 employees	How have employees and businesses responded to the Covid-19 crisis
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Before the outbreak of the pandemic, 14.6% of people were already working from home. Since the outbreak, 34.1% of respondents have switched to remote work, while 37.6% continue to work in their physical workplace. These percentages represent the current distribution of jobs among the surveyed population. Statistically, the reported differences between men and women in terms of gender are deemed insignificant. The practice of remote work is more widespread among people aged between 25 and 34, with a lower presence among people aged 65 and over.

Belzunegui- Eraso An., Erro- Garces A. April 2020	Multidisciplinary Digital Publishing Institute (MDPI), Sustainability Journal	“Teleworking in the Context of the COVID-19 Crisis”	Research Type: Qualitative Questionnaire N= 27 companies where they implemented Teleworking as a measure against the pandemic	Factors affecting the implementation of Telework
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For those involved, the conclusion of a business is of the utmost importance. The results can either lead to triumph or defeat, success or disappointment, or have the potential to shape future endeavors in many ways. Analyzing and evaluating the results of any business is essential to gain perspective and identify room for improvement. Using this knowledge can help shape future decisions and chart the course of future actions. Before the coronavirus epidemic, telecommuting was affected by many factors, as seen in the literature. These included individual preferences, work demands, family life, work demands and company culture, together with the use of information and communication technology, environmental considerations, and health and safety concerns. In addition, other factors have also contributed to people working from home. Following the outbreak of COVID-19, a large number of companies have initiated work-from-home measures in response. However, it is important to mention that these measures are mainly carried out by large multinational companies. Due to the impact of the pandemic in some areas, several companies have made telecommuting a requirement in order to guarantee business operations. For the most part, companies felt compelled to telecommute to protect the well-being and safety of their employees. Although many saw this as a necessity, it was generally to ensure business continuity during this ordeal. Of all industries, Telematics, Energy, Insurance, Banking and Technology have the majority of

telecommuters. Employees in these fields often work away from home more than anyone else. In the midst of the COVID-19 pandemic, telecommuting provisions bear similarities to on-site learning requirements. There is still a need for adequate tools and specialized guidance. However, the severity of the pandemic has introduced changes in employment matters. As a measure for seamless business continuity, telecommuting is often embraced by companies. The reasoning behind this decision is based on two core values: trust and responsibility. Trust extends to employees, who are given the option to work remotely. Equally important is the sense of responsibility that falls on the employee, making it incumbent upon them to maintain the same level of productivity while working from home.

Baudot L., Kelly Kh. July 2020	SSRN	“A Survey of Perceptions of Remote Work and Work Productivity in the United States during the COVID-19”	Research type: Qualitative with a questionnaire N= 598 employees	Impact of remote work on employees' perceptions of their productivity.
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The implementation of telecommuting during the COVID-19 pandemic has had a noticeable effect on employees. When people work remotely, there is a noticeable increase in time spent working. Their opinion is that the level of productivity for both themselves and their subordinates is on the rise. Their productivity is not closely related to their ability to maintain a work-life balance. The concept of enhanced productivity is often associated with the idea of "close" supervision by management, the implementation of monitoring systems to monitor performance, and a general sense of concern among employees about the possibility of layoffs.

Ahrendt D., Mascherini M. April 2020	European Foundation for the Improvement of Living and Working	“Living, working and COVID-19”	Type of research: Quantitative with questionnaire N= 1,051 Employees	The impact of COVID-19 on life and work.
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The most anticipated aspect of the research process is usually the outcome of scientific studies. Confirming or rejecting their hypotheses and improving their understanding of phenomena are made possible through the results obtained by scientists. However, the results are sometimes inconclusive and further research could be needed to produce firm findings. Subjective views of researchers may also cause interpretive differences when it comes to presenting results. In the European Union, around 37% of employees have started working remotely in recent years. Every other day, about 27% of telecommuters work beyond their usual hours. Pressure from their job is usually the reason behind this extra work. They find themselves working outside the normal working hours dictated by their job. Telecommuting parents with children under 12 experience problems related to focus in their workplace, with 22% affected. In contrast, families without children and families with children over 12 years of age only seem to experience this problem at rates of 5% and 7% respectively.

Human Resources Management Workshop, January 2021	Athens University of Economics and Business	“Pandemic and digital adaptation in HRM: telework & distance learning”	Type of research: Qualitative, with a questionnaire N=598 employees	Investigating adaptation to telecommuting conditions.
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At baseline, the vast majority of participants (63% to be exact) had no telecommuting experience. However, half of them (52%) were working remotely at the time of the study. The provision of telecommuting-related facilities, such as logistical tools, was rare in a small number of employers. However, telecommuters recognize that working remotely has significant financial benefits. They rely primarily on their colleagues for support, followed by their managers and bosses, in an exchange based on a foundation of mutual trust. Remote working is generally favored by many, but productivity is not necessarily enhanced. Attitudes towards telecommuting seem to be linked to the following elements:

- The numerous children in respondents' homes were a common source of criticism. They struggled to juggle the duties required of telecommuting and caring for their children, who were also confined to the home amid the pandemic.
- Educational background is taken into account when providing an answer that portrays the respondent in a positive light.
- The size of the organization is positive.
- Greater motivation and success can be achieved with a positive attitude towards distance education. It is important to keep a positive outlook on this learning method.

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Source: Authors' own contribution

Table 1 above covers various aspects of the impact of remote work on employees, including perceptions, productivity, benefits, and challenges, as well as suggestions for future research and policy-making. Remote work has led to a notable increase in productivity for many, but not without challenges. Employees appreciate the flexibility and the reduction in commuting time but face difficulties in separating work from personal life. The transition to remote work highlighted the need for better technological infrastructure and digital tools to facilitate effective communication and collaboration among teams. It is also observed that there's a dual impact on employee well-being, with some experiencing improved work-life balance and others facing increased stress due to the blurring boundaries between work and personal life. The success of remote work is significantly influenced by the company culture and leadership approach. Trust, clear communication, and support from management are crucial.

### **2.3 The role of human resource management in remote work management**

In 2020, telework was adopted as a model by around 16% of the workforce in the European Union, however, some countries such as the Netherlands, Finland and Sweden appeared to rely heavily on telework with a total of 30% of their businesses choose to employ a workforce that works remotely. Greece, on the other hand, had a significantly lower percentage (4%) of remote employees. While it is worth mentioning that the majority of people who worked from home were actually self-employed, according to Kyriakoulis (2020). Due to the Covid-19 pandemic, countries around the world have put a number of restrictions in place. In order to combat the spread of the virus in April 2020, lockdowns were imposed in many nations which caused 80% of the global workforce to be unable to access their workplaces (ILO, 2020). As a result, companies have had to innovate and introduce telecommuting to address these limitations. The sudden shift to remote working meant that both employees and businesses had to acclimatize to this new approach in a hurry. In the period April/May 2020 to June/July of the same year, the number of Europeans who started working from home increased significantly from 36% to 44%. Meanwhile, despite the ongoing pandemic in February/March 2021, an estimated 42% of people continued to telecommute. The data was collected by Eurofound, an organization dedicated to improving the living and working conditions of Europeans, from research referring to the studies of Ahrendt et al. (2021). In Nordic nations with established cultural backgrounds such as Belgium and the Netherlands, telecommuting has seen the most significant rise. In contrast, benefits from telecommuting remained low in Bulgaria, Greece, Romania, Hungary and Croatia. Greek businesses were found to have the lowest telecommuting adoption rate, as data showed telecommuting rates plummeting from around 30% to a paltry 10% after eight months. However, various global studies have shown that telecommuting positively affects both employee satisfaction and productivity. Post-pandemic, telecommuting is expected to continue to be a popular option, with an estimated 87% of UK employees looking to complete some parts of their work remotely, while 50% said they would prefer to work from home for most of the work. According to research by

Felstead and Reuschke in 2020, these findings show a significant preference for telecommuting among UK employees.

Recent surveys (such as those of Barrero ET AL., 2021; Florida et al., 2021; Al Riyami et al., 2023) found that the thought of returning to traditional office work after the pandemic was unappealing to a growing number of US employees. An impressive 81% of respondents expressed a preference for a combination of remote and on-site work that would not affect their wages. Only 18% of employees expressed hope of returning to personal office work full-time, as indicated by these studies. Timely breaks can help prevent burnout, and regular work routines are also beneficial. Assigning certain responsibilities to competent people is another productivity technique, as is breaking complex tasks into manageable chunks and assigning priority levels based on importance and urgency. It really is a wealth of best practices. The volatile conditions of the pandemic have greatly affected both employees and businesses. Employees have been introduced to an unfamiliar method of working in a new environment due to the imposition of remote work. Initially, companies expressed concern about the impact of telecommuting on employee productivity in light of the pandemic. However, many research studies have dismissed these uncertainties. Over the past year, Price Waterhouse Coopers (PwC) conducted a survey revealing that 57% of senior business executives were able to exceed their employees' performance standards and improve productivity levels. An overwhelming number of participants reported satisfactory results, with only a small minority of 4% stating that their business had experienced a decline in performance-based results. These findings were published by PwC in September 2021. Due to the convenience of digital technology, working from home has become easier and more efficient (Xanthopoulou, 2022). This has led to better accuracy and reliability while drastically reducing turnaround time. By using online conferencing instead of traveling to in-person meetings, business executives have been able to reduce costs associated with transportation and hospitality. At the same time, online conferencing has also allowed meetings to be shorter by minimizing unprofessional talk. Overall, these developments contributed to the streamlining of corporate processes. To boost employee wellness, some companies have opted for telecommuting and flexible scheduling, enabling their staff to manage their own workload from home. This approach should lead to better physical and mental health, resulting in higher productivity. However, only 25% of executives surveyed by PwC believe in the ability of their remote workforce to handle their tasks satisfactorily. To increase efficiency, some companies outsource work and extend operating hours. Initially, these tactics may yield favorable results, but in the end, they will lead to fatigue and detrimental actions, ultimately undermining overall achievements in the future.

To get the most out of telecommuting while mitigating any downsides, companies can prioritize buying the necessary tools, securing data and imparting practical skills to staff. A voluntary approach to telecommuting is key, as are training supervisors to effectively handle distributed teams. This requires innovative strategies that differ from conventional modes of supervision. Key ingredients include building trust with remote employees, providing feedback based on specific benchmarks, and valuing employees' independence and adaptability. In order to combat social and occupational isolation, one possible solution would be for employees to be able to choose between office work and telecommuting, meaning that half of the days could involve working from home and the other half from the office. By implementing this strategy, organizations can also be helped to develop and maintain a healthy corporate environment. According to Amigoni and Gurvis (2009), establishing measurable and achievable goals is critical to the success of telecommuting arrangements. It is important for organizations to regularly communicate their expectations, priorities and goals to remote employees, who have no visual cues from their colleagues. To build trust, supervisors should work with employees to create a mutually acceptable schedule. Building trust, effective communication and flexibility in working hours can all be supported through consistent virtual meetings. Additionally, using these meetings as a tool to inform remote employees about the organization and their duties can help minimize feelings of loneliness (Wang et al., 2021). Ultimately, remote work requires trust from businesses and their leadership team that their employees are committed to achieving the organization's goals, regardless of their location (Altman, 2020). Not all employees may find remote work a preferable alternative to traditional business environments. Remote work can cause a feeling of disconnection from colleagues and, combined with vague or unrealistic goals, can lead to stress. As a result, remote employees may feel unsupported or neglected by superiors and colleagues. In addition, a feeling of insecurity can arise when remote employees do not have sufficient expertise or training in digital technology. Through the use of digital technologies, remote employees often feel that their working hours are exploited and their privacy rights are violated by the requirement to have an open camera in their personal space. This issue of limiting their freedom is a common concern among those who work from home, as reported by Rysavy and Michalak (2020). Effective burnout management involves following several recommended practices. These practices aim to alleviate the symptoms of burnout by helping individuals cope

with the condition. The effects of burnout are widespread and felt by many. Diagnosed by the World Health Organization as a result of failure to properly manage work stress (WHO, 2019). Burnout, experienced by many in the workforce, occurs when someone is subjected to excessive and constant pressure at work, resulting in a feeling of dissatisfaction that can be expressed in a variety of ways.

In the context of modern work realities, managing telecommuting raises significant challenges for businesses, often causing a drop in productivity and negative effects on personal and professional relationships. Emotional exhaustion, depersonalization, and a reduced sense of personal success are major symptoms of burnout, with consequences not only for employees but also for the company itself. Analyzing the causes, Sleddens and Becker (2018) point to insufficient compensation, lack of support, insufficient recognition of personal achievements and conflicting values as the main factors of burnout. Business strategy should focus on preventing and managing burnout by adapting work practices to enhance employee autonomy, work-life balance and well-being. This requires the development of policies that encourage the equal distribution of opportunities and tasks, as well as the implementation of human-centered interventions aimed at reducing the causes of burnout and enhancing the mental and physical well-being of employees. It is vital that companies recognize the value of human contribution and create a positive work environment that promotes harmony and productivity. This strategy is driven not only by the need for corporate prosperity but also by the broader pursuit of a fair and sustainable work culture. Cooper's (1998) view suggest that employee training should include more than just practicing work experience. Supplementing proficiency with better social and personal skills, including time management, self-management, and stress management, should also be emphasized. When an employee begins to experience the effects of burnout, it is important to take immediate action. Possible sources of help include family and friends, professionals or people within the organization - for example, colleagues, managers or HR staff. The key to effectively managing this situation is for the employee to take a proactive approach and advocate for their own needs and concerns. He/she may choose to seek further clarification on his/her job duties or pursue new opportunities that match his/her strengths and rekindle his/her passion for his/her work.

### **3. CONCLUSIONS, LIMITATIONS AND SUGGESTIONS FOR FURTHER RESEARCH**

The paper analyzes the implementation of teleworking by companies during the COVID-19 pandemic, focusing on the challenges and implications for companies and employees. It studies flexible working, analyzing the benefits and difficulties of telecommuting from the perspective of companies and employees, while looking at the growth of remote work worldwide and how companies are responding to the new demands. Additionally, it covers employees' experiences with telecommuting and its overall impact, showing how different sectors and businesses have adapted to telecommuting and the challenges they've faced, such as performance management, data security, and collaboration. Remote work forces HR departments to adapt to new demands, with changes in recruitment and selection processes through technology, a need to train and develop employees in remote environments, and new methods for performance measurement and evaluation. Communication and collaboration are critical elements, with the need for technological tools and flexibility for remote work success. Adaptations require revising policies and procedures, enhancing collaboration, problem solving, and team achievement.

Research on the telework phenomenon has grown dramatically, capturing a wide range of aspects and dynamics of teleworking. In this context, important issues and findings have been highlighted, which include the assessment of the effectiveness and performance of tele employees. A number of studies support that telecommuting enhances efficiency, while also highlighting challenges such as time and task management. In the field of well-being and health, there is conflicting evidence regarding the impact of telework on the psychological state of employees. While some employees report a reduction in anxiety and stress due to increased flexibility, others report feelings of increased isolation. Industrial relations are also tested through telecommuting, as research focuses on its effects on communication and collaboration between employees and management. At the same time, the needs for technological infrastructure and related skills become imperative for the effective implementation of telecommuting. From the organizations' point of view, the research tries to understand the effects of telecommuting in various areas such as space management, financial consequences and personnel policy. Additionally, collaboration and creativity are important research topics, as telecommuting has the potential to positively or negatively impact these dimensions of the work environment. Scientific studies continue to explore the benefits and challenges associated with telecommuting, providing a deep understanding of its integration into the modern work environment. The dynamics of telecommuting reveal a diversity of outcomes, depending on factors such as working conditions, organizational

policies, and employee satisfaction. Proper management of telecommuting is critical to achieving a harmonious relationship between benefits and challenges in order to ensure maximum efficiency and well-being for employees and businesses.

The study aimed to enhance the theoretical and practical understanding of telecommuting by presenting important findings for its implementation, especially during and after the Covid-19 pandemic. It explores the challenges and outcomes of forced telecommuting adoption, employee perception and management, and HRM's contribution to a smooth transition. It highlights the obstacles, business strategies for its implementation, and policies to support telework, as well as the need for legislation and social dialogue to promote telework in Greece. It emphasizes the importance of research for the development of future strategies and a comprehensive understanding of the effects of telework. The study highlights limitations such as the relative lack of extensive literature and the absence of a clearly defined legislative structure for teleworking in Greece, as well as the difficulties arising from the forced and short period of its adoption under stressful conditions, which may not fully reflect acceptance or the reaction of employees to the new form of work and the challenges that may arise. In addition, the lack of previous studies and the need for a broader understanding of adaptation processes in various sectors and professional categories constitute important limitations that affect the comprehensive assessment of telework and its application in work reality. To promote and improve teleworking, the study recommends the development of specific legislative frameworks that will clearly define the rights and obligations of employees and employers, enhancing security, parity and opportunities for professional development. The need for a systematic social dialogue between the government, businesses and employees to create favorable working conditions and the establishment of a strengthened and transparent control mechanism is highlighted. It is also recommended that more in-depth research be conducted that examines the effects of telework in various sectors, the effectiveness of the applied models and best implementation practices, with the aim of better understanding the needs and challenges of telework. This will contribute to the development of more effective policies and practices that will support the flexibility, productivity and well-being of employees, while protecting their rights and safety in the new work environment.

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## Consumer Feedback as an Alarm System for the CSR of the Business Organisation

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**Abstract:** The importance of communication on topics related to corporate social responsibility (CSR) is determined by the nature of this specific activity to benefit stakeholders in various areas, such as healthy living, environmental protection, charity, etc. Communicating CSR to stakeholders and maintaining a dialogue with consumers are at the core of the two-way process of interaction between the organization and the society. Therefore, CSR itself must stem from the needs of stakeholders and be intertwined with the mission and goals of the business organization.

This paper examines CSR communication with consumers as a multiple group of individuals who have the potential to contribute to the realization as well as the modification of organizational CSR activities and complex policy.

The authors therefore focus on the kind of alarm system that consumer feedback to the business organization becomes. In this regard, results of a survey among traditional consumers of a hypermarket chain in Bulgaria are presented.

**Keywords:** CSR, consumers, feedback, communication

### 1. INTRODUCTION

Communication as a two-way exchange of information is a process that helps to reduce misunderstandings and uncertainty in interactions between two entities. The strength of a business organization's communication links with its external stakeholders can be seen as a driver of specific CSR communication policy.

Awareness of an organization's CSR efforts and the benefits to the organization itself of those specific efforts depend on effective communication (Hayes & Carr, 2021). Our basic understanding is that CSR demonstrates and reinforces the business organization's sensitivity to societal expectations and values. Such a definition of CSR focuses precisely on the sensitivity of the organization itself to all the current issues and problems raised by stakeholders and which should be within the scope of the organizational CSR policy.

Bernays (as cited in Shtilyanov, 2016), one of the founders of the social technology of public relations (PR), put forward the claim that PR are a "two-way street" and one of the main conditions for their success is the practice of dialogic communication. Public relations practitioners in an organization are charged with the commitment to promote its activities, but also to be a link between the organization and its stakeholders. In this regard, we can outline one significant area of interaction between CSR and PR: communication relations, which are an aspiration in both organizational activities. The PR practitioner is therefore responsible for maintaining the functionality of the alarm system along which information flows from the consumers as a plural group to the business organization whose activities depend on them. This feedback is vital for synchronizing the CSR efforts of the organization with the needs of the consumers. Very often the research efforts of PR specialist are an essential element in this interaction.

### 2. THE MODERN BUSINESS ORGANIZATION AND ITS CSR HORIZON

Presenting the evolutionary dynamics of CSR requires looking at its sides as mentioned Goodpaster et al. (2005):

- 1) economic and social impact of the external environment on the company;
- 2) transformation of the social, political and economic environment in which the organizations operate;
- 3) definition of the concept of CSR;
- 4) development of CSR management practices and strategies within companies;
- 5) the nature of the current CSR topics discussed.

The European Commission defines corporate social responsibility as "a concept that refers to the integration by enterprises, on a voluntary basis, of social and environmental aspects in their economic operations and in their interaction with relevant stakeholders" (European Commission).



In recent years, greater attention has been paid to the social and environmental impacts of business, particularly in relation to the activities of multinational companies. In order to build lasting relationships with stakeholders in general and customers in particular, companies need to take into account the growing interest in CSR activities and the need of intensive and effective CSR communication.

Stakeholders are increasingly sensitive to environmental and social issues and prefer to work with companies whose activities are consistent with their personal values and beliefs. Stakeholder perceptions of a company's commitment to CSR are positively related to the company's image, reputation and ability to attract retain and motivate its employees. This justifies the effectiveness to integrate social and environmental concerns into core strategies and business activities (Calabrese et al., 2015).

What is new in a CSR horizon? At the European Union (EU) level, the Corporate Sustainability Reporting Directive (CSRD) came into force in January 2024 (European Union, 2022). The CSRD affects large organizations (those meeting at least two of the following criteria: a balance sheet of 20 million euros; a turnover of 40 million euros and 250 employees on average) in the EU. It can be defined as a corporate sustainability due diligence to ascertain the corporate responsibility of companies to respect social and human rights and environmental standards according to Bibinovska (Bibinovska, 2020). The new regulatory framework for the publication of ESG (Environmental Social Governance) reports is seen as a prerequisite for creating transparency on the environmental impact of business. This level of transparency "will help civil society organizations, consumers and shareholders have a clearer picture of where a company stands within the European Green Deal" (Balgaranov, 2023). It is also important to note that business organizations start producing reports from 2024 and will publish them next year in 2025. The information in the reports must be digital (Balgaranov, 2023). ESG can be seen as a general framework for the organizational impact on the environment and society on the one hand, and the quality of the company's corporate governance on the other. Integrating ESG elements into the activities of a business organization requires understanding them and making sense of the thematic diversity inherent in each element (Vladimirov & Kisyova, 2022).

These new challenges are also shaping the image of the sustainability specialist in a business organization. Stefanova (Vuhev, 2023) summarizes his activities in the following directions:

- engage both internal and external stakeholders to identify risks to the organization related to its activities;
- support the development of the overall concept of sustainability;
- create the processes and discusses the topics with everyone else;
- facilitate the dialogue;
- defend the topics before the directors of the organization;
- argue a certain budget and create activities that are part of the implementation of set goals;
- report and collect feedback from everyone else;
- communicate effectively with all specialists involved in the environmental or social component;
- center the subject in strategic company management.

It is evident that the impact of organizations on the environment and society is a significant thematic area, which not only finds its place in research, but is increasingly the subject of media attention and practical solutions. The socially responsible behavior of companies finds its reflection in the mentioned ESG reports, which we considered as mandatory reporting. The widespread promotion of CSR information and its accessibility to consumers is an activity of particular priority in the context of European and even global demands upon modern companies. In a modern business organization, PR, CSR and the sustainability specialist will work simultaneously. They intersect their communication efforts in the idea of dialogue with internal and external audiences.

### **3. FEEDBACK ABOUT CSR**

Customer perceptions and expectations of CSR influence purchase intentions, customer loyalty, corporate image and reputation, and customer identification with the company. Actual customer feedback depends on the distance between the customer's beliefs, values and lifestyle and the company's perception of CSR. Consequently, one company may receive different or conflicting feedback on CSR based on multiple customer perceptions and expectations (Calabrese et al., 2015).

One of the main challenges in developing an effective CSR communication strategy is to engage stakeholders and increase their confidence in the company's socially responsible behavior (Schmeltz, 2017). Communication

of CSR practices is not just a matter of information transfer but of interaction with stakeholders. Precise CSR communication can be seen as an important agenda for both public relations research and practice (Lee, 2017). The communication interaction between the organization and its stakeholders can be outlined as a general idea in CSR and in PR practice. An even deeper look takes us to stakeholder feedback to the company itself which can regularly be fed with information from studies of the external environment.

Consumer knowledge can be enriched through various information gathering methods. One of them is the media, whose content is generated by the consumers themselves - blogs, forums, comment sections, podcasts - as noted by Angelova (2024).

### **3.1. APPROACHES TO CSR COMMUNICATION**

Public relations subject matter and research focuses on public engagement and the strategic value of CSR, which includes effective reputation management, improved corporate identity and purchase intent (Lee, 2017). Stefanova et al. (2023) emphasize that consumers tend to stop buying if they do not agree with the organization's position on important social issues.

In the present paragraph, we will consider Morsing and Schultz's models of CSR communication. Not by chance, the models of CSR communication strategies put forward by Morsing and Schultz are based on the public relations models proposed by Grunig and Hunt. Grunig outlines four models based on four evolutionary stages in PR practice: press agency, public information, two-sided asymmetric model, and two-sided symmetric model. The last model brightly emphasizes the bidirectionality in communication through mutual understanding and equal dialogue. According to Morsing and Schultz (2006) social responsibility is associated with proactive corporate activities and reflects the status of a virtuous company. At the same time, CSR messages attract critical attention from stakeholders. Companies include in their CSR not only their own actions and decisions, but also those of their suppliers and consumers, which can lead to criticism of the company.

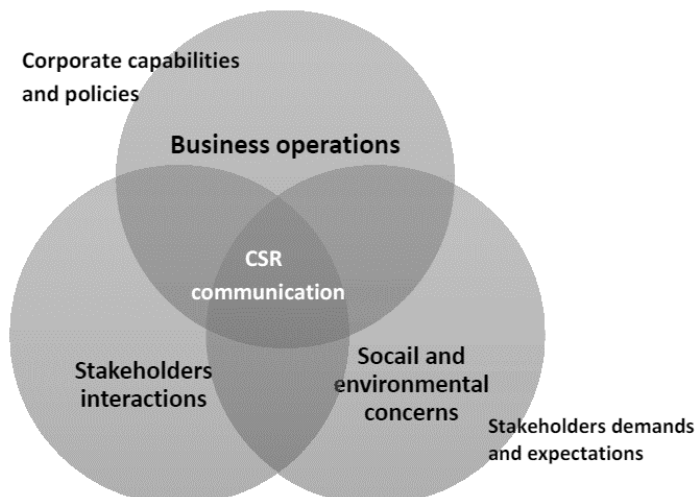
Morsing and Schultz present three CSR communication strategies that encompass an evolution from classic monologues to dialogue-based stakeholder relations:

- 1) Information strategy to stakeholders – communication is essentially seen as a one-way transmission of information. The strategy is not intended to persuade, but to inform the public as objectively as possible. The company should inform its stakeholders about its good intentions, decisions and actions to ensure positive support.
- 2) Stakeholder response strategy – the strategy is based on the two-way asymmetric communication model. The company must engage its stakeholders by making corporate decisions and relevant actions to gain approval from its external stakeholders.
- 3) Stakeholder engagement strategy – this strategy implies dialogue with stakeholders. Persuasion can occur, but it comes from stakeholders as well as the organization itself, each trying to stimulate change in the other. Companies must strive not only to influence stakeholders, but also to be influenced by them and, if necessary, make changes.

The reviewed strategies give us a reason to emphasize that it is the stakeholder participation strategy that can be perceived as a kind of alarm system for the CSR of the business organization.

Another possible two-way approach to CSR communication is offered by Podnar's model (as cited in Nguyen & Wall, 2010). It describes the context in which communication takes place as a two-way relationship between the CSR requirements of stakeholders and the company's ability to meet these requirements.

Figure 1: Podnar's model for CSR communication



Source: Nguyen, T., Wall, K., An analysis of CSR online communication. The case of Shell, ExxonMobil, E.ON, and Vestas

The model is presented as a combination of the relationship between three contexts: business activities, social and environmental issues and stakeholder interaction. The model aims to encourage companies to adopt a more holistic approach to the implementation and management of CSR communications.

#### 4. METHODOLOGY AND DATA COLLECTION

The presented research is a part of the work of PhD student Violina Petrova at South-West University "Neofit Rilski" – Blagoevgrad, Bulgaria on her dissertation *The impact of corporate social responsibility (CSR) on the image of the business organization*.

The applied method for collecting information is a questionnaire survey. The survey was carried out among consumers of a large retail chain in Bulgaria. The overall research period is four months: 01/07/2023 - 31/10/2023. The chosen subject of analysis is LIDL Bulgaria EOOD & Co. KD, hereinafter referred to as Lidl, the organization or the company. Our choice of this business organization is dictated by the presence of the following factual circumstances:

- more than 10 years presence on the Bulgarian marketplace;
- more than 250 employees;
- active and public presented CSR policy in a different channels – corporate website; YouTube channel; Facebook profile, printed brochure with products information and CSR campaign introduction, labeling the products. We analyzed the main online company's channels in our previous research (Hristova & Petrova, 2022).

Although the general population for the survey is very large and consists of an uncountable amount of people, it has some essential characteristics that are important for the purpose of the study – every person is a real, traditional consumer of the selected retail chain who is willing to share opinion voluntarily and anonymously. In this case, it was necessary to apply the snowballing method in order to include individual respondents in the study.

In the first stage, respondents were asked to participate through dedicated social networking groups. Specially designed questionnaires were sent by providing a link. The planned sample size of 162 participants was reached. In a second stage, the sample was supplemented with 54 respondents surveyed in the field at the entrance of the retail chain with the same web-based questionnaire. After processing the field and online survey data, it was found that there were no outliers in the quantitative indicators, allowing these data to be analyzed in aggregate.

The questionnaire contains ten questions which are mainly open and closed alternative questions (the answers given are mutually exclusive and only one answer is possible). The groups of questions included in the consumer questionnaire can be summarized as follows:

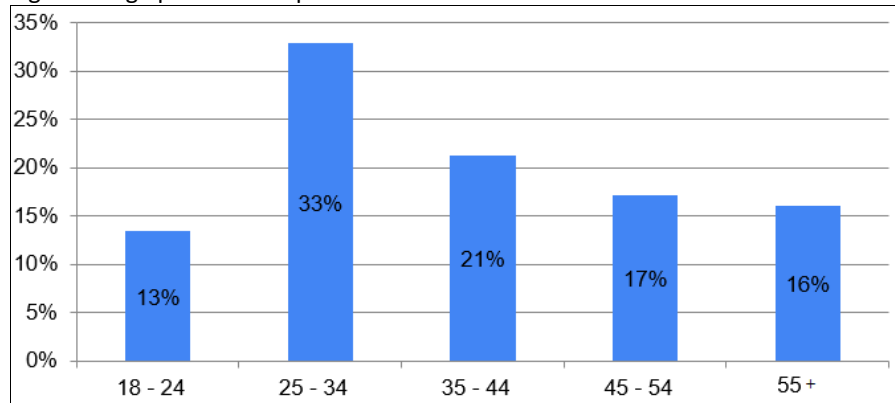
- questions about the demographic status of the surveyed persons – age, education, residence.

- questions about the affective and cognitive component in the minds of the surveyed individuals – what do individuals know about CSR campaigns.
- questions related to the role positions of the researched individuals – to what extent Lidl's CSR activities motivate the behavior of the researched individuals.

## 5. RESULTS

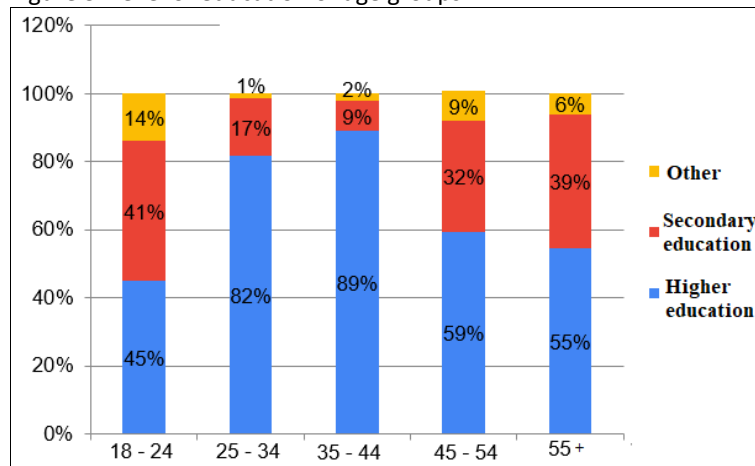
The respondents who took part in the study are divided into the following age groups: 18-24; 25-34; 35-44; 45-54; 55+. Figure 2 shows the distribution of age groups.

Figure 2: Age profile of respondents



The largest group of surveyed consumers is in the 25-34 age range. The distribution of the surveyed persons by level of education is shown in Figure 3. The data show that the distribution is in favor of graduates – 70%, and those with secondary education – 25%.

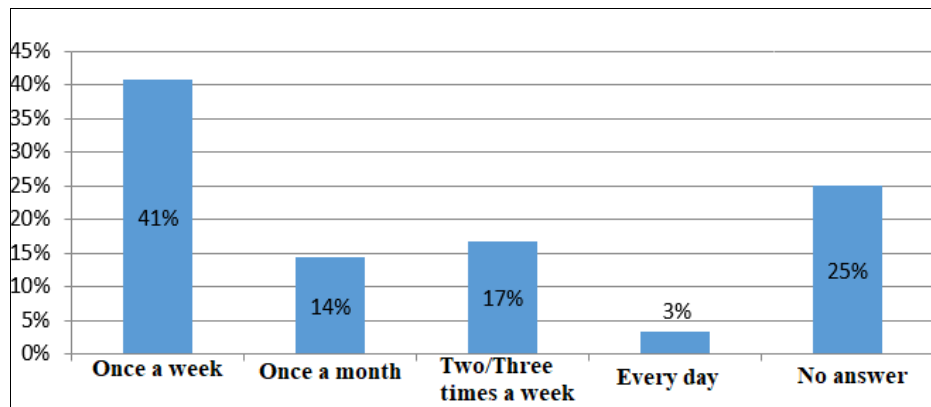
Figure 3. Level of education of age groups



The percentage of the most highly educated is highest in the 35-44 age group. They are followed by those surveyed between the ages of 25 and 34. The share (45%) of those with higher education in the 18-24 age group is not small either. Approximately the same number of surveyed persons (41%) with secondary education.

A large percentage of respondents (58%) have a traditional habitual behavior of visiting the retail outlet once or more times a week (Figure 4). A distinguishing feature of this segment of consumers is precisely their activity – they plan and carry out a weekly visit to the point of sale. This gives them the opportunity to be observers of in-store communication formats used to draw attention to specific products or promotions, including CSR activities. Therefore, consumer perceptions of in-store CSR products can be specifically targeted. This is a fertile ground to intensify the CSR communication of the business organization at the point of sale and to influence consumer awareness.

Figure 4. Shopping frequency



Respondents were also asked a question about level of awareness and sources of information about specific organizational CSR activities. The analyzed data can be specifically considered as feedback from consumers, in which the effect of CSR communication is clearly reflected like alarm system. We directed respondents' attention to three CSR campaigns that are presented through social media and social networks of the company. Another argument for our choice is that these initiatives have traditionally been implemented by the company in recent years. The conceptual designs of each selected campaign are also distinctive and non-overlapping.

The initiatives are:

- 1) The *You and Lidl for a Better Life* campaign – is most widely promoted on the company's official website. This campaign won an award in the Investor in Society category at the Annual Responsible Business Awards in 2017 (second place), 2018 (second place), 2019 (second place), 2021 (first place) and 2022 (third place). Through the initiative, socially significant projects of non-governmental organizations throughout the country are financed. The goal is to enable people from different regions to live better and more fully. In the press information section of the corporate official website, there are 523 search results: *You and Lidl for a Better Life*.
- 2) The *Support for the Bulgarian Volleyball Federation* campaign – a traditional CSR initiative for the researched organization in the last six years. Our choice was also dictated by an additional circumstance: the campaign has also been running since 2017, but the communication about it is more limited compared to that of the *You and Lidl for a Better Life* campaign.
- 3) The *RESet Plastic* campaign – started in 2018. The period coincides with the declared intention and goal of the investigated organization to reduce the consumption of plastic by 30% by 2025 and to make 100% of the packaging of its own branded products as possible recyclable.

The analysis of the results shows that people with the highest level of education use the company's official website as the main source of information. We believe that consumers with a higher level of education should demonstrate a greater interest in relevant social topics and issues. Among these problems, we position the social responsibility activities of the business organization. These activities are aimed at engaging consumers, i.e. towards attracting individuals to think and act in a way that supports: 1) the very realization of the CSR activity and 2) the well-being of the consumers themselves, social groups and the whole society. Respondents with secondary education who are familiar with the initiatives of the researched company are also informed mainly from its official website.

The analysis of the survey results shows that the majority of graduates are not familiar with the company's social responsibility initiatives. They are most familiar with the *Support for the Bulgarian Volleyball Federation* initiative (73%), with 21% of them being informed by the TV commercials and 19% - by the official website. The reason for this can be found in the more saturated advertising messages broadcast in the past year for specific CSR initiatives. Figures 5, 6 and 7 present data on the general awareness of consumers for the three considered campaigns.

Figure 5. Information sources of consumers for the campaign: Support for the Bulgarian Volleyball Federation

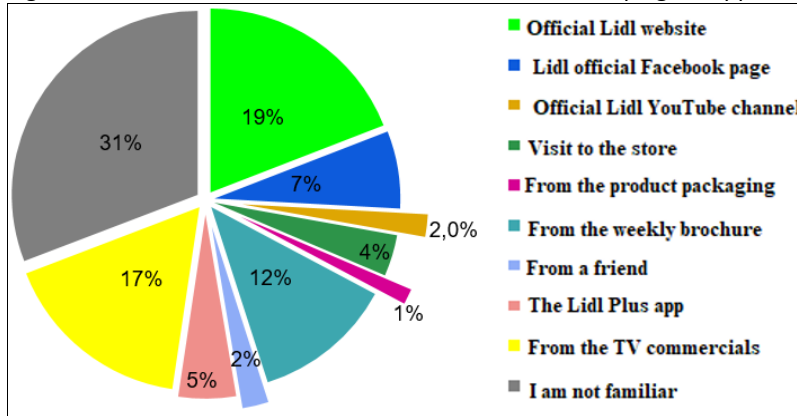


Figure 6. Information sources of consumers for the campaign: REset Plastic

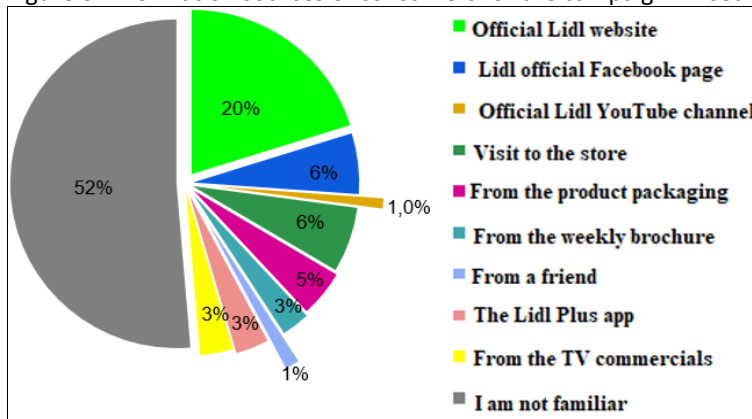
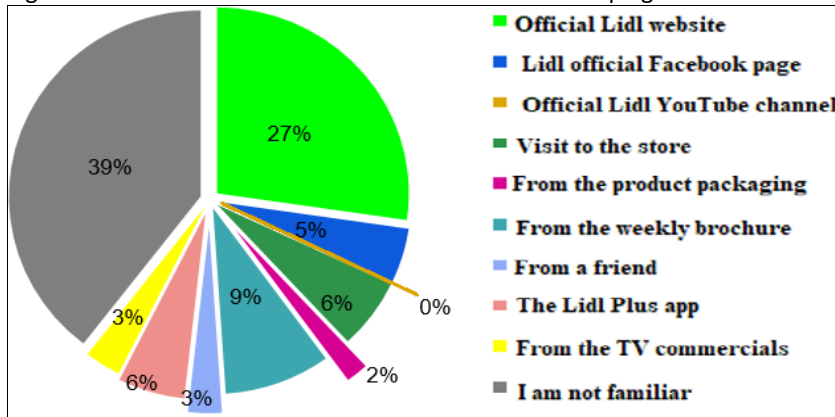


Figure 7. Information sources of consumers for the campaign: You and Lidl for a Better Life

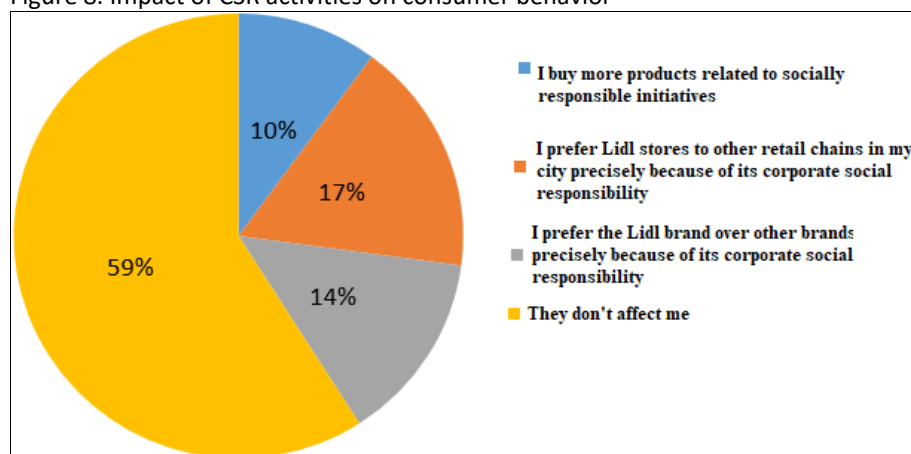


Respondents are the least familiar with the plastic recycling initiative *REset Plastic* – 57%. About the *You and Lidl for a Better Life* campaign, 27% of graduates got information from the company's official website. Those who were informed about the *REset Plastic* campaign did so from the official website – 19%. Among respondents with secondary education, the percentage of those informed about the campaign *You and Lidl for a Better Life* is also the highest – 23%. As with graduates, respondents with secondary education are mostly not familiar with the *REset Plastic* campaign – 45%. About the *Support for the Bulgarian Volleyball Federation* campaign, the respondents were informed mainly from the official website (19%) and from television advertisements (17%). This is where the importance of consumer communication channels comes into play. The feedback is an alarm system for their media habits and awareness of CSR campaigns.

An important part of consumer feedback research is related to obtaining and analyzing information on how CSR communication influences their behavior. We should note that respondents' attention is directed towards sharing information about CSR impact. The data from our survey show that in the 35-44 age group, consumers who were not influenced by the company's CSR is the largest percentage 24%. An opposite trend in behavior is

observed among younger respondents in the 25-34 age group. They (37%) buy more products related to socially responsible initiatives. Figure 8 shows the overall impact of CSR on consumer behavior. More than half of consumers (59%) say they feel no impact.

Figure 8. Impact of CSR activities on consumer behavior



The lowest percentage answered that they started buying more products related to socially responsible initiatives – 10%.

## 6. CONCLUSION

The overall research results and analysis of the feedback from the consumers of the business organization can give extremely useful information for the overall communication approach, as well as for the targeted CSR communication. The variety of demographic factors, media habits, and store exposure of stakeholders can be seen as bright lights in the organizational alarm system. They are also preconditions for developing a differentiated approach to individual groups of consumers. Maintaining a kind of alarm system in terms of communication requires at least two-way transfer of information, feedback from research, analysis of data and their implementation in business activities dedicated to CSR.

Communication activities in the field of CSR should be centered on two-way interaction with the audience. Part of it is the regular research and analysis of data on the current attitudes and positions of consumers, which are a powerful engine for the CSR policy of the business organization.

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## Basel Komitesi: Küresel Finansal Standartların Düzenlenmesindeki Rolü ve İşlevleri

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**Özet:** Azerbaycan Cumhuriyeti'nin 2022-2026 sosyo-ekonomik kalkınma stratejisi, finans sektörünün tüm kesimlerinin finansal istikrar düzenleme çerçevesinin uluslararası standartlarına uyarlanmasını ve bu konuda Basel standartlarına uyumun sağlanmasını yansıtmaktadır. Bu açıdan Basel standartlarını ve bunları belirleyen organ olan Basel Komitesi'nin faaliyet alanını incelemek önemlidir. Bu makalede, Basel Komitesi'nin uluslararası mali standartlardaki düzenlemelere dayalı olarak çalışması ve organizasyon yapısı incelenmekte, Komite'nin bankacılık denetimi ve finansal istikrar ve gelişimindeki önemli rolü açıklanmaktadır. Komitenin kökenlerini, hedeflerini ve gelişim aşamalarını, uygulama alanlarını ve Basel I, Basel II ve Basel III gibi düzenleyici standartların temel farklılıklarını kapsar. Bu standartlar finansal sistemin sağlığını önemli ölçüde iyileştirmiş olsa da, krediler üzerindeki potansiyel olumsuz etkileri ve özellikle teknoloji gelişmeleriyle ilgili olmak üzere küresel olarak gelişen ve ortaya çıkan riskleri ele almak üzere sürekli revizyonlara tabidirler. Genel olarak, Basel Komitesi'nin faaliyetleri uluslararası bankacılık sektörünün istikrarı ve sağlamlığının sağlanmasında önemini korumaktadır. Makalede, Basel Komitesi'nin finansal sistem üzerindeki büyük etkisi vurgulanıyor ve bu standartların küresel bankacılık sisteminin istikrarını güçlendirmede önemli bir rol oynadığı doğrulansa da, finansal piyasaların gelişimi ve teknolojilerin ortaya çıkışı hızlı küreselleşmeyle bağlantılı yeni zorluklarla başa çıkabilmek için sürekli ayarlamalara ihtiyaç duyulduğu da belirtiliyor.

**Anahtar Kelimeler:** Basel Komitesi, Bankacılık Denetimi, Finansal İstikrar, Düzenleyici Çerçeve

**Abstract:** The socio-economic development strategy of the Republic of Azerbaijan for 2022-2026 reflects the adaptation of all segments of the financial sector and its financial stability regulatory framework to international standards and ensuring compliance with Basel standards. In this respect, it is important to examine the Basel standards and the field of activity of the Basel Committee, which is the body that determines them. In this article, the work and organizational structure of the Basel Committee based on regulations in international financial standards are examined, and the important role of the Committee in banking supervision and financial stability and development is explained. It covers the committee's origins, objectives and stages of development, areas of application, and key differences between regulatory standards such as Basel I, Basel II and Basel III. While these standards have significantly improved the health of the financial system, they are subject to ongoing revisions to address potential adverse impacts on credit and emerging risks globally, particularly related to technology advancements. Overall, the activities of the Basel Committee remain important in ensuring the stability and soundness of the international banking sector. The article emphasizes the great influence of the Basel Committee on the financial system, and although it is confirmed that these standards play a significant role in strengthening the stability of the global banking system, it is also noted that constant adjustments are needed to cope with new challenges associated with rapid globalization, the development of financial markets and the emergence of new technologies.

**Key Words:** Basel Committee, Banking Supervision, Financial Stability, Regulatory Framework

### 1. GİRİŞ

Bu çalışmada Basel Komitesinin uluslararası mali standartların düzenlenmesine ilişkin çalışmaları ve organizasyon yapısı ve gelişimi anlatılmaktadır. Basel Komitesi, bankacılık denetiminin ve finansal istikrarın sağlanmasında önemli rol oynayan uluslararası bir kuruluştur. Bu makalede Basel Komitesi'nin oluşturulma nedenleri, yönetim yapısı, Basel I, Basel II ve Basel III gibi düzenleyici standartların hedefleri ve gelişim aşamaları, standartların uygulama alanları ve temel farklılıkları anlatılmaktadır. Makalede, Basel Komitesi'nin finansal sistem üzerindeki büyük etkisi ve işbirliği ihtiyacı vurgulanmakta ve risk yönetimi ilkelerini uygulayarak bankalar arasında sağlam bir finansal sistem oluşturmaya yardımcı olan organizasyonun faaliyetleri desteklenmektedir.

### 2. ARAŞTIRMA YÖNTEMİ

Araştırma çalışmasında Basel Komitesi'nin çalışma prensipleri, yönetim yapısı ve standartlarının mantıksal özetleme ve karşılaştırmalı analizi yöntemleri kullanılmıştır. Araştırmanın yürütülmesinde Basel Komitesi'nin veri tabanlarından, raporlarından ve resmi açıklamalarından, bilimsel literatürden yararlanılmıştır.

## 2.1. Basel Komitesinin kurulması ihtiyacı

Basel Komitesi, Batı Almanya'daki Bankhaus Herstatt olayı gibi uluslararası para ve bankacılık piyasalarında süregelen krizlerin mantıksal bir sonucu olarak 1974 yılının sonlarında 10 ülkenin merkez bankaları tarafından Bankacılık Düzenleme ve Denetleme Uygulamaları Komitesi olarak kuruldu. Bu nedenle, çöken Bretton Woods (1944-1973) sisteminin yerine yeni uluslararası mali yapıların inşa edilmesine ihtiyaç duyuldu. İlk toplantısı Şubat 1975'te yapılmış olup, bugün bu kurumun toplantıları yılda 3-4 kez düzenlenmektedir. "Büyük-10" (G10) olarak başlayan Komite, 2009 ve 2014 yıllarında üyeliğini genişleterek 28 ülkeden 45 kurumu bünyesinde barındırıyor. Merkezi İsviçre'nin Basel kentinde bulunan Uluslararası Ödemeler Bankası'nda bulunan Komite, dünya çapında bankacılık denetiminin kalitesini iyileştirerek finansal istikrarı artırmak ve üye olan ülkeler arasında bankacılık denetimi konusunda düzenli işbirliği için bir forum oluşturmak amacıyla kurulmuştur. Kurumun üyeleri arasında bankacılık faaliyetlerini düzenleme yetkisine sahip merkez bankaları ve düzenleyici kurumlar yer almaktadır. Komitede ayrıca merkez bankaları, düzenleyici kurumlar, uluslararası kuruluşlar ve diğer kurumları temsil eden 9 gözlemci üye yer alıyor. Uluslararası Para Fonu, Avrupa Komisyonu, Avrupa Bankacılık Otoritesi, Basel Danışma Grubu ve diğer düzenleyici kuruluşlar ile uluslararası kuruluşlar, Komitenin çalışmalarına aktif olarak katılmaktadır. Komitede birçok ülkeden iki kurum temsil edilmektedir; bunun nedeni, bazı ülkelerde merkez bankalarının finans sektörünü düzenleyen tek kurum olmamasıdır (Basel Committee membership, 2013).

Tablo 1. Basel Komitesi üyeleri

Basel Komitesi Üyeleri	
Üye ülke	Organizasyonu temsil etmek
	<b>Sorumlu üyeler</b>
Arjantin	Merkez Bankası
Avustralya	Rezerv Bankası İhtiyatlı Düzenleme Ajansı
Belçika	Ulusal Banka
Brezilya	Merkez Bankası
Kanada	Kanada bankası Finansal kurumların düzenleme ofisi
Çin	ÇHC Bankası Bankacılık Düzenleme Komisyonu
Avrupa Birliği	Merkez Bankası Merkez Bankası Tek Düzenleme Mekanizması
Fransa	Fransa Bankası İhtiyatlı düzenleme ve karar alma organı
Almaniya	Bundesbank Federal Mali Düzenleme Kurumu (BaFin)
Hong Kong	Para Otoritesi
Hindistan	Rezerv Bankası
Endonezya	Endonezya Bankası Finansal Hizmetler Ajansı
İtalya	İtalya Bankası
Japonya	Japonya Bankası Finansal Hizmetler Ajansı
Kore	Kore Bankası Mali Düzenleme Hizmeti
Lüksemburg	Finans sektörünün gözetim sektörü
Meksika	Meksika bankası Ulusal Bankacılık Komisyonu
Hollanda	Hollanda Bankası
Rusya	Merkez Bankası
Suudi Arabistan	Merkez Bankası
Singapur	Para Otoritesi
Güney Afrika Cumhuriyeti	Rezerv Bankası
İspanya	İspanya Bankası

İsveç	Merkez Bankası
	Mali Düzenleme Kurumu
İsviçre	Ulusal Banka
	Mali Düzenleme Kurumu
Türkiye	Merkez Bankası
	Bankacılık Denetleme ve Düzenleme Kurumu
İngiltere	İngiltere bankası
	İhtiyatlı Düzenleme Kurumu
ABD	Federal Rezerv Denetleme Kurulu
	New York Federal Rezerv Bankası
	Döviz Kontrolörlüğü Ofisi
	Federal Depzoit Sigorta Şirketi
<b>Gözlemciler</b>	
Şili	Bankacılık ve Finansal Kuruluşlar Düzenleme Kurumu
Malezya	Merkez Bankası
BAE	Merkez Bankası
<b>Düzenleyici kuruluşlar, uluslararası kuruluşlar ve diğerleri</b>	
Uluslararası Ödemeler Bankası	
Basel Danışma Grubu	
Avrupa Bankacılık Otoritesi	
Avrupa Komisyonu	
Uluslararası Para Fonu	
<b>Sekreterlik</b>	
Uluslararası Ödemeler Bankası	

Kaynak: Basel Komitesi üyeliği, 2022, Basel Bankacılık Denetleme Komitesinde temsil edilen kurumlar

## 2.2. Basel Komite Yönetim yapısı

Basel Komitesinin yönetim yapısı yönlendirme, standardizasyon ve araştırmaya dayalı grupları ve BIS'in ev sahipliği yaptığı bir Sekreterliği içerir. Komite, ilk kez 1975 yılında oluşturulan ve birçok kez revize edilen Basel Konkordatosu'ndan başlayarak, Basel I, Basel II, Basel III olarak bilinen sermaye yeterliliği anlaşmaları ve banka düzenlemelerine yönelik bir dizi uluslararası standart oluşturdu. Basel Komitesi, ulusal sermaye yeterliliği hesaplama yöntemlerinin uyumlaştırılması ve bu konuda asgari standartların uygulanması amacıyla 1988 yılında Basel I adı verilen sermaye yeterliliği anlaşmasını hazırlamıştır. Sonuç olarak Basel Komitesi tarafından açıklanan uluslararası sermaye yeterliliği düzenlemesi, birçok ülkede farklı standartlarla uygulanan sistemleri standart hale getirdi. Basel I standartları olarak adlandırılan bu düzenleme, başta "Büyük-10" ülkeleri (G-10) olmak üzere birçok ülkenin denetim otoriteleri tarafından benimsenmiş ve 100'den fazla ülkede uygulanmıştır.

## 2.4. KOMİTE'NİN KRİZ MÜDAHALE ARACI OLARAK BASEL STANDARTLARI

Küreselleşmenin gelişmesiyle birlikte dünyanın her yerinde bankalar arasında bir bağlantı ortaya çıkıyor. Bankaların hesaplanmayan risklere maruz kalması durumunda, söz konusu olan fon miktarının büyük olması nedeniyle yıkıcı durumlar ortaya çıkabilmekte ve bu olumsuz etki hızla birçok ülkeyi etkileyebilmektedir. 2008 yılında başlayan ve büyük ekonomik kayıplara yol açan finansal kriz bunun en açık örneğidir. Basel I'den Basel III'e geçişin temel amaçlarından biri uluslararası düzeyde asgari sermaye gereksiniminin belirlenmesi ve finansal istikrarın sağlanmasıyla ilgilidir (Difference Between Basel 1 2 and 3, 2017).

Basel I kriterlerinin en temel dayanağı, müşterinin kredi riski açısından sermaye gereksiniminin OECD ülkesi olup olmama kriterlerine göre belirlenmesidir. Kredilendirmede OECD ülkelerine kredi imkanı sağlanması ilkesi uygulanmıştır. Basel I kriterleri, bankaların krizlere ve finansal kırılganlığa karşı dayanıklılıklarını artırmak ve finansal istikrarı sağlamak için uymaları gereken ana kriterleri belirliyor. Genel olarak Basel I standartları, yani sermaye yeterliliği anlaşması, küresel bankacılık sisteminin sağlığı ve istikrarının güçlendirilmesinde ve uluslararası faaliyet gösteren bankalar arasındaki rekabetin artmasında olumlu etki yarattı. Bununla birlikte finansal piyasalar hızla gelişmekte ve dünya finansal sistemi zaman zaman ciddi ekonomik gerilimlerle karşı karşıya kalmaya başlamıştır. Ayrıca Basel I standartlarının bankaların risk düzeylerini tam olarak yansıtmaması, mevzuattan kaynaklanan farklılıklar nedeniyle ortaya çıkabilecek sorunları engelleyememesi, operasyonel risk,

yeterli sermayeye sahip olma ve risk yönetimi gibi bazı riskleri kapsamaması nedeniyle bankalara olan güven ya da bankacılık sistemine olan güven sağlığın sağlanmasında yetersiz kalmış ve yeni bir düzenleme sistemine ihtiyaç duyulmuştur. Basel I standartları, bankaların krizlere ve finansal kırılganlığa karşı dayanıklılıklarını artırmak ve finansal istikrarı sağlamak için uymaları gereken ana kriterleri belirliyor. Bu standartlarda bankaların kredi verirken belirli ilkelere uyması ve risk alma katsayılarının belirli bir değerin üzerinde olmaması önerildi. Ayrıca bankaların sermaye güvenliğinin sağlanmasına yönelik getirilen şartlar da belirlendi. Basel I standartları esas olarak kredi risklerine odaklanmaktadır. Ayrıca asgari yüzde 8 sermaye zorunluluğu, sermayenin, varlıkların değer kazanması ve kredi ve piyasa risklerini ölçmeye yönelik basit bir yaklaşımın bu standartların temel özellikleri olduğunu vurgulamak mümkündür. Sermaye hesaplama kuralları aşağıdaki şekilde tanımlanmıştır:

#### **Gerekli sermaye = %8 \* Risk ağırlıklı varlıklar**

Bankalarda etkin risk yönetimi ve piyasa disiplininin geliştirilmesi, sermaye yeterliliği ölçümlerinin etkinliğinin artırılması ve bu sayede güçlü ve etkin bir bankacılık sisteminin oluşturulması ve finansal istikrara katkı sağlanması amacıyla 2004 yılında Basel I kriterlerinin yerini Basel II kriterleri almıştır (Basel III summary. 2021). Basel II standartlarının temel amacı, finansal sistemin güvenilirliğini ve istikrarını artırmak, aynı zamanda risklere daha detaylı bir yaklaşım ve serbest rekabet ortamı sağlamaktır. Basel II anlaşması, riskleri yasal sermaye ihtiyaçları ile daha iyi hizaladı, risk ölçümü ve yönetimindeki gelişmeleri dikkate alarak daha kapsamlı bir yaklaşım oluşturdu, finansal sistemin güvenliğini ve sağlamlığını desteklemeye devam etti ve belirli bir odaklanma ile değişen karmaşıklık düzeylerine sahip uluslararası bankalarda eşit bir oyun alanını kolaylaştırdı.

Basel II'nin en önemli ilkelerinden biri risk yönetiminin tek merkezde yoğunlaşmaması, çok merkezli düzenlenmesi gerektiği, yani kredi kuruluşlarının bir müşteriye ticari kredi vermek zorunda kaldıklarında, müşterilerini KOBİ, perakende KOBİ veya kurumsal KOBİ kategorilerinden birine dahil etmelidir. Bunu yaparken derecelendirme kuruluşlarının verdiği derecelendirmeler dikkate alınmakta ve derecelendirme kuruluşlarının derecelendirmelerine göre müşterinin kredi alıp alamayacağı veya hangi maliyetle kredi alabileceği belirlenmektedir. Bu nedenle Basel II'nin ana merkezi fikri, kredilendirmenin müşterinin kendine özgü durumuna bağlı olarak farklı şekilde uygulanabileceği fikrine dayanmaktadır. Basel II'de sermaye gereksinimlerinin nasıl hesaplanacağı, riske maruz değer yönetimi, sermaye yeterliliğinin nasıl değerlendirileceği ve açıklanacağı, kredi, piyasa ve operasyonel riskin basit hesaplanmasının yanı sıra istatistiksel, matematiksel risk ölçüm yöntemlerine dayalı standart yöntemlere ilişkin hükümler bulunmaktadır (İ.Arslan,2007).

Basel II ilkelerinin uygulanması, toplam sermaye, kredi arzı ve ekonomik faaliyet arasında doğrudan bir bağlantı yaratmaktadır. Öte yandan aşırı düzenlemenin olumsuz etkileri de olabilir. Dolayısıyla bunun sonucunda finansal aracılığın maliyetinin artması ve bankacılık sektörünün karlılığının azalması ihtimali bulunmaktadır. Aynı zamanda katı düzenlemeler, bankaları kredileri sıkılaştırmaya zorlayabilir ve bu da istikrar dönemlerinde ekonomik büyüme üzerinde olumsuz etki yaratabilir. Daha fazla sermaye toplamak zorunda kalan bankalar kredi marjlarını artırabilir. Öte yandan, sıkı ihtiyati düzenleme gereklilikleri, ekonomik ve finansal krizlerin bankacılık sisteminin istikrarı üzerindeki etkilerinin en aza indirilmesinde olumlu bir etki yaratacaktır. Basel II ilkeleri, bankaların risk tanımlama ve ölçümünde daha gelişmiş ve esnek bir yaklaşım benimseyerek riskleri daha etkin yönetmelerine olanak sağlamıştır. Özellikle bankaların içsel derecelendirme modelleri gibi ek araçları kullanması, kredi risklerinin daha doğru ölçülmesini sağlayan bir unsur olarak değerlendirilebilir. Özetlemek gerekirse, Basel II'de aynı sermaye kavramı ve aynı yüzde 8'lik sermaye zorunluluğu korunmuş, ancak operasyonel ve piyasa risklerinin yanı sıra risk bazlı yaklaşımlar da getirilmiş ve OECD ülkelerine yönelik özel yaklaşım iptal edilmiştir. Basel II anlaşmasının metni, beş yıllık bir istişare süreci sonucunda 2004 yılında yayımlandı, 2005 yılında güncellendi ve kapsamlı versiyonu Haziran 2006'da yayımlandı (Basel III: international regulatory framework for banks, 2017).

Basel III değişiklikleri, Basel Bankacılık Denetim Komitesi'nin şimdi ve gelecekte uygulayacağı tüm standartları entegre eden bir sistemdir. Basel III, Basel Bankacılık Denetim Komitesi tarafından 2007-09 mali krizine yanıt olarak geliştirilen, uluslararası düzeyde kabul görmüş bir dizi önlemdir. Tedbirlerin amacı bankaların düzenleme, denetim ve risk yönetimini güçlendirmektir. Tüm Basel Komitesi standartları gibi, Basel III standartları da uluslararası banka varlıklarına uygulanan asgari gerekliliklerdir. Üyeler, Komite tarafından belirlenen süre içerisinde standartları kendi yasal çerçeveleri çerçevesinde uygulayabilirler (Basel III: international regulatory framework for banks, 2017).

Basel III'ün temel amacının, daha fazla makroekonomik riske hazırlık amacıyla bankaların tutacakları ek sermaye tamponunun belirlenmesi olduğunu belirtmek gerekir. Basel I standardı minimum risk gereksinimlerine

sahipken, Basel II risk yönetimine (operasyonel, stratejik ve itibar riskleri dahil) geniş bir yaklaşım getirmiştir. Basel II'de tanımlanan risklerin yanı sıra Basel III'te likidite riskinin değerlendirilmesi de standartlarda yer aldı.

### 3. BASEL 3 STANDARTLARININ OLUŞUMU

Basel III standartları, Basel Komitesi'nin küresel mali ve ekonomik krizlere tepkisinin merkezi bir unsurudur. Bu standartlar özünde, kriz öncesi dönemde düzenleyici çerçevede var olan eksiklikleri gidererek sistematik panik ve krizlerin önlenmesine hizmet etmektedir (Basel Committee on Banking Supervision - Bank for International Settlements, 2017). Basel Komitesi, 2010 yılından bu yana yürürlükte olan Basel III standartlarının iyileştirilmesini 2017 yılında tamamlamıştır. 2017 reformları, risk ağırlıklı varlıkların hesaplanmasında güvenilirliğin artırılmasını ve bankaların sermaye oranlarının karşılaştırılabilirliğini geliştirmeyi amaçladı. Böylece küresel mali kriz bir takım eksikliklerin varlığını gündeme getirmiştir. Bu nedenle, çok sayıda çalışma, ROA'ların yalnızca banka portföylerinin riskliliğine atfedilemeyecek kadar geniş bir varyasyonunu ortaya çıkarmıştır. Yetkisiz değişiklikler sermaye oranlarına güvensizlik yarattı ve reformlar risk bazlı sermaye çerçevesinin güvenilirliğini yeniden sağlamayı amaçlıyordu. Öte yandan, dahili modeller standart yaklaşımlara göre daha ayrıntılı risk değerlendirmelerine izin vermelidir. Ancak, içsel modele dayalı olarak asgari sermaye gereksinimleri belirlenirken risk ağırlıklarının azaltılmasına yönelik teşvikler mevcuttur ve reformlar, bankaların içsel modeli kullanmasına bazı kısıtlamalar getirilmesini öngörmektedir. Aynı zamanda Basel III çerçevesindeki reformlar uygulanırken kredi, operasyonel ve piyasa risklerinin hesaplanması, kredi değerlendirmesine yönelik standart yaklaşımlarda değişiklik yapılarak karşılaştırılabilirlik ve risk duyarlılığının artırılmasının amacı bankaların daha fazla kâr elde etmesinin önüne geçmektir. Asgari sermaye gereksiniminin hesaplanmasında içsel model kullanılarak limit belirlenmesi ve küresel öneme sahip bankalar için daha yüksek kaldıraç oranı uygulanması hususları da kabul edilmiştir (Basel III: Finalising post-crisis reforms, 2017).

Basel III, Basel Bankacılık Denetimi Komitesi ve 28 ülkenin merkez bankalarından oluşan bir konsorsiyum tarafından 2007-2009 mali krizine yanıt olarak geliştirilen, uluslararası kabul görmüş bir önlem paketidir. Yeni uygulama kurallarının kabul tarihi başlangıçta 2015 iken daha sonra bu tarih birkaç kez değiştirilerek son olarak 01 Ocak 2022 olarak belirlendi. Genel olarak bu adımlar, bankacılık risklerinin düzenleme, kontrol ve yönetim düzeyinin güçlendirilmesine odaklandı. Basel III standartları aynı zamanda bankalara finansal stres zamanlarında aşırı borçlanmadan korunmak için yeterli likidite sağlamayı amaçlayan likidite gerekliliklerini de belirlemektedir.

Basel III kuralları bankaların sermaye yapılarında bir takım temel değişiklikler içermektedir. Öncelikle aktif kompozisyonunda asgari kişisel sermaye tutarı %2'den %4,5'e çıkarıldı. Ayrıca %2,5 oranında ilave artıma ihtiyaç duyulmakta olup, bu da toplam sermaye gereksiniminin %7 olmasına neden olmaktadır. Bu artım finansal stres altında kullanılabilir, ancak bunu yapan bankalar temettü ödeme ve sermaye kullanma kabiliyetlerinde kısıtlamalarla karşılaşacaktır. Bankaların bu değişiklikleri uygulamak için 2019 yılına kadar süreleri vardı, bu da onlara kredilerin ani bir şekilde donmasını önlemek için yeterli zaman tanıdı. Bu kurallar nedeniyle gelecekte bankaların kısmen daha az kârlı olacağı göz ardı edilemez. Basel III'ün asgari sermaye zorunluluğu %7 olmasına rağmen, pek çok bankanın güvenlik seviyelerini artırmak amacıyla daha yüksek oranları korumaya çalışması muhtemeldir (Basel Committee on Banking Supervision, 2010).

#### 3.1. BASEL III'E GEÇİŞİN EKONOMİK ETKİLERİ

Ampirik çalışmalar, Basel düzenlemelerinin benimsenmesinin çeşitli kanallar yoluyla ekonomik kalkınma üzerinde bazı olumsuz etkileri olabileceğini göstermektedir.

Tablo 2. Basel düzenlemelerinin olası ekonomik boyutları

Basel 3 kriterleri	Ekonomik kalkınma üzerindeki olumlu etki kanalları	Ekonomik kalkınma üzerindeki olumsuz etki kanalları	Olumsuz etkileri azaltmanın olası yolları
Artan sermaye gereksinimleri	Bankacılık sektörünün ve sonuçta ekonomik istikrarın desteklenmesi	Borç verme ve bunun sonucunda ekonomik gelişmeyi yavaşlatma etkisi vardır.	Standartların yerel koşullara uyarlanmış ve aşamalı uygulanması
Stres senaryolarına karşı dirençli olmak için yüksek kaliteli likit		Kredi kullanılabilirliği ve ekonomik kalkınma üzerindeki olumsuz etki	Yerel bankacılık sektörünün potansiyelini ve

<b>varlık tutma gereksinimleri</b>			yeteneklerini artırmak
<b>Kaldıraç oranı</b>	Risk almayı sınırlamak	Kredi arzının sınırlanması ve yatırımın ve ekonomik büyümenin olumsuz etkilenmesi	Risk yönetimi kültürünün yükseltilmesi
<b>Döngüsellğe karşı sermaye tamponları</b>	Yüksek kredi büyümesinin olduğu dönemlerde yüksek sermaye talebi kredi patlamasını yavaşlatıyor		İzleme, değerlendirme ve hesap verebilirliği güçlendirme
<b>Risk yönetimi için genel gereklilikler</b>	Güçlendirilmiş risk yönetimi uygulamaları bankacılık sektörünün istikrarını artırmakta, krizleri önleyerek sürdürülebilir ekonomik kalkınmayı desteklemektedir.		Bağımlılığın azaltılması ve alternatif finansman ve kredi kaynakları Finansman kaynağı olarak sermaye piyasalarının gelişiminin desteklenmesi
<b>Diğer kriterlere ilişkin genel etkiler</b>	Bankacılık sektörüne olan güven artıyor  Bankacılık sektöründe şeffaflığın artırılması  Ortak bir küresel standardın oluşturulması  Ulusal bankaların uluslararası piyasalara daha iyi ve aktif katılımı için koşulların yaratılması	Bankacılık hizmetlerinin maliyetinde artış  Gölge bankacılığın potansiyel büyümesi  Düzenleme gerekliliklerini karşılamak için kaynaklara erişimde küçük bankaların veya az gelişmiş ülkelerdeki bankaların rekabet gücü üzerinde olumsuz bir etki  Bölgesel farklılıklar ve ülkelerin kurumsal koşullarındaki farklılıklar dikkate alınmadan herkes için ortak standartların uygulanması, bazı bankacılık segmentlerinde kısıtlamalara yol açabilmektedir.	Uluslararası finans kurumları ve diğer ülkelerin düzenleyici kurumlarıyla işbirliğinin genişletilmesi Düzenlemelerdeki değişiklikler, bunların niteliği ve faydaları konusunda kamuoyunun ve bankacılık sektörünün farkındalığının artırılması, kriterlerin olası etkileri konusunda şeffaf iletişimin yürütülmesi Bankacılık dışı segmentlerin gelişiminin izlenmesi ve risk yönetimi. Sürekli inceleme ve uyarılma

Kaynak: Yazar tarafından çeşitli literatürlerin incelenmesi sonucunda derlenmiştir.

Bu bağlamda Basel kriterlerine geçişin olası olumsuz etkilerinin önlenmesi amacıyla geniş kapsamlı önleyici tedbirlerin alınması dikkate alınarak sektörün tüm paydaşları arasında yukarıda bahsedilen koordineli faaliyetlerin hayata geçirilmesi uygun görülmektedir. Bu bağlamda, bu standartlara geçiş öncesinde bankacılık sektörünün yasal çerçevesi ve istatistiksel göstergelerinin Basel standartlarına uygunluğuna ilişkin teşhis değerlendirmesinin yapılması ve bankacılık sektörüne yönelik bir Yol Haritası hazırlanmasının gerekli olduğu uygun görülmüştür.

#### 4. SONUÇ

Sonuç olarak, Basel Bankacılık Denetim Komitesi, uluslararası para ve bankacılık piyasalarında devam eden krizlere yanıt olarak oluşturuldu ve ana hedefi, bozulan Bretton Woods sisteminin yerini alacak yeni uluslararası mali yapılar oluşturmaktır. Yıllar geçtikçe komite gelişti, üyeliğini genişletti ve sermaye yeterliliğine odaklanarak bankacılık düzenlemesine yönelik uluslararası standartlar oluşturdu.

Basel I, Basel II ve Basel III'ü kapsayan Basel standartları, küresel bankacılık sisteminin istikrarının ve dayanıklılığının artırılmasında önemli bir rol oynamıştır. Özetle, Basel I asgari sermaye gerekliliklerini getirdi, Basel II iyileştirilmiş risk yönetimini sağladı ve Basel III likidite ve sermaye artımları gibi konuları daha geniş bir şekilde ele aldı. Bu standartlar finansal sistemin sağlığını önemli ölçüde iyileştirmiş olsa da, krediler üzerindeki potansiyel olumsuz etkileri ve özellikle teknoloji gelişmeleriyle ilgili olmak üzere küresel olarak gelişen ve ortaya çıkan riskleri ele almak üzere sürekli revizyonlara tabidirler. Genel olarak, Basel Komitesi'nin faaliyetleri uluslararası bankacılık sektörünün istikrarı ve sağlamlığının sağlanmasında önemini korumaktadır. Öte yandan Basel standartlarının benimsenmesi, olası ekonomik etkileri dikkate alan, olumsuz etkileri azaltacak stratejik ayarlamalar ve önleyici tedbirler gerektiren dengeli bir yaklaşımı gerektirmektedir. Bankacılık sektörünün koordineli çalışmalarla ve özelleştirilmiş bir uygulama yol haritasıyla hazırlığının sağlanması, finansal istikrarın sürdürülebilir ekonomik büyümeyle uyumlu hale getirilmesi açısından büyük önem taşıyor.

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## The Involvement of Social Networks In Globalization and Deglobalization Processes

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**Abstract:** One of the economic topics of the modern world is that represented by the phenomena of globalization and, more recently, deglobalization. Given the political, economic and social context of the last five years, we have proposed to analyze through this paper the role that social networks have in the process of globalization, respectively deglobalization, in the situation where social networks are recognized as an eloquent example of global coverage on the communication and promotion of ideas, facts, products and services.

### The digital economy in the context of globalization and the development of the Internet

The electronic market is the foundation on which the digital economy has been built and consolidated, which is based "on information technology and has as factors communities of producers, traders, consumers of electronically traded goods and services" (Roşca, Ghilic-Micu şi Stoica 2009)

The digital economy is considered to be "the driving force behind the economies of developed countries, thus contributing to the overall well-being of societies and economic growth. It also states that the digital economy, based on information technology, including among the key factors for smart, sustainable growth" (Comisia Europeană, 2010).

According to (Roşca, Ghilic-Micu şi Stoica 2009), "the digital economy fulfills the following functions:

- Represents the meeting place between the seller and the buyer
- It allows establishing the content of the offer
- Allows the development of business partnerships
- Enables price discovery, facilitated by determination and comparison processes
- Ensures the logistics necessary for the conduct of business
- Provides payment methods
- It ensures the institutional infrastructure, the legal framework and the regulations in force".

While "the Internet infrastructure provides optimal support for the development of the functions of the digital economy, digital applications, represented by software products and IT systems, such as commercial websites, enable the development of electronic businesses" (Roşca, Ghilic-Micu şi Stoica 2009) . "Intermediaries are those who do not earn income directly from transactions but indirectly through commissions, paid advertisements, taxes, etc." (Roşca, Ghilic-Micu şi Stoica 2009)

Online transactions bring together all types of representation of the economic environment from "the framework of the distribution chain: manufacturers, traders, providers of various services that do business on the Internet" (Roşca, Ghilic-Micu şi Stoica 2009)

A new business technology that is based on the Internet is emerging, namely e-commerce for which the new context is proving to be extremely favorable. In the new digital economy, e-commerce is changing the way products and services used to be exchanged. Developing information and communication technology has advanced to the creation of advantageous technologies for the development of electronic commerce.

E-commerce has as its main component the facilitation of the commercialization of tangible goods and services in a faster and cheaper way with the help of electronic media, "followed by related components: establishing market strategies, advertising and promotional activities, virtual contact between merchants and advance support and after sale" (Pistol şi Pistol 2006).



Due to its rapid but also complex development, e-commerce has become both a practical and a theoretical concern, one of the most beneficial ways to market products and services locally, regionally, and, thanks to globalization, more and more internationally.

### **The role of social networks in the context of globalization The role of social networks in the context of globalization**

Globalization, the philosophy of the new economy, is "a trend that has been around for two centuries, but its effects were accelerated with the collapse of the Soviet Union and China's economic opening in the late 1980s—both events embraced by the United States as its principal driver." (Devonshire-Ellis 2022)

There have been expansive changes in recent decades in terms of technology, but most importantly, how technology allows us as a society to communicate with each other. In the same sense, the way communities, societies and even countries have been affected and transformed by technology is felt and the phenomenon has led to globalization.

Experts usually describe four types of globalization: economic, cultural, social, and political globalization.

### **Cultural and social globalization**

Cultural globalization is centered on the transmission of ideas, meanings and values worldwide in such a way as to lead to the extension and intensification of social relations. This is intensified by the shared consumption of cultures that have been transmitted through the Internet, social networks, but also international and intercultural travel, and has added to the processes of local cultural and sports exchanges, contributing to cultural exchanges around the world.

Cross-cultural circulation enables participation in extended social relationships that cross national and regional borders, again leading to increased innovation, exchanges of ideas and a better shared understanding of global issues.

Social globalization includes the freedom of movement of people. This is evident in many ways, not least in tourism, where for the first time in a decade in 2012, global international tourist arrivals to another country exceeded 1 billion. In the context of globalization Not only tourism is growing, we are also witnessing a worldwide labor movement, an international movement that is recognized as an essential part of economic development.

Globalization is also associated with a significant increase in international education. The development of global intercultural competencies in the workforce has increased over the past twenty years. More and more young people are looking to complete their higher education in internationally recognized countries with superior educational potential, and many students consider studying at prestigious universities as a stepping stone for their future, with a view to building a successful career in a particular country .

The process is a win-win one, in addition to the benefit gained by young people following courses at prestigious international universities, foreign students make significant contributions to the economy of the host country, both from a cultural perspective, but also from a financial point of view. Therefore, a number of initiatives have been developed to facilitate the movement and integration of foreign students, including substantial changes to immigration and visa policies and procedures, as well as to bring new ideas and innovations to the workforce. work worldwide.

### **Economic globalization**

Economic globalization refers to the increasing interdependence of the world's economies as a result of the increase in cross-border trade in goods and services, the flow of international capital, and the wide and rapid spread of technologies. It reflects the continuous expansion and mutual integration of market frontiers, and in the 2000s, it was considered to be an irreversible trend for economic development around the world at the turn of the millennium. The rapidly growing importance of information in all kinds of productive activities and marketing are the two major driving forces for economic globalization.

In other words, the rapid globalization of the world's economies in recent years is largely based on the rapid development of science and technology, it resulted from the environment in which the market economic

system spread rapidly throughout the world and developed on the basis of growth division cross-border labor that has penetrated to the level of production chains within enterprises in different countries.

The process of economic globalization is also the process of global industrial restructuring and readjustment. With the development of science and technology and rising income levels, the industrial structures of all countries were also undergoing readjustment and modernization. In recent years, developed countries in the West are gradually entering the era of the knowledge-based economy, and many labor-intensive industries with weak international competitiveness have begun to shift to developing countries.

### **It is globalization irreversible?**

Years ago, researchers considered globalization to be an irreversible process that “reflects the continuous expansion and mutual integration of market frontiers and represents an irreversible trend for economic development around the world at the turn of the millennium. The rapidly increasing importance of information in all types of productive activities and commercialization are the two major driving forces for economic globalization” (Shangquan 2000). In recent years, the globalization process has experienced contradictory periods under the influence of major events with considerable impact on the world economy: the pandemic and the Russian-Ukrainian war.

In 2019, the coronavirus crisis exposed cracks in economic interdependence. In 2022, the war in Ukraine blows up commodity markets. These can be signposts on the road to deglobalization – which is reshaping our world. “In retrospect, in the rush to enter the Chinese market, the West ignored the smaller Russian market, leading to resentments that, as we have seen, are still felt today. However, now, just as it seemed that globalization was about to reach its peak, the West is taking very strategic steps towards possible deglobalization.” (Devonshire-Ellis 2022)

As a result of the first catastrophe, the COVID-19 pandemic, EPICE (European Center for International Political Economy) initiated the “New Globalization” project, which aims to take stock of trade and global dependencies - mainly in Europe - and highlight the role critical of economic openness for the restart of the global economy. EPICE set out to demonstrate that international trade is not just about economics: yes, free trade leads to prosperity, but it also makes societies more resilient.

The second event with a major influence on globalization is the Russian-Ukrainian war, which led to economic sanctions that lead to the question: is globalization a good idea. In the current context it has been concluded that globalization was a big mistake. Unfortunately, globalization turns out to be a wrong strategy in the current political context, namely against the backdrop of the Russian-Ukrainian war and the sanctions that the European Union and NATO member countries have imposed on Russia, as an aggressor country. As a result of these sanctions, all the countries of the world suffer, directly or indirectly. More and more countries are considering limiting globalization in order to no longer depend economically and/or financially on other countries.

Given these extreme events, the question remains open: is economic globalization an irreversible trend? And if it turns out not to be irreversible, how painful will giving up globalization be? We find the answer in the explosion of prices, in the unexpected increase, above all estimates, of inflation superimposed on the two major events described.

### **The role of social networks in the globalization phenomenon**

As an integral part of globalization, social media has transformed the way people communicate in the 21st century. This type of communication has helped transform society into a globalized world, impacting social interactions, financial institutions and the ways used to promote transactions, ways of communicating, including marketing communication. One can talk about the important role of social media in a globalized world.

“The growth of globalization theory coincides with key developments such as the growth of international trade, the global movement of people, the growth of international laws and forums, economic liberalism, and the growth of the Internet and global social networks of digital communications.” (Flew and Iosifidis 2020, vol 82(1))

In the constant drive to globalize, the biggest tool with the biggest impact is social media, without a doubt. Even before brand websites managed to go global, social media did. The revolution has begun. The role of social media has become inevitable. Rather than social networks, the concepts of "global social networks" or "globalization of social networks" have emerged and grown. Today, there is no sure answer to the question "How many people use social networks globally?". But it's safe to say that at least half of the world's population, at worst.

Until recently, promotion was resource-intensive, there was no question of sustainable behavior, before the existence of social networks, companies promoted themselves through printed ads in bus stations or any place where posters could be pasted, there were TV ads, billboards. People didn't used to pay attention to their surroundings. It was a much more expensive way to place an ad and definitely caused a lot more paper waste. Although it was also very expensive to promote yourself in your homeland, promoting yourself in a foreign country meant double the expenses. A team had to be recruited to do the same process in foreign countries and pay that team as well. With currency fluctuations, estimating the profit ratio was quite difficult.

Social networks find their greatest involvement in the process of cultural and social globalization. Cultural globalization involves the transmission of cultural ideas, meanings and values throughout the world, so as to participate in the expansion and intensification of social relations. This aspect is accentuated by the sharing, by the cultural exchanges broadcast through the Internet. Social networking in tandem with international travel has added to the processes of cultural and social exchange, helping to transmit cultural meaning across the globe. Cultural circulation allows people to participate in social relations for which boundaries disappear and, again, leads to increased innovation, exchange of ideas and a better shared understanding of global issues.

Before social networks, communication was more difficult, there were letters, phone books, but there was no way to connect two people from two different continents just like that. The delivery of a letter took a long time, sometimes it could not even reach its destination, finding an address was difficult, sometimes impossible. With phones, an average salaryman could not afford to make international calls.

But social media came along and not only did it make communication between two people sitting next to each other easier; they also facilitated communication between two people living on two sides of the world. Among social networks, being the first example of globalization, Facebook not only helped people communicate and globalize, but also allowed companies to promote themselves on a global scale.

Many companies have offered Facebook ads to use social media for global marketing. With nearly 60,000 people clicking on Facebook ads every day, they've succeeded. And what's the best part? No more paper waste and besides, less TV ads and fewer flyers at bus stops.

With Facebook and many others that followed, the impact of social media on globalization could not have been condescending. Branches of digital marketing have emerged within companies to facilitate the globalization of companies' social networks. This globalization of social media has led companies to have a certified social media account, whether it's on Facebook, Twitter, Instagram or LinkedIn. Companies that didn't have them didn't stay in the global market race.

And maybe it is precisely because social networks have proven to be an effective tool of globalization, now that the danger of deglobalization has appeared, but also in other periods of political crisis, they proceed to "cut" access to some social networks, also as a instrument, but this time of deglobalization.

In this sense, in the context of the Russian-Ukrainian war, deglobalization in the social media sector comes as a political strategy, the limitation of access to some social networks is threatened or even practiced or even its own, territorially limiting social networks are developed with the aim of limiting communication global on the grounds that social media does not encourage the formation of rational, informed deliberation because it influences and amplifies an irrational public mood in which "chaotic enterprises are caught in a daily staging in which ethos, pathos and logos are all mixed" "Ordinary people become the recipients - as well as the senders - of misleading messages that invoke political terms heavily invested with symbolic meaning and emotional valence." (Maldonado 2017)

## Conclusions

Living in a technological age, using technological tools while on the road to global success is inevitable and a good thing. Social media and globalization have helped many companies become what they are today.

With all the information and statistics combined, there is no doubt that social media dominates the global markets when it comes to promotion and sales. Most records have been broken due to the success of social media globalization and many companies have grown as a result of successfully using social media on a global scale.

There is even Social Media Day which was first celebrated by the international news site Mashable on June 30, 2010 to recognize its impact on global communication. Social media has brought the world together on the same platform. It connected people all over the world. Almost everyone uses social media and connects with people around the world in a simple and fast way. In fact, social media has become an important stream of income generation that provides employment to millions of people and plays an important role in the development of today's society.

Social networks also find a significant involvement in the globalization process, especially in cultural and social globalization. The phenomenon of cultural globalization through social networks is accentuated by sharing, by cultural exchanges broadcast through the Internet. Social media in tandem with international travel facilitates cultural and social exchange, helping to transmit cultural meaning around the globe. Cultural circulation allows people to participate in social relations for which borders disappear and contributes to increased innovation, exchange of ideas and a better understanding of global issues.

Years ago globalization was considered to be an irreversible process, a theory that seems to be disproved by the harsh reality of recent years in which the globalization process experienced contradictory periods under the influence of major events with considerable impact on the world economy: the pandemic and the Russian war - Ukrainian.

And maybe it is precisely because social networks have proven to be an effective tool of globalization, now that the danger of deglobalization has appeared, but also in other periods of political crisis, they proceed to "cut" access to some social networks, also as a instrument, but this time of deglobalization. The general conclusion seems to be that, in the current context, globalization has been a big mistake.

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## The Behaviour Of The Albanian Consumer Towards Genetically Modified Products

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**Abstract:** Population growth has made food sufficiency impossible, and the lack of Food has led to the search for alternative ways of providing it. Genetically modified organisms have been seen as a solution to one of the world's biggest problems today. The study of consumer behavior is crucial for orienting the offer of different products. This aspect is also essential for products containing genetically modified organisms, foods created by organisms whose DNA has been altered using genetic engineering and molecular biology techniques. In studies done in different countries, consumers are skeptical of these products. The results of our work go along the same lines, which show that consumers do not tend to go towards GMO products and do not have enough information about them. In this study, we will try to answer our main research questions: How well do consumers know genetically modified foods, and what is their attitude towards GMOs? Are Albanians sufficiently informed about them, and what is their approach to these products?

**Keywords:** product, consumer behavior, genetically modified organisms

### 1. INTRODUCTION

Genetically modified organisms have been seen as a solution to one of the world's biggest problems today. Population growth has made food sufficiency impossible. According to the World Bank report (2020), nearly 690 million people - or 8.9 percent of the global population- are hungry. Food insecurity can worsen the quality of nutrition and increase the risk of various forms of malnutrition, potentially leading to undernutrition and overweight. The cost of healthy meals is unaffordable for more than 3 billion people in the world (World Bank 2021)

As mentioned above, the lack of Food leads to the search for alternative ways such as GMOs. The part of genetic technology that combines hereditary material (genes) from different organisms (plants, animals, and microorganisms) is called recombinant DNA technology or genetic engineering. The organism that arises from a combination of genes is a genetically modified organism (GMO). Food containing or derived from a genetically modified organism constitutes genetically modified Food (WHO 2021). Using DNA recombination technology, an organism is created with specific desired properties in food production to achieve resistance to insects and viruses, tolerance to herbicides, and improved nutritional value of Food.

New technologies affect people's decision-making trends. Changes arise through new processes and products, often improving some dimensions of living and making others worse. In many cases, costs are uncertain in the form of a probability of a threat, usually referred to as risks. This is because new technologies are associated with scientific uncertainty, considering that not all social and individual consequences of their initiation are fully known.

Moreover, innovations impact people's social life, generating conflicts with their previous views and values. This is particularly important in the case of Food and nutrition, when people are faced with daily decisions about how to eat better (Barrena et al., 2009). A consumer's perspective on introducing new GMO products (which are added to pre-existing products) largely depends on the existing information in the system. Therefore, releasing more information about food-related risks shapes people's perception of risk. Consequently, people act on perceived risks, carefully balancing benefits and costs, both in the short term and especially in the long term. Given that the long-term effects are not known with certainty, we will usually refer to these effects as risks, given that there is some information about individuals to form an expectation or a probability of the risk qualitatively. The same can be applied to benefits, which mainly influence product acceptance based on individual subjective knowledge (Boccaletti, S. & Moro, D, 2000)

GMO products are products that are not very familiar to Albanian consumers. The main goal of this paper is to analyze consumer preferences towards GMO products through a survey. The paper continues as follows: in the second chapter, the theoretical background and the review of the literature are analyzed, which includes data on the definition of genetically modified organisms, the benefits and risks that come from them, as well as the main approaches that different authors have proposed. In the third chapter, the methodology followed for conducting the study is analyzed, where the survey of 50 consumers in the city of Tirana was used as the primary method, as

well as the research question and the hypotheses of the paper. In the fourth chapter, we present the analysis of the results, which we showed in survey data reports; in the fifth chapter, we have the conclusions drawn from the study.

## 2. LITERATURE REVIEW

Technological advances in food production are considered inevitable changes in today's food industry, and many new foods or food ingredients consumed worldwide have been produced through genetic modification since the mid-1990s. However, most consumers remain uninformed about genetically modified foods; thus, it is natural that they do not fully understand the scientific basis of their technology, including its potential benefits and risks. Previous studies of this technology show that consumers perceive this as more of a threat than a benefit. The attitude towards a product is based on knowledge about the product itself and its attributes, called bottom-up attitude formation (Bech-Larsen & Grunert, 2003). However, attitudes do not depend only on one specific product but on a good part of them. The more people are aware of GMOs, the more they perceive the benefits to outweigh the risks; however, they are generally unaware of whether or not they consume GMO foods. This result is consistent with many other studies, which found that despite consumers' somewhat greater information about GMO products and their expected benefits, they nevertheless maintain a negative attitude toward GMO foods. This theoretical model has been empirically supported by several studies such as (Moon, 2001) and (Sawhney M. et al., 2004), etc., which state that consumers associate, as a whole, more negative thoughts than positive ones for agro-biotechnology. In addition, evidence suggests that individual behaviors are driven by personal perceptions or beliefs about risks rather than technical assessments of risk provided by experts (Frewer et al., 1998).

### 2.1 WHAT ARE GENETICALLY MODIFIED ORGANISMS?

GMOs result from DNA recombination procedures, biotechnological procedures that allow genetic improvements of Food or organism. This 'recombination' can be accomplished by moving genes from one organism to another. GMO (Genetically Modified Organism) refers to a living organism whose genetic material has been modified by humans through genetic engineering techniques (Cunningham et al., 2001).

### 2.2 ADVANTAGES AND RISKS OF GMO USE

#### Advantages:

With an ever-increasing global population and an estimate that a child dies of hunger every two seconds, this technology holds great promise as it benefits farmers and society worldwide. The positive sides of genetically modified crops are:

- better taste
- increase in nutritional values
- resistance to diseases and pests
- rapid production of crops.

Seeds are genetically modified for many reasons, including improving insect resistance and generating healthy crops. This can reduce the risk of crop failure and make crops more resistant to extreme weather. The technology could eliminate seeds and produce a longer shelf life, which allows "safe transportation for people in places where there is no access to high-nutrition foods." Environmental benefits: fewer chemicals, time, and machinery because soils need crops, which can help reduce environmental pollution, gas emissions, and soil erosion.

Better nutrition: "By modifying certain foods in terms of minerals or vitamins, companies can supply much-needed nutrients and help fight malnutrition around the world," according to the Food and Agriculture Organization of the United Nations. They also state that one of the positive sides of GMOs is that farmers can produce Food with more calories (Galán et al., 2008).

#### Risks:

The researchers warn that there are no long-term, large-scale analyses to prove genetically modified foods safety (GMOs). They draw attention to several potential risks.

- Allergic reaction: if a gene, which produces a protein that causes allergic reactions, ends up in, for example, cereals, people suffering from food allergies could be exposed to a significant risk.
- Greater poisonous ability: some experts think that genetic modification could enhance the natural poisons of plants in unforeseen ways. When a gene becomes active in a plant and gives the desired effect, it can produce natural poisons. Toxicity is also caused by toxins released by plants resistant to insects or herbicides. Resistance to herbicides is due to the insertion into the deoxyribonucleic acid (DNA) of plants, a gene of bacterial origin that confers resistance to herbicides (IYZOBA, H. J. C, 2016).

Antibiotic resistance: as part of the genetic modification of plants, scientists use marker genes to determine whether the desired gene has been successfully introduced. Since most marker genes confer resistance to antibiotics, scientists fear that this may contribute to the growing problem of antibiotic resistance. But other scientists argue that these marker genes are genetically arranged disorderly before use, reducing this risk.

- Damage to the human organism: in this case, the consumer, by eating Food with GMOs, is getting a new DNA that has not been fed with before and thus risks damaging not human DNA but damages the permanent bacteria of the digestive system by thus causing significant disturbances in the process of food digestion. Human studies show that genetically modified Food can leave behind material after consumption, possibly causing long-term problems. For example, genes inserted into genetically modified soybeans can transfer the DNA of bacteria that live inside us, as well as insecticide toxin produced by genetically modified corn has been found in the blood of pregnant women (Harward University Blog 2015)

### 2.3 OBJECTIVE AND SUBJECTIVE KNOWLEDGE OF CONSUMERS

Consumer knowledge influences their attitudes toward GMO foods and other consumer goods. Previous studies showed a positive relationship between consumers' understanding of GMO technology and their attitude toward GMO foods (Boccaletti, S. & Moro, D, 2000). Consumer knowledge of this technology also relates to consumer perception of the benefits and risks of GMO foods. It is essential to regulate biased perceptions and intentions regarding these products (Curl et al., 2015). When consumers have a high level of involvement in a particular product category that is an area of personal interest, their product knowledge increases. Further, increased consumer knowledge typically increases the likelihood of seeking new information as part of the decision-making process within the product category.

Consumer knowledge is divided into objective and subjective because of the difference between what consumers think they know something and what they know. This change can affect consumer attitudes and purchase intention toward foods. Knowledge, namely accurate information about channels collected over a long period by consumers, memories, and current understanding of the consumer, have a close relationship with the ability of consumers to select products (Park & Lessig, 1981).

In contrast, subjective knowledge is based on direct experience by consumers and the interpretation of these experiences and suggests a close relationship between product choice and subjective knowledge. Although objective and subjective knowledge is related, previous studies have shown that objective knowledge is rarely the same as subjective knowledge. Leung et al. (2013) reported that although subjective and objective knowledge is interrelated, they cannot be replaced and should be measured separately. Some studies have shown that these two compounds have a weak or moderate relationship. According to Kruger & Dunning (1999), despite having little objective knowledge, consumers may think that they have sufficient knowledge; moreover, although the level of their objective knowledge may be high, they may sometimes judge by subjectivity. Therefore, measuring the two constructs separately and identifying the imbalance between them will help determine which type of knowledge influences consumer responses to GMOs, providing more complete insights into the food industry.

Given that genetically modified organisms are a relatively new phenomenon, the number of studies conducted concerning consumer preferences and information about them is limited. Most European consumers do not have a particularly positive attitude toward GMOs (Bonny, S., 2003). Different elements are formed based on this attitude. Below is an overview of the main determinants of consumer attitudes towards GMOs (mainly) in European countries. It is essential since the impact of these attitudes on consumer purchase intentions regarding the description of genetically modified food products is high. According to the attitude model of

Grunert et al. (2000), attitudes toward GMOs are determined by the perception of risk and benefits. In turn, beliefs about (potential) risks and benefits are powerfully explained by consumer knowledge and more general attitudes (e.g., attitude toward technology, consumer trust in government, and food producers) rooted in socio-economic, demographic, and cultural characteristics. The Fishbein model (1963) suggests that, under certain conditions of high involvement, an individual's attitude toward an object is determined by the sum of the beliefs they have about the consequences or attributes of that object weighted by how they are evaluated and are commonly referred to as outcome beliefs and outcome estimates. Involvement is the perceived degree and personal importance accompanying product choice (Akpyomare et al., 2013). Multi-attribute models, such as Fishbein's, assume that consumers use formal learning as a hierarchical effects approach in which beliefs lead to their purchase behavior and attitudes.

Regarding the risk side related to GM (genetically modified) Food, consumers mainly perceive the possible risks for human health and the environment (Bereano, 1999). On the other hand, consumers' ethical concerns focus on internal beliefs that GM is wrong (Frewer et al., 1998). Such situations are more significant concerning whether animal or human DNA is involved rather than plant microorganisms. Another aspect that consumers are concerned about is the religious acceptability of these products. For Christians, there is a concern for the integrity of God's creation and humanity's relationship with God. Muslims and Jews focus on the prescribed diet and worry if genetically modified Food contains genes from animals whose meat is forbidden, such as pigs (Thomson, 2003). Another ethical concern concerns the right to choose freely as consumers. For example, vegetarians should be able to avoid food products produced from genetically modified plants into which genes have been transferred from animals. Another issue related to GMOs is dealing with the position of the Third World.

Some disagree that using technology in Food will reduce food shortages and malnutrition in developing countries. Third-world countries lack the financial resources to establish GM applications that can benefit their populations, and it is unlikely that foreign multinationals will spend time or money on altruistic research to help them (Nielsen et al., 2003). Evidence on attitudes has become more evident in European countries since the publication of the Eurobarometer after 1991. Interestingly, evidence suggests some reluctance to introduce foods, reflecting recent Eurobarometer surveys (Gaskell et al., 2004), revealing evidence of an ongoing progressive resurgence in human support for GMOs from 1999 to 2002. Surprisingly, a return to skepticism has been noted in the following years. This evidence reveals a division of European consumers along several dimensions, mainly classified into three groups regarding their perception of GMOs: optimistic, pessimistic, and undecided. In addition to this general attitude, national differences are also remarkable. It found that support for GMOs was observed by 2002 in only four countries - Spain, Portugal, Ireland, and Finland.

However, this changed in 2005, when the top supporting countries were - Spain, Malta, Portugal, the Czech Republic, Ireland, Italy, and Lithuania. Indeed, in a recent study in Ireland using cluster analysis techniques, it was found that there was still a significant segment (25%) that could best be described as anti-GMO products and others (20%) who had complex reservations about the wholesale introduction of GM products (O'Connor et al., 2006). (Grunert et al., 2000b) when analyzing product attitudes confirms the negative attitude of Nordic populations toward GMO products. The same conclusion has been reached in several surveys of consumers in Poland, who generally distrust genetic modification, primarily when it may occur in food products (Szczurowska, T, 2005).

### 3. METHODOLOGY USED

The main research question of this study is:

How well do consumers know genetically modified foods, and what is their behavior towards GMOs?

Based on the above data, we propose the hypotheses of the study:

H1: Albanians are not sufficiently informed about GMOs

H2: Consumers generally have a negative attitude toward GMO products.

The methodology used to realize this work is based on a questionnaire developed concerning consumers' knowledge about products that contain genetically modified organisms. The questionnaire was completed by 50 consumers of the city of Tirana. It includes questions about consumers' information about GMO products and the advantages and disadvantages they think these products bring. The central part of this paper is the data provided by the questionnaire, which is divided into two sections. The first section includes questions



related to the age, gender, educational level, and income level of the respondents. The second section contains inquiries about how well consumers know GMO products, where they got information about them, and how consumers prefer them.

### 3.1 RESULTS AND INTERPRETATIONS

The studies conducted in Albania about genetically modified products are not numerous, and the information consumers possess is limited. However, from studies conducted in other countries, a reluctance of consumers to consume GMOs has been noticed. We analyze the survey results to see if this also happens in Albania.

According to the answers to this questionnaire, it turns out that more than half of the participants usually consume organic Food, that is, about 56% of them. At the same time, 31% of them do not know what they are consuming since they have no guarantee that the information they are given is entirely accurate. About 13% of them stated that they consume conventional foods and that none have chosen GMO foods, at least not with their knowledge.

We conclude that 43% of the participants have enough information on GMO products from the obtained results. However, about 44% of the majority expressed little knowledge but would like to know more. Meanwhile, only 13% said they did not have enough information, and none of them knew about GMO products.

An exciting finding of this questionnaire is that the primary source of obtaining information is the Internet, surpassing even television or radio and the press. This shows the ease of information reaching people in the Internet age.

We also learned from this survey that consumers against GMO products dominate. They represent about 53% of the participants, while some of them were undecided about GMO products, i.e., 16% of them. While those in favor of these products makeup 31% of the consumers asked.

Also, this survey highlighted the willingness of the participants to buy GMO products. About 40% say they believe sometimes, while only 2% said they always buy. At the same time, the majority, or 58%, stated that they do not buy at all or are unaware of the lack of security.

According to the answers received, 40% of the consumers asked had no opinion regarding the difference between GMO plants and traditional plants. 56% said the differences make them think, while the remaining 4% believe there is no difference between these two types of plants.

Also, from the answers received, we found that most (47%) consumers are against GMO technology. While 37% say, they can accept this technology if they know its benefits, and 16% say they agree.

Regarding the importance of these products for the future, consumers have answered that it is essential for the future, seeing at what levels technology is advancing today. However, some think that these products will not be necessary in the future.

Regarding the fact in which aspect GMO products would have the most impact according to the results of the survey, we see that the majority think that the effect will be on health, in second place is the impact on the economy and then the positive language that will have in the environment.

According to the answers received, 55% of the participants in this survey did not consume GMO products at all during the Pandemic, while only 18% answered that they did, and 27% did not know if they finished GMO products.

Regarding whether they will use GMO products in the next few days, the consumers answered as follows: equally, 42% say that they will not consume or are not sure, and only 16% say that they will consume.

### 4. CONCLUSIONS

Population growth has led to increased food shortages, and GMO products have been seen as one of the alternative solutions. When consumers are faced with new products, studying their behavior toward them is essential. In this context, this study would be critical because it reveals the preferences of Albanian consumers toward GMO products. The study was conducted by developing a survey in the city of Tirana.

Referring to the results achieved by this study, we can reach the conclusions that:

- Consumers show a reluctance to consume GMO products.
- Most consumers know about GMO products, but not enough, and want to learn more. The Internet is the primary source of this information, which shows why most have little knowledge.
- The information that consumers want to know more about is the impact of this technology on human health. Consumers do not feel safe, which is shown in the results that most of them are against GMO technology.
- According to this result, we conclude that the most significant impact of this technology will be on the economy and the environment due to the non-use of Herbicides and Insecticides.

At the end of the analysis, we could prove the two hypotheses raised at the beginning. Albanians are not sufficiently informed about GMOs, and about 44% answered that they want to know more about GMOs. We also confirmed that 53% of consumers surveyed are against GMO products.

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## Formal Institutions and Foreign Capital Inflows In Turkey: The Role Of Economic Freedom

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**Abstract:** Developed and developing countries often make efforts to achieve economic growth by absorbing Foreign Direct Investments. Better institutional conditions in the recipient economies are listed among the determinants that encourage multinational enterprises and foreign investors. The research aims to empirically examine the interaction between formal institutions and Foreign Direct Investment inflows in Turkey from 2002 to 2020, focusing on economic freedom. The study is motivated by the eclectic paradigm theory and the institutional theory of North and examines the role of economic freedom and explanatory variables of Foreign Direct Investment, namely inflation, trade openness, and, gross domestic product in attracting foreign capital. The present research aims to provide a broader understanding of institutions as an FDI determinant and to contribute to the existing knowledge on the role of formal institutions as an FDI determinant. An empirical model is developed and time series analysis is applied. To investigate the interaction among the studied variables, unit root, and cointegration tests are used, while autoregressive distributed lag and error correction models are applied. It is concluded that certain indicators of economic freedom determine the number of foreign capital inflows in Turkey, namely Regulation and Freedom to Trade. The limitations of the study are discussed and suggestions for future research are also included.

**Keywords:** Turkey, Foreign Direct Investment, Institutions, Economic Freedom, Time series analysis

**JEL:** F21, O43, N15, F14.

### 1. Introduction

Better institutional quality in both developed and developing countries is associated with several long- and short-term benefits, namely economic growth and reduced income inequality (e.g. Nabi & Suliman, 2009; Asamoah, 2021). Institutions include a certain set of rules that regulate, constrain, and channel the behavior of the members living in a society and significantly impact the country's economic performance (North, 1990; Campbell, 2010).

Over the past years, Turkey (also known as Türkiye) made significant efforts to improve institutions, including stabilization programs to attract more Foreign Direct Investment (FDI) and reduce inflation rates (Akyurek, Kutan & Yilmazkuday, 2011).

The present research aims to present a new empirical model, provide a broader understanding of institutions as an FDI determinant, and contribute to the existing knowledge on the role of formal institutions as an FDI determinant, focusing on economic freedom. The study examines economic freedom to understand the most salient aspects of institutions (Meyer et al. 2009) and provides empirical evidence on the formal institutional environment in Turkey, which influences the behavior of managers and multinational enterprises (MNEs).

The paper is structured as follows: Section 2 includes the theoretical framework and in Section 3 the findings of the literature review on previous studies on the association between FDI and institutions in groups of countries and Turkey are presented. Section 4 includes the methodological approach applied and the results of the empirical analysis are presented in Section 5. Finally, Section 6 presents the discussion and suggestions for future research.

### 2. Theoretical framework

According to the traditional neoclassic growth model, countries often present differences regarding their saving rates and their capital accumulation which lead to different per capita incomes (Solow, 1956). Thus, FDI plays a crucial role in filling the gap between the countries' level of investment, and savings (Sabir & Khan, 2018). Based on the eclectic paradigm (Dunning, 1988), among the location-specific factors, the institutional framework and the macroeconomic environment are considered the most important FDI determinants.

Nevertheless, traditional FDI theories mostly focus on competitive advantages and profitability, and they do not examine the role of the economic freedom index (EFI) as an institutional indicator (Xu, 2019), and the eclectic paradigm lacks institutional content (Dunning, 2006).

## 2.1. Literature review

The literature reveals that there are vague findings on the role of institutional quality as an FDI determinant in emerging and developing economies, while previous studies examined single aspects of institutional quality, namely corruption (e.g. Bellos & Subasat, 2012a, 2012b; Hakimi & Hamdi, 2017; Qureshi et al. 2021), governance (e.g. Bellos & Subasat, 2013; Khan et al. 2019; Younsi & Bechtini, 2019), etc. and do not provide a broader understanding on the role of institutions as a determinant for FDI. Similarly, the limited empirical studies that focused on Turkey also examined certain indicators of institutions. In particular, Dumludag (2009), Tosun, Yurdakul, and Iyidogan (2014), Eren and Jimenez (2015), and Simet Lungu, Muller, and Karassavoglou (2015) researched the common conclusion that lower corruption in Turkey could attract more FDI inflows. Additionally, democracy was also investigated as a proxy for institutions in Turkey by Aslan and Okten (2010), who proved the long-run relationship between democracy and FDI.

Based on the above, to contribute to the new institutional economic theory on formal institutions that attract FDI inflows (North 1990, 1991), the present research focuses on the impact of economic freedom on FDI. Economic freedom is investigated as a proxy for formal institutions because it includes a holistic set of indicators that define legal progress, transparency of government, security of property rights, and freedom of transacting (Globerman & Shapiro, 2003). The research aims to deepen knowledge of the association between institutions and FDI inflows and the EFI is used as a proxy for institutions arguing that it provides a holistic explanation of the location-specific advantages that attract FDI (Sambharya & Rasheed, 2015) and that it is characterized as a multidimensional index that covers different aspects of institutional quality (Jones et al. 2023).

Nevertheless, empirical findings on the role of FDI as a determinant for FDI also remain vague. The majority of empirical studies observed a positive impact of several pillars of economic freedom on FDI inflows (e.g. Bengoa & Sanchez-Robles, 2003; Tintin, 2013; Economou, 2019; Ghazalian & Amponsem, 2019; Sambharya & Rasheed, 2015; Hossain, 2016; Moussa, Çaha & Karagöz, 2016; Muslija, 2018; Hammami, 2019; Tag & Degirmen, 2022), including the Asian economies (e.g. Quazi, 2007; Imtiaz & Bashir, 2017; Ullah & Khan, 2017). However, certain empirical studies concluded to an insignificant influence of economic freedom on FDI inflows in developing or emerging countries, including Asian economies (e.g. Kapuria-Foreman, 2008; Akkaya, 2019), and Turkey (Singh & Gal, 2020). Additionally, other studies concluded that solely certain sub-indexes of economic freedom attract FDI in developing countries, while other sub-indexes are deterrents of FDI (e.g. Ajide & Eregha, 2014; Taran, Mironiuc & Huian, 2016) or that there is a weak causality between economic freedom and FDI (Ciftci & Durusu-Ciftci, 2021). Therefore, to achieve a broader understanding of institutional quality as an FDI determinant and to clarify the association between EFI and FDI in Turkey, an empirical analysis is conducted and presented in the following section. To our knowledge, it is the first empirical study to examine EFI as a determinant for FDI inflows in Turkey.

## 3. Materials and methods

FDI inflows are studied as the dependent variable during the period ranging from 2002 to 2020. The EFI (size of government, legal system, property rights, sound money, freedom to trade internationally, regulation) is used as a proxy for institutions. Gross domestic product (GDP), trade openness, and inflation are explanatory variables. Microsoft Excel was used to classify, and proceed with available data, and EViews 12 was used to perform econometric estimations.

### 3.1. Purpose and research hypotheses

As mentioned, the purpose of the research is to present a new empirical model to investigate the association among FDI, a new set of institutional variables, namely the EFI, and determinants of FDI, focusing on the case of Turkey from 2002 to 2020.

The research hypotheses are developed as follows:

*H1: FDI determinants are crucial in attracting FDI in Turkey*

Based on the literature review findings, FDI determinants would influence the number of inflows in the country. Thus, a positive association between GDP and FDI inflows (Dumludag, 2009; Tosun et al, 2014; Eren & Jimenez, 2015), a positive relationship between trade openness, and FDI inflows (Mercado & Park, 2011; Öğrül & Eryiğit, 2015), and a negative interaction between inflation, and FDI inflows (Aslan & Okten, 2010) are expected.

#### H2: Economic freedom attracts FDI inflows in Turkey

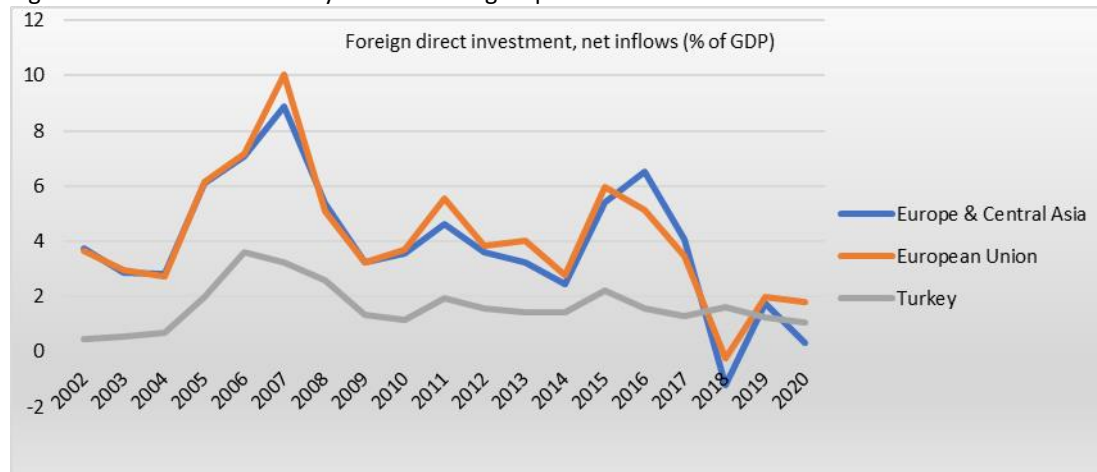
It is expected that improved economic freedom and institutional quality would encourage FDI inflows in the country and improve Turkey's attractiveness to foreign investors (e.g. Tosun et al, 2014; Simet et al, 2015; Eren & Jimenez, 2015). It is argued that freedom to trade attracts more foreign investors in recipient countries (Hayakawa, Kimura & Lee, 2013).

### 3.2. Data, sources, and sample

Secondary data was collected from reliable data sources. In particular, the World Bank database was used to collect data on FDI inflows, GDP, Trade openness, and Inflation, while the Fraser Institute Database was used for the EFI, which includes the Size of Government, the Legal System and Property Rights, the Sound Money, the Freedom to Trade, and the Regulation. According to the Fraser Institute (2023), the Size of Government includes government consumption, transfers, subsidies, government investment, top marginal tax rate, and state ownership of assets, while the Legal System and Property Rights include judicial independence, impartial courts, protection of property rights, military interference in rule of law and politics, the integrity of the legal system, legal enforcement of contracts, regulatory costs of the sale of real property and reliability of police. Moreover, Sound Money includes money growth, standard deviation of inflation, inflation, freedom to own foreign currency bank accounts, and Freedom to Trade Internationally including tariffs, regulatory trade barriers, black-market exchange rates, and controls of the movement of capital and people. Finally, Regulation includes credit market regulations, labor market regulations, and business regulations.

Figure 1 presents FDI inflows in Turkey during the studied period, as well as in the European Union (EU) countries, and the European, and Central Asian economies. It is observed that FDI inflows in Turkey reduced significantly from 2006, while in the EU members, and the European and Central Asian countries, a decline was observed during 2008 – 2009.

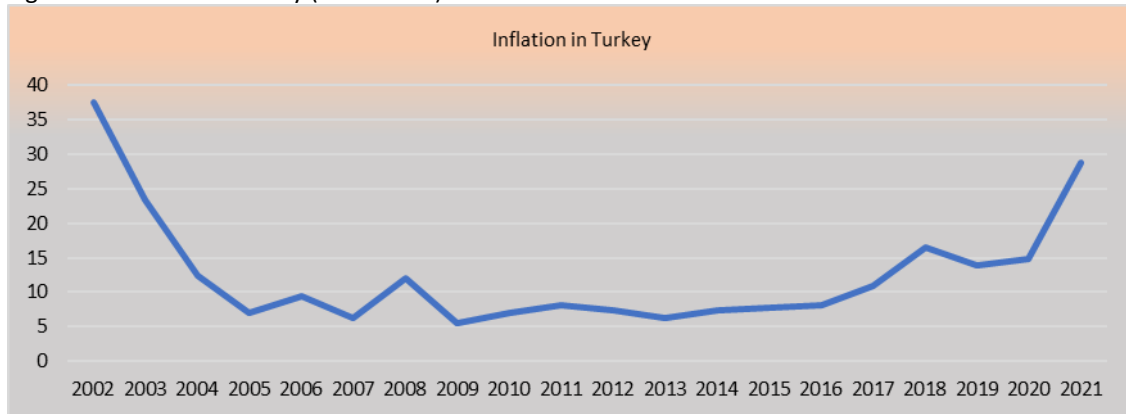
Figure 1: FDI inflows in Turkey and selected group of countries



Source: World Bank Database, author's calculations

Additionally, among the traditional determinants of FDI, inflation in Turkey is investigated. As presented in Figure 2, over the past few years, inflation in the country has accelerated as a result of the interest rates being cut by the Central Bank (Kayıkçı & Kaplan, 2019).

Figure 2: Inflation in Turkey (2002-2021)



Source: World Bank Database, author’s calculations

### 3.3. Methodology: The empirical model

Following North’s (1990) institutional theory and the eclectic paradigm (Dunning, 1979, 1988), the determinants of FDI inflows are macroeconomic stability, market size, and institutional quality.

The empirical model is developed as:

$$\text{Eq (1) } FDI = f(\text{Macroeconomic stability, Market size, Institutional quality})$$

Inflation is used as a proxy for macroeconomic stability, GDP is used as a proxy for market size, and the EFI is used as a proxy for institutional quality. The initial model is extended by adding another explanatory variable of FDI, namely trade openness, which is a determinant of FDI inflows, as suggested by previous studies (Nguyen et al, 2018; Sabir et al, 2019). The final model is expressed as:

$$\text{Eq (2) } FDI = \beta_0 + \beta_1GDP + \beta_2TradeOpenness + \beta_3Inflation + \beta_4Economic\ Freedom\ Index + u_t$$

or

$$\text{Eq (3) } FDI = \beta_0 + \beta_1GDP + \beta_2TradeOpenness + \beta_3Inflation + \beta_4Size\ of\ Government + \beta_5Legal\ System\ and\ Property\ Rights + \beta_6Sound\ Money + \beta_7Freedom\ to\ Trade\ Internationally + \beta_8Regulation + u_t$$

## 4. Results

In the present section, the results of the econometric analysis are presented. Firstly, a correlation matrix is applied to investigate the potential multicollinearity among the studied variables (Table 1). It would be expected that there would be a positive relationship among FDI and indicators of institutional quality, considering that the majority of the empirical studies concluded that foreign investors prefer stronger institutions (e.g. Kurul & Yalta, 2017; Sabir et al, 2019; Kechagia & Metaxas, 2022, etc.). Table 2 includes the results of the Unit root tests, namely Augmented Dickey Fuller (ADF) and Phillips Perron (PP).

Table 1: Correlation Matrix

	FDI	GDP	Inflation	Trade openness	Freedom to Trade	Legal System	Regulation	Size of Government	Sound Money
FDI	1								
GDP	0.021	1							
Inflation	-0.548	-0.682	1						
Trade openness	0.090	0.436	0.051	1					
Freedom to Trade	0.509	0.813	-0.7	0.183	1				
Legal System	0.014	-0.653	0.034	-0.72	-0.393	1			
Regulation	0.405	0.835	-0.582	0.124	0.728	-0.378	1		
Size of Government	-0.231	-0.447	-0.082	-0.728	-0.32	0.828	-0.277	1	

Sound Money	0.267	0.936	0.582	0.441	0.835	-0.721	0.8	-0.603	1
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Table 2: Unit Root tests results

	FDI	GDP	Inflation	Trade openness	Freedom to trade	Legal system	Regulation	Size of Government	Sound money
ADDF (Individual intercept)	-2.449** (0.045)	-2.884* (0.065)	0.096 (0.155)	1.602 (0.298)	-2.368* (0.063)	-0.52 (0.162)	-2.014 (0.178)	-0.361 (0.296)	-1.711 (0.208)
ADDF (Trend and intercept)	-4.251** (0.019)	-1.542* (0.077)	-1.287 (0.255)	-1.641 (0.136)	-1.372 (0.133)	-2.73 (0.239)	-0.763 (0.249)	-3.573* (0.063)	-1.059 (0.206)
Panel level series									
PP (Individual intercept)	-2.468 (0.138)	-3.086** (0.044)	-3.262** (0.031)	2.228 (0.199)	-2.534 (0.124)	-0.632 (0.139)	-1.917 (0.317)	-0.634 (0.239)	-2.285 (0.186)
PP (Trend and intercept)	-2.227 (0.449)	-1.487 (0.195)	-3.070 (0.14)	-1.375 (0.234)	-0.381 (0.279)	-3.949** (0.031)	-1.403 (0.224)	-3.119 (0.131)	-0.635 (0.262)
ADDF (Individual intercept)	-15.189*** (0.000)	-6.910*** (0.000)	7.820*** (0.000)	9.829*** (0.000)	-12.390*** (0.000)	-9.820*** (0.000)	-7.801*** (0.000)	-7.912*** (0.000)	-9.920*** (0.000)
ADDF (Trend and intercept)	-15.971*** (0.000)	-8.482*** (0.000)	-7.891*** (0.000)	-9.862*** (0.000)	-9.149*** (0.000)	10.859*** (0.000)	11.594*** (0.000)	12.976*** (0.000)	-8.566*** (0.000)
Panel 1 <sup>st</sup> difference									
PP (Individual intercept)	-8.81*** (0.000)	16.891*** (0.000)	11.885*** (0.000)	10.571*** (0.000)	10.665*** (0.000)	-8.592*** (0.000)	-9.762*** (0.000)	-8.834*** (0.000)	10.795*** (0.000)
PP (Trend and intercept)	-11.826*** (0.000)	-9.724*** (0.000)	12.784*** (0.000)	-9.826*** (0.000)	-9.784*** (0.000)	12.671*** (0.000)	-9.891*** (0.000)	11.012*** (0.000)	-8.701*** (0.000)

\*\*\*, \*\*, \* Denote levels of significance at 1%, 5%, and 10%, respectively

In Table 2, the findings of the Unit Root Tests are presented to test the stationarity. Therefore, the ADF and the PP tests are used under the null hypothesis that a unit root is observed in the sample. As, for the ADF test, it is T – statistics are less than the critical values at 5% and 1% levels of significance. Thus, the null hypothesis is accepted and to ensure the stationarity of the series, the first differences are applied. Similarly, as for the PP tests, it is observed that the null hypothesis is accepted at a 1% level of significance. Thus, the first differences are used. To investigate the optimal lag, the values of the Akaike and the Schwarz criteria are examined, as presented in Table 3.

Table 3: VAR lag order selection criteria

Lag	AIC	SC
0	46.10191	46.17911*
1	45.19961*	46.69181
2	45.71906	46.71071
3	45.71901	46.79811



4	46.71971	46.98171
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\* indicates lag order selected by the criterion

Moreover, Table 4 presents the results of the co-integration tests and it is concluded that the variables are integrated in both the long and short-run, since the Wald F is higher than the upper value at a 5% level of significance.

Table 4: Wald test results

Level of significance (%)	Lower-bound critical values	Upper-bound critical values	Wald F-Statistics
10%	3.22	4.71	5.98119
5%	3.72	4.89	
2.5%	3.90	5.87	
1%	4.10	6.12	

Based on the above, Table 5 includes the results of the long-run, while Table 6 the findings of the short-run.

Table 5: Long-run estimation results

Dependent variable: FDI			
Dependent variable	Coefficient	t-statistic	Prob.
FDI(-1)	0.8101	0.0181	0.617
Trade openness(-1)	8101812***	2.8192	0.003
GDP(-1)	2.19E+10***	-0.71918	0.001
Inflation(-1)	-918701***	-0.8191	0.003
Sound money(-1)	7.671	0.7192	0.891
Legal system(-1)	6.891	0.7107	0.188
Size of government(-1)	-7.519	0.9123	0.891
Regulation(-1)	8.179**	0.8109	0.041
Freedom to trade(-1)	7.980***	0.6781	0.001
R-squared	0.68971		
Adjusted R-squared	0.69921		
Durbin Watson stat.	2.01801		
AIC	47.8643		
SC	48.3795		

\*\*\*, \*\*, \* Denote levels of significance at 1%, 5%, and 10%, respectively

Table 6: Short-run estimation results

Dependent variable: D(FDI,2)			
Dependent variable	Coefficient	t-statistic	Prob.
D(FDI(-1))	0.71918	1.17918	0.321
D(Trade openness(-1))	792791***	2.27082	0.001
D(GDP(-1))	1.22E+07**	0.72981	0.038
D(Inflation(-1))	-826514*	0.78437	0.091
D(Sound money(-1))	6.179	0.62981	0.718
D(Legal system(-1))	6.192	2.82091	0.437
D(Size of government(-1))	-5.181**	2.97332	0.016
D(Regulation(-1))	6.818**	1.87643	0.047
D(Freedom to trade(-1))	6.865***	1.5954	0.001
R-squared	0.78612		

Adjusted R-squared	0.74791
Durbin Watson stat.	2.02812
AIC	45.7964
SC	46.4869

\*\*\*, \*\*, \* Denote levels of significance at 1%, 5%, and 10%, respectively

It is observed that, in the long run, inflation and the size of the government have a negative impact on FDI inflows; nevertheless, the impact of the size of the government is statistically insignificant. Trade openness, inflation, GDP, regulation and freedom to trade have a statistically significant impact on the dependent variable. On the contrary, in the short-run, it is observed that the impact of inflation on FDI inflows remains negative and statistically significant at 10% level of significance. The size of the government also has a negative influence on FDI (statistically significant at 5% level of significance). Finally, trade openness and GDP are statistically significant at 10% and 5% level of significance, respectively, while the freedom to trade and regulation are statistically significant at 5% level of significance. Table 7 includes the results of the Error Correction Model (ECM).

Table 7: ECM estimation results

Dependent variable: D(FDI(-1))			
Dependent variable	Coefficient	t-statistic	Prob.
D(FDI(-1))	0.54965	0.929181	0.827
D(Trade openness(-1))	7.8281***	0.22641	0.001
D(GDP(-1))	3.11E+07**	1.72817	0.022
D(Inflation(-1))	-728162	-0.875467	0.089
D(Sound money(-1))	5.7859	-0.95379	0.686
D(Legal system(-1),2)	5.9182	1.283651	0.823
D(Size of government(-1),2)	-6.7256	1.97587	0.571
D(Regulation(-1),2)	4.7269**	-1.73651	0.038
D(Freedom to trade(-1),2)	6.8279	0.292721	0.627
Residual(-1)	-0.528291	-2.262861	0.029
R-squared	0.826197		
Adjusted R-squared	0.797286		
Durbin Watson stat.	1.982701		
AIC	45.72821		
SC	46.7271		

\*\*\*, \*\*, \* Denote levels of significance at 1%, 5%, and 10%, respectively

It is revealed that the ECM term is -0.528 which means that FDI inflows return to equilibrium at 52,8% speed of adjustment after a change in the independent variables. Finally, the last table (Table 8) includes the result for the autocorrelation and the heteroskedasticity.

Table 8: Results on autocorrelation and heteroskedasticity

Breusch-Godfrey Serial Correlation LM Test results			
F-statistic	0.291918	Prob. F.	0.5791
Obs*R-squared	0.976919	Prob. Chi-Square(2)	0.5281
Heteroskedasticity test Breusch-Pagan-Godfrey results			
F-statistic	4.373871	Prob. F.	0.765
Obs*R-squared	12.18279	Prob. Chi-Square(12)	0.300
Scaled explained SS	0.876581	Prob. Chi-Square(12)	1.000

It is, therefore, concluded that the empirical model does not present serial correlation or heteroskedasticity.

## 6. Discussion

The present study focused on the case of Turkey and on the role of institutional quality in attracting FDI inflows from 2002 to 2020. The present research presents a new empirical model and sheds light on the institutional indicators that determine FDI inflows in Turkey. The study concludes that in both the short- and long-run, among the institutional indicators, freedom to trade and regulation have a statistically significant impact on FDI inflows in Turkey from 2002 to 2020. The findings of the present research are in line with the results of Sabir et al (2019), who observed that there is a negative impact of inflation on FDI inflows in a group of countries, among which Turkey. On the contrary, previous studies reached to similar findings regarding the association between trade openness and FDI inflows in Turkey (e.g. Kurul & Yalta, 2017; Sabir et al, 2019), as well as between GDP and FDI inflows in Turkey (e.g. Mehrara, Haghnejad, Dehnavi & Meybodi, 2010; Mahmoodi & Mahmoodi, 2016). Therefore, the first research hypothesis (H1) is accepted. As for the role of institutions, Kalemlı-Ozcan, Kamil & and Villegas-Sanchez (2016) suggested that Turkey should improve the Rule of Law to attract more FDI, and Aslan and Okten (2010) concluded to a uni-directional causal relationship between democracy and FDI inflows. The second research hypothesis (H2) is also partially accepted.

As for the limitations of the research, it is noted that the findings of the research could not be generalized to other countries of the region. Additionally, solely inflows of FDI were considered, and no distinction among different forms of FDI, namely efficiency-seeking, market-seeking, strategic asset-seeking, or resource-seeking, is considered. Additionally, no distinction between vertical and horizontal FDI is considered. Another limitation of the research refers to the studied period and explanatory variables used in the present economic analysis. Finally, according to Sambharya and Rasheed (2015) using the EFI is associated with certain methodological limitations, namely moral hazard outliers. Nevertheless, criticism against the EFI is mostly attributed to the causal relationship between economic freedom and economic growth, while the present research investigates the association between FDI and economic freedom.

Future studies could, therefore, investigate additional indicators of institutional quality, namely civil liberties or political rights, in Turkey. The impact of socioeconomic crises, such as the COVID-19 pandemic, could be studied considering that there is increasing research interest in the case of Turkey, and the inflation rates in the country, mostly in the post-COVID-19 period (e.g. Aydın & Ari, 2020; Bareja-Wawryszak, Pajewski, Çakaröz & Kavas, 2022; Ersoy, Saygılı, Yılmaz, Uslu & Selvi, 2022) as well as on the Turkish economy (e.g. Gömleksiz, Şahbaz & Mercan, 2017; Bărbuță-Mișu, Güleç, Duramaz & Virleanuta, 2020; Çelik, Oğuş & Orhan, Binatlı, 2022; Emikönel, Emikönel & Castanho, 2022).

As for the policy implications arising for institutions in Turkey, it is argued that attention should be paid to improving the above-mentioned institutional indicators which are FDI determinants, namely the Freedom to Trade, the Regulation, and the Size of Government. Firstly, to improve the freedom to trade and regulation, it is important to abolish non-tariff barriers, which, according to Zhao and Karagoz (2016), constrain the freedom to trade. These non-tariff barriers in Turkey include minimum local content requirements, certifications, licenses, etc. which increase trade costs, especially between Turkey and the EU (Togan, 2015; Yalcin & Felbermayr, 2021). Additionally, non-tariff barriers include customs procedures, and rules of origin, and have a negative impact on a country's trading activity (Jakšić, Erjavec & Cota, 2021).

In conclusion, governmental policies could focus on the improvement of the institutional indicators that cause FDI inflows. Poor institutions could discourage MNEs and foreign investors, while attention should be paid to the high rates of inflation in the country. The improvement of the political and economic environment could further increase Turkey's attractiveness to foreign investors and create a favorable location advantage for MNEs (Dunning, 2001).

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## Intellectual Capital and Innovation: Essay on Science and Empathy

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**Abstract:** While we discuss complexities, sophistication and ecosystems through innovation, little attention is paid to intellectual capital. Intellectual capital consists and interacts in different ways with engineering and sociology and the main capital forms, such as human capital, property capital, asset capital, process capital, market capital and renewal capital. Contributing to institutions and organizations through efficiency and added value, it represents a fundamental spectrum for markets and sustainability. Through a stylized view, we support the importance of intellectual capital and its multidimensional impacts such as economic, social, institutional, inspirational and spiritual, essential for ecosystems and economic decision-making and especially for current security processes and progress.

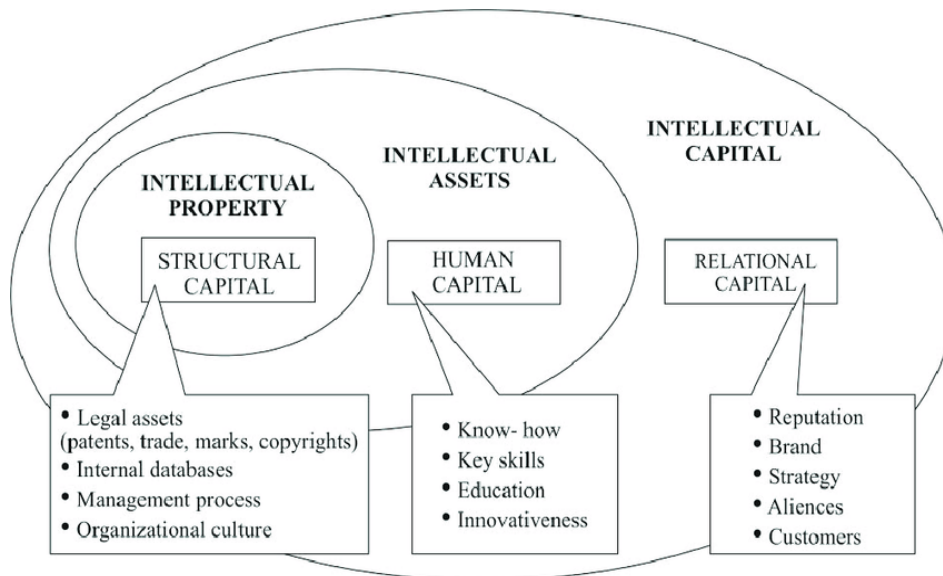
**Keywords:** intellectual capital (IC), structural capital, process capital, empathy.

### IS INTELLECTUAL CAPITAL INTELLECTUAL?

Yesterday, the information program about the problems in the country was predefined by others. Today, we determine the favorite news program on world affairs at any time. Students can access books, lectures and experiments electronically. The democratization of information and the rapid-change-gap have created effects on people's interactions and beliefs. This sophisticated interaction may be verbal, nonverbal or visual including its early black-and-white (eg ideographic) forms. As conflicts, climate change, innovation and AI engineering affect continuously the economy and markets, the implications appear with effects on our perceptions, hearing apparatus, memory and accumulated validity, creating a blurring over what is primary, what is very important and what is important, or the meaning and substance. Information, research and multiple techniques, however, have not always been enough sufficient in verum verbum, affecting the decisions in countries and time. For example, previous research supports the correlation between geographic and age factors (eg youth) and consumption of some foods (eg ice creams), but the dynamics show that this respected empirical result may still be discussible. Education and innovation and new techniques, including theories, paradigms and organized knowledge, while remaining imperative for human capital and growth are determined by the main manpower, such as intellectual capital (Galbraith, 1969).

Intellectual capital (IC) is essential for decision-making quality, cultural managerial-range, institutions and sustainability. In its composition, the main dimensions of wealth accumulation processes by the society are embodied, such as human capital, including the level of development, access to local-social knowledge and socio-economic achievements of education, etc.; structural capital, including organizations and institutions (i.e. the functional market), managerial assets and legitimacy, etc; and relational capital, including interpersonal relationships, simplifications and institutional-organizational achievements, and everyday culture as its fundamental component (figure 1.). However, while in the constitution of the above forms, there are influences of organizational capital, process capital and property capital, in our discussion, we can also emphasize the importance of social capital as a component of all forms of capital, especially under the influence of two circumstances. For example, while the "tragedy of the commons" (Ostrom, 1990) may be a reality, the "free riding tendency" (Albanese et al., 1985) may specifically affect resources and capital (eg relational), worsening the social environment or company. These effects may include recruitment systems, public hierarchy or the central governance that is intellectual capital-based. Thus, given the functioning of a society, intellectual capital can be intellectual in different colors across regions or countries.

Figure 1. Understanding intellectual capital.



Source: Todericiu et al., 2015.

Due to increased mobility, we face intellectual capital in different circumstances, locations or ages. Its quality (or deficits) impresses us in different ways, depending on our intellectual heritage and capacity, memory or imagination. Depending on the material conditions, industrialization or culture, this approach may be different between regions. Thus, human capital in the composition of intellectual capital may face difficulties in accessing quality university life (including access to canteen food, appropriate culture and intellectual mentoring), as well as inadequacies of the primary school system in the deep areas of the villages, with an impact on the premises for building intellectual capacity that takes place in the secondary education system. As qualitatively related to resources, culture and relational capital, it is simultaneously an expression of the model of human behavior, beliefs and individual attitudes and a predictor of the values of possible groups in society. While the ordinary individual immediately “recognizes” the similarity and groups “as if they had known each other for years”, the sciences of logic (Schopenhauer, 2019) argue that the intellectual is guided by high maxims and values as he focuses a little higher. So, intellectual capital, enough intellectual, innovative and regenerative (or not), may appear different among individuals and countries, despite converging processes and related to historical processes (Bontis, 1996; 2004; Nikolova, 2019).

### VALUES OF INTELLECTUAL CAPITAL

The identity of intellectual capital, cannot be understood without exploring the circles of values that enable its operation. While *hominis*, skin (heredity) and “intelligence chips” are in his composition, we highlight the importance of its functioning principles within the all-accepted community values as part of social functionalism. So, as we accepted that there are differences between individuals, countries and institutions and since the latter are different-abstract entities formed by multifarious processes, it is expected that these universally recognized values also differ in its composition among regions. Going beyond ordinary human capital (and basic scholasticism), due to multicultural approach and sophistication, higher capacity and *sensitivity* for the improvement of relevant field or society, a leading value of intellectual capital is *truth*. The approach to it (and in freedom) is substantial and results from the beliefs according to which his processing apparatus (cognitive, logical, numerical) functions. Intellectual capital is based on uncompromising truth and “here any doubts, should be thrown behind the back” (D. Aligeri, “The Gates of Hell”). However, depending on sociology and entities (solidarity networks, political parties) and development (income, disparities), this fundamental value within a poor-opportunistic environment, under the “kolkhoz instrumentalization” of the “division of labor” can be distorted. That’s why in imperfect networks the truth has a price and market, but it has no value. It can be sold and bought and bought and sold.

So, resource and institutional insufficiency, possible early deficits in basic values from primary education where usually only numbers are taught, may favor a social environment without European values of honesty and compassion for the truth. It is well-known that societies during communism had human capital according to the resources or development (or the above factors), but they did not have proper intellectual capital and



freedom as prerequisites for the truth. Even today, there are regions where these basic values can be contested. Where self-offering (within the wheel of torment), rampant careerism and senseless arrivism may be usual norms, deficits in the core values on which intellectual capital operates, may hinder or manipulate sophisticated understandings of European progress. Decisions on innovation and new techniques or functional markets, costs/benefits of implemented deals or investments and concentrated forms of scale production as determinants for competitiveness and growth and prospects on green and blue strategies or gray information and sustainability, are common tasks for *intellectualis hominis*. Moreover, in such a complex world, given the new threats, such as migration and global (in) security/ies, which constantly impoverish small countries, intellectual capital has an overestimated importance. Within these ambiguities, intellectual capital can be seen as a spectrum of peace, and the influence of the individual in leadership is well-supported.

Science within intellectual capital and values such as peace and humanism are at the foundation of European culture. The machinery of intellectual capital and its positivist ferment are found in prestigious European universities and forums, where complex-decision-making for major investments is examined and jobs that determine developmental channels, innovation and security are allocated. The restructuring and improvement of competition in markets, the sophistication of enterprises and ecosystems, the new management systems adapted through the implementation of scientific neologisms of technical-social innovation and the modernization of organizations, culture and institutional efficiency go along with the empowerment of intellectual capital. The holistic values of intellectual capital such as accountability, creativity, inspiration and spirituality multiply its importance beyond just a critical input for long-term values or economic balances, promoting socially the power of freedom, the liberation from the culture of poverty and primitive patronage supervisions and organizational-institutional reminiscences, by building human-centered processes and core-values. Moreover, intellectual capital may reinforce the essential human values that seem to have been devalued recently, such as love for man and mankind. The old books, place benevolence and love at the epicenter of the values of *intellectualis hominis* and the foundation of our civilization.

## INTELLECTUAL CAPITAL AS EMPATHY

The growth of innovation and techniques places man in a new position, increasing the importance of intellectual capital. While Innovation, AI or ChatGPT have simplified important tasks by revealing future asymmetries, deficits and complexities of primary issues, little has been discussed about the need for new intellectual capital. Its empowerment is imperative for sustainability, ecosystems and current security. For example, stakeholders, internal (ie. company, managers, etc) or external (ie. government, main actors, etc) in the absence of necessary intellectual capital or appropriate agendas, may refer to a primary problem as usually non-problematic context. While IC can be created, enriched and measured with formal metrics, its value is usually related to managerial, economic-social and institutional-organizational benefits (Seemann et al., 2000). As a basic constituent of the main forms of capital, institutional engines and leadership, it can influence complex dimensions and processes and change over time (Fisher, 1906). New (or old) management integrated systems and socio-economic implementations may not be popular or readily available everywhere and this may make the need for them particularly critical in certain regions. The entropy of intellectual capability can positively compensate for consequences of migration or production structure, also empowering society with values that currently are missing such as *compassion*, *truth* and *responsibility*. However, encountering intellectual minds virtually (through books or technology), or in reality in academic circles often represents an event that is accompanied by meaningful surprises or new convictions gained, which remain forever in our memory. While the momentum becomes crucial for the depth of understanding about life and essential dimensions, such as man, environment and the power of science, this point-of-communication becomes the space, where each one within his experienced "true", begins to narrate the "goodness" and the (spiritual) "beauty", discovering commands in himself as someone who can interact with the "garden of humanity", remaining us once again of the inalienable inspiration of the first lesson: that the true, goodness and beauty often go together.

Greeting the participants in the Congress, as a scientific space where visions, the truth and the future are promoted, I would like to address especially the organizers of the activity, the Academic Community of UARD, of which I am a part, bringing my experience. Honored professors, dear students, colleagues and friends of UARD, I will never forget my first "encounter" with the souls and intellectual minds of our well-known Academics. The high intellectual class of the Rector Prof. Dimitrov, ex-Rector Braykov, Prof. Arkadii Krystev, Prof. Vasilev and others remain unforgettable. While with Rector Prof. Ekaterina and Prof. Borisov, we discuss the controversial validity of scientific adaptations among countries nowadays, however, we emphasize its

unifying power and intellectual authority, regardless of cultures, countries or borders. Prof. Dimitrov emphasized the depth of the multidisciplinary approach "like the seas and oceans", designing the intellectual identity through qualities and values, in many ways, such as biological, cultural, spiritual and aesthetic, finding support in theories (eg Gaussian distribution, aesthetics according to Da Vinci, etc.). He shows that the fertility of the intellectual mind operates within several dimensions and is related to multi-scientific views, values (high and true) and especially spirit (the essence of beauty), metaphorically explaining dimensions (E. Abbot, "Flatland") and arguing the third dimension theory. Prof. Braykov argued the importance of innovation in institutions, new financial practices used and public policies, the culture and the power of intellectual capital that processes with speed and vision, analyzing the interwar era of the famous Daskalov, where production increased several times, thus determining the future of Plovdiv as one of the important world centers of research-excellence and agri-selection for the following 50 years.

Prof. Krystev with frowning eyebrows and noble aristocratic white-hair like Einstein, critical of every theory, explained the formation of human capital related to material, environmental and cultural (or subcultural) factors and the explosion of intellectual capital with factors such as heredity and spirituality and special values. Many years later when I was working in Albania and I came to Plovdiv, I met again with the Professor in the corridors of UARD. It was Christmas, the snow blocked everything for two days and I couldn't return to Albania. At dinner, the receptionist calls me and informs me that a Professor wants to talk to you. On the phone Prof. Krystev asked me: "...Rezear if you don't have any plans, it's Christmas, come join us and our Family". The Professor was waiting for me at the entrance of his beautiful house, in classic-aristocratic dress. While his lady was decorating the table, we sat facing each other and the Professor asked the unforgettable question: "Rezear, you have started work and you can serve professionally. What value are you guided by?". "Professor—I've answered, our roles change throughout life and the values in our hearts manifest in many ways. Now I am near my parents after a long time, and perhaps the value I experience daily is compassion for my parents". The Professor stood up solemnly and looking each other in the eyes, we wished "*Наздраве*" and drank the glasses to the end. Such memorable events in everyone's life are examples of the incomparable value power that intellectual capital has beyond material clichés or boundaries, by changing with the power of example irreversibly the man, society and beliefs. Finding it, in the composition of human, inspirational and spiritual dimensions, *intellectualis hominis* also illuminates empathy.

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## Maturity Models for the Assessment of Industry 4.0

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**Abstract.** The concept of Industry 4.0 can revolutionize the entire manufacturing industry. However, the correct implementation and adoption of Industry 4.0 standards remains challenging. Multiple maturity models have been discussed in the literature to assess Industry 4.0. The maturity models not only assess the company's level but also provide a framework to overcome a company's shortcomings in implementing Industry 4.0 standards. In total, seven models have been presented in the paper. Some models address the issue of IT readiness in a company, while others deal with the process of digital transformation or internet maturity. Some incomplete models have also been presented in this paper to show the direction we are headed. At last, a comparative analysis of all the maturity models has been presented. The paper has tried to understand the scenarios in which each model will be of the best use, considering the pros and cons of each maturity model.

**Keywords:** Industry 4.0, Assessment Models, Maturity Model, Production, Smart Industry

### Introduction

Since its introduction in 2011, Industry 4.0 has become a universally accepted phenomenon. Implementation of Industry 4.0 has always been considered a matter of technology diffusion and adoption. However, the biggest impediment to implementing Industry 4.0 standards is assessing the current technological level of a production environment. Even after implementing Industry 4.0, tracking the implementation progress remains a challenge. Maturity models provide a solution to the assessment needs of setups based on Industry 4.0.

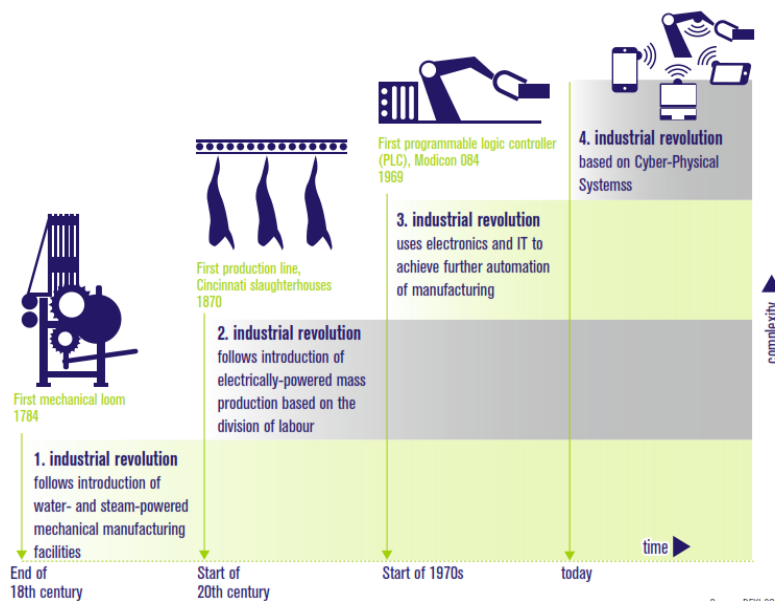
This article will discuss the maturity models for assessing Industry 4.0-based production environments. We will examine the positives and negatives of each model at the end while determining which model works best in which scenario.

### 1.1. Industry 4.0 Background

Industry 4.0 is based on the interconnectivity of technologies, resources, and information to enable intelligent decision-making for flexible automation. The concept was first introduced in Germany during a trade fair in 2011 (Kagermann et al., 2013). Figure 1 shows the stages of industrial evolution. Industry 4.0 focuses on technological evolution in three main areas: connectivity, intelligence, and flexible automation. Connectivity refers to the creation of the Internet of Things. This broadens the dataset available for decision-making, thus improving the overall intelligence of a setup.

If Industry 4.0 is implemented correctly, it enables flexible automation and positively impacts the production and quality of the manufacturing industry. Some of the most common technologies covered in Industry 4.0 include additive manufacturing, advanced robotics, augmented virtual reality, mixed reality, big data, cloud computing, and the Internet of Things (Dalenogare et al., 2018).

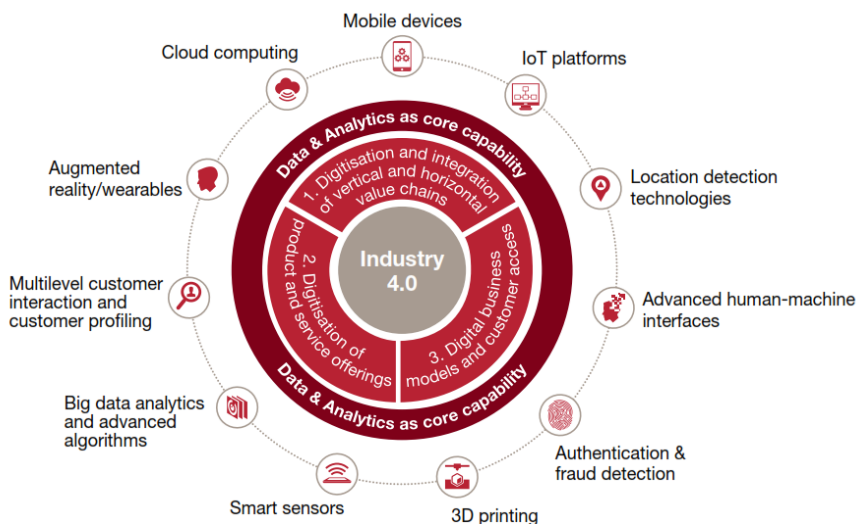
Figure 1: Four stages of the Industrial Revolution (Kagermann et al., 2013)



## 1.2. Maturity Models

Maturity Model frameworks provide an organized system to assess the progress of implementing Industry 4.0 technologies in a production environment. Industry 4.0 is unlike the previous industrial advancements and technologies. Figure 2 shows the technologies of Industry 4.0. If there's one thing that is common between all the technologies of Industry 4.0, it is the fact that they are all based on cutting-edge software, IT infrastructure, and the Internet of Things (Dalenogare et al., 2018). This is why conventional assessment models cannot be used to determine the state of an environment that uses Industry 4.0 technology.

Figure 2: Industry 4.0 framework and contributing digital technologies (Geissbauer et al., 2016)



As Industry 4.0 becomes popular, companies face challenges in implementing Industry 4.0 standards. However, tracking the progress of Industry 4.0 implementation in their specific setup is a more pressing issue. Most industries and businesses lack a systematic framework for evaluating their implemented technologies. This is where the maturity models come in. Maturity Models provide a systematic approach to implementing and assessing the progress of implementing Industry 4.0 standards (Rauch et al., 2020).

### 1.3. Maturity Models for the Assessment of Industry 4.0

This section will discuss the seven most important maturity models for assessing Industry 4.0. Table 1 lists these six models' maturity levels, dimensions, and research context. Several other assessment models are derived from these basic maturity models, but they are primarily based on the models described here.

Table 15: Existing maturity models (MMs) in the context of Industry 4.0 (Gökalp et al., 2017)

Model/Research name	Research context	Maturity levels	Dimensions
The connected enterprise maturity model	IT readiness	5 maturity stages (Assessment; Secure and upgraded network controls; Defined and organized working data capital (WDC); Analytics; Collaboration)	4 dimensions related to technological readiness. As stated in [17], no further information is provided related to aspect dimensions and the creation process of them
IMPULS – Industrie 4.0 readiness	Industry 4.0 readiness	6 maturity levels (Outsiders; Beginner; Intermediate; Experienced; Expert; Top performers)	6 dimensions (Strategy & Organization, Smart Factory, Smart Operations, Smart Products, Data-driven Services, and Employees)
Empowered and implementation strategy for Industry 4.0	Implementation strategies of Industry 4.0	No information provided regarding the MM	No information provided regarding the MM
Industry 4.0/digital operations self-assessment	Digital readiness for Industry 4.0	3 maturity levels (Vertical Integrator; Horizontal Collaborator; Digital Champion)	6 dimensions (Business Models; Product & Service; Portfolio Market & Customer Access; Value Chains & Processes; IT Architecture; Compliance, Legal, Risk, Security & Tax; Organization & Culture)
A maturity model for Industry 4.0 Readiness	Industry 4.0 maturity	Likert-scale maturity levels (from rating 1 = “not important”; to rating 4 = “very important”)	8 dimensions (Strategy, Leadership, Customer, Products, Operations, Culture, People, Governance, Technology)
Towards a maturity model for Industrial Internet	Industrial Internet maturity	The research is not completed yet. No information regarding the MM	The research is not completed yet. No information regarding the MM
SIMMI 4.0	Industry 4.0 maturity	5 maturity stages (Basic Digitization; Cross-Departmental Digitization; Horizontal and Vertical Digitization; Full Digitization; Optimized Full Digitization)	3 dimensions (Vertical Integration, Horizontal Integration, Cross-sectional Technology Criteria)

#### 2.1. The Connected Enterprise Maturity Model

The connected enterprise maturity model is the most basic model to determine the level of IT readiness in Industry 4.0. Rockwell Automation has put forward the five-stage model. The model aims to integrate information technology (IT) with operational technology to improve the performance and output of an industry (Beth Parkinson, 2015).

Here’s the 5-step approach outlined in the connected enterprise maturity model:

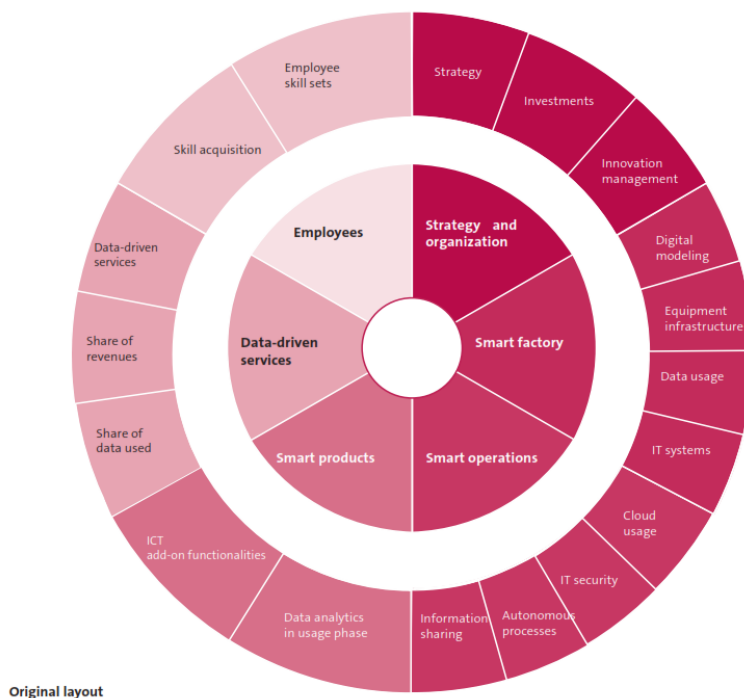
- 1. Assess:** The first step is to assess the process and landscape of a production environment. This includes monitoring the manufacturing times, quality, EHS, and costs.
- 2. Secure and Upgrade Network and Controls:** Enable the timely exchange of information between IT and OT by focusing on process stability and production responsiveness.
- 3. Define and Organize Working Data Capital:** Measure the key financial parameters such as ROI, inventory turnover, overall equipment effectiveness, and manufacturing costs.

- Analyze:** Gather the data collected in steps 1-3 and analyze it using data analytics software. Look for the areas where most work is required.
- Collaborate:** Promote cross-departmental collaboration to make decisions regarding demand forecast accuracy, product innovation, market share, and overall supply-chain inventories.

## 2.2. Readiness Maturity Model for Industry 4.0 by IMPULS

This maturity model by IMPULS aims to assess the readiness level of companies to implement the Industry 4.0 standards. It takes a competitive approach to the digital transformation process. The model comprises six dimensions, further divided into 18 operational fields. The details of the dimensions and elements are shown in Figure 3.

Figure 3: Dimensions and associated fields of Industrie 4.0 (Lichtblau et al., n.d.)



The performance data of these fields and dimensions can be used to rank each company from levels 0 to 5. Level 0 is assigned to a company doing nothing to implement the Industry 4.0 standards, whereas Level 5 is assigned to top companies implementing the strategies of Industry 4.0. The model systematically assigns levels to each company (Lichtblau et al., n.d.).

## 2.3. Empowered and Implementation Strategy for Industry 4.0

Empowered and implementation strategy is an incomplete maturity model to assess an Industry 4.0. The study aims to provide a framework for implementing Industry 4.0 standards and protocols. However, it fails to do so. No maturity stages and clear dimensions for measurement of quantities are mentioned in this model (Gökalp et al., 2017).

## 2.4. Digital Operations Self-assessment Maturity Model for Industry 4.0

The main goal of the digital operations maturity model is to provide an implementation framework for the digital transformation of a production company into Industry 4.0. It outlines the key challenges the companies face during their digital transformation journey to Industry 4.0. Plus, it also suggests an approach that can resolve the underlying issues. Figure 4 shows the steps of the blueprint (Geissbauer et al., 2016).

Here is the comprehensive blueprint provided by the self-assessment model for Industry 4.0.

**Map out Industry 4.0 Strategy:** The first step of this journey for a company is to assess its current level of digital maturity and set a clear vision with clear objectives to bring about a digital transformation. The company should also map out the digital technologies enabling it to transform operations and create value. The path of this digital transformation journey should be aligned with the long-term impact, performance, and efficiency goals of the industry.

**Create Initial Pilot Projects:** The company should start by implementing digital transformation concepts in the pilot project. This way, the risk is minimized, and pilot projects can become a good starting point to test out how this digital transformative journey will play out. Digital transformation of initial pilot projects can provide insights and valuable data for a digital transformation on the industrial level.

Figure 4: Blueprint for digital success (Geissbauer et al., 2016)



**Define Required Capabilities:** After obtaining the results and insights from the initial pilot projects, the company should find the required capabilities and resources for implementing a digital transformation strategy on an industrial scale. This may include but isn't limited to considering organizational structures, assessing skill sets of the workforce, ongoing process improvements, and technology infrastructure required to enable digital transformation.

**Become a Data Virtuoso:** Data analytics is the most important step in the transformative journey of a company to become an Industry 4.0. Data analysis provides actionable evidence to optimize processes and insights to develop new products and drive innovation. A robust data analytics strategy can identify data sources and help implement advanced analytics techniques.

**Transform into a Digital Enterprise:** The company should not stop after the technological aspect of digital transformation has been achieved. Instead, it should strive to become a digital enterprise in itself. This requires a rapid cultural shift within the organization. The workforce and management should be aligned in embracing the digital transformation process. The attitude of fostering innovation and building digital skills can go a long way in transforming a company into a truly digital enterprise and, consequently, an Industry 4.0.

**Actively Plan an Ecosystem Approach:** Instead of implementing the digital transformation strategy only within the company, a truly digital enterprise should apply it to its other partners. It should actively plan an ecosystem approach. A company cannot become Industry 4.0 when its customers, suppliers, and associated businesses are not following the required standards. Hence, the partners should be in the loop during this digital transformative journey.

## 2.4. A Maturity Model for Industry 4.0 Readiness

The maturity model for assessing Industry 4.0 readiness and maturity of manufacturing enterprises is probably the most reliable to measure the measuring values in the context of Industry 4.0. Overall, 62 items have been listed in this model to assess a company's maturity level. These 62 elements have been classified into nine dimensions. Each company is categorized using a level system based on the measured values across all dimensions.



Level 1 is assigned to a company that doesn't show any attributes of Industry 4.0, whereas Level 5 is assigned to a company that has made state-of-the-art efforts to become Industry 4.0. The model makes the overall process of maturity assessment very easy. A software-based tool is used to generate standardized maturity reports. The measuring values of the 62 elements are fed into the software, which it uses to calculate the maturity levels based on scores across the nine dimensions (Schumacher et al., 2016).

The use of the Likert scale makes the measurement of measuring values reliable, easy, and straightforward. For example, some basic questions are put forward, and a score on the Likert scale is assigned. The questionnaire containing questions about 62 measuring values is distributed to various people inside the company for the best results. It is important to note that some people might be more well-versed in a certain discipline. Therefore, an average score is calculated based on the individual questionnaire score of each person.

The model then uses a weighted average formula to determine the maturity level of a company in each dimension. The formula used for this purpose is used in equation (1).

$$M_d = \frac{\sum_{i=1}^n M_{Dli} * g_{Dli}}{\sum_{i=1}^n g_{Dli}}$$

In this formula,

M...Maturity

D...Dimension

I...Item

g...Weighting Factor

n...Number of Maturity Items

Unlike the complicated structures of other maturity models, this model is relatively easy to use and removes the complex scenarios. It is a straightforward mathematical model based on the Likert-scale scoring system.

## 2.5. Industrial Internet Maturity Model for Industry 4.0

Based on Mettler's research, the Industrial Internet maturity model is an incomplete model that aims to provide an assessment criteria for industrial internet in manufacturing industries. It proposes that a customized and tailored model is required to validate complex systems and heavy machinery connected through the industrial internet. The industrial internet has had an extremely positive impact on the output and performance of the manufacturing industry. However, as with the introduction of each technological innovation, the implementation has been quite tricky.

The industrial internet maturity model suggests that this complexity level can be reduced by developing a detailed maturity model for planning, execution, analysis, and value creation in a production environment. The research also covers other maturity models used in IT and software-related domains. These models have been successful at providing a long-term road map for the implementation of strategies. Ongoing research on industrial internet models will result in a complete maturity model for connectivity of Industry 4.0 (Menon & Allan Lasrado, n.d.).

## 2.6. SIMMI 4.0 Maturity Model for Industry 4.0

System Integration Maturity Model Industry 4.0 (SIMMI 4.0) is probably the most important assessment model in the context of Industry 4.0. Though it disregards a production company's organizational and environmental performance parameters, it analyzes its IT and software landscape. Since Industry 4.0 mainly focuses on flexible automation using software and IT techniques, assessing against the SSIMMI 4.0 criteria becomes very important (Leyh et al., 2017).

According to SIMMI 4.0, the IT systems of a company should meet the bare minimum requirements of vertical & horizontal integration and cross-sectional technologies to be categorized as Industry 4.0. This model categorizes the companies between stages 1 and 5. Each model is assessed on the following parameters:



- IT Integration
- Process Digitization
- Cross-departmental Digitization
- Service Oriented Approach
- Horizontal and Vertical Digitization
- Automated Information Flows
- Collaboration with Business Partners
- Development of New Business Models
- Improvements in IT Security Measures
- Operational Efficiency
- Competitiveness

The initial stage of the company is determined by using these parameters of SIMMI 4.0. The systematic framework provided by the stage criteria shows the company where it stands and what it needs to do to attain the next level.

### A Comparison Between Maturity Models

Six criteria have been defined in the literature to assess the quality of the maturity models for Industry 4.0. These six criteria have been defined in Table 2 below.

Table 16: Assessment criteria for gap analysis (Gökalp et al., 2017)

Criteria #	Criteria	Definitions
C1	Fitness for purpose	The level of fitness of the corresponding MM in terms of measuring maturity level in the context of Industry 4.0
C2	Completeness of aspects	The level of completeness of aspects in terms of addressing all or a subset of major aspects in the context of Industry 4.0
C3	Granularity of dimensions	The level of detail of explanations of the attributes in the corresponding dimensions
C4	Definition of measurement attributes	It questions whether the corresponding MM provides the description of the measurement attributes, or not
C5	Description of assessment method	It questions if the study provides a complete description of the assessment method
C6	Objectivity of the assessment method	The level of objectivity of maturity assessment method of the study. The definitions of the attributes, practices, and each level of the maturity should be described unambiguously. And the overall maturity level should correctly reflect the number of questions positively answered

The analysis results based on these criteria are shown in Table 3. Here is the scoring scheme for the terms used in Table 3.

- FA: 86%-100%
- LA: 51%-85%
- PA: 16%-50%
- NA: 1%-15%

Table 17: Analysis of existing MMs in the context of Industry 4.0 (Gökalp et al., 2017)

Maturity model	C1	C2	C3	C4	C5	C6
MM1	NA	PA	NA	NA	NA	NA
MM2	PA	PA	PA	LA	FA	LA
MM3	NA	NA	NA	NA	NA	NA
MM4	PA	PA	PA	PA	NA	PA
MM5	PA	PA	PA	PA	PA	PA
MM6	PA	NA	NA	NA	NA	NA
MM7	PA	PA	PA	PA	LA	PA

Now, let's critically analyze each model in light of this scoring scheme while also looking at the pros and cons of using each model.

#### **MM1: The Connected Enterprise Maturity Model**

Overall Assessment Score = **4%-21%**

##### **Pros:**

- Provides a 5-step approach for the implementation of IT readiness in Industry 4.0.
- It can integrate information technology (IT) with operational technology (OT).

##### **Cons:**

- No clear dimensions are defined.
- Elements for no dimensions are provided in the model.

#### **MM2: Readiness Maturity Model for Industry 4.0 by IMPULS**

Overall Assessment Score = **39%-70%**

##### **Pros:**

- It can define the maturity levels of a company accurately.
- It provides a clear and defined program for implementing Industry 4.0 standards.

##### **Cons:**

- The competitor's maturity level is defined only when another company in the same market takes the survey.

#### **MM3: Empowered and Implementation Strategy for Industry 4.0**

Overall Assessment Score = **1%-15%**

##### **Pros:**

- It provides a general framework for implementing the Industry 4.0 strategies.

##### **Cons:**

- Little to no information is available on the model.
- No clear dimensions are defined.
- Elements for no dimensions are provided in the model.

#### **MM4: Digital Operations Self-assessment Maturity Model for Industry 4.0**

Overall Assessment Score = **14%-44%**

##### **Pros:**

- It offers an online assessment tool for Industry 4.0.
- It can define the maturity levels of a company accurately.

##### **Cons:**

- It only focuses on the digital transformation of a company.
- Elements for no dimensions are defined in the model.

#### **MM5: A Maturity Model for Industry 4.0 Readiness**

Overall Assessment Score = **16%-50%**

##### **Pros:**

- This model is straightforward to apply.
- It uses mathematical expressions to quantify the dimensions.

##### **Cons:**

- The model cannot provide solutions for companies lagging to become Industry 4.0.

#### **MM6: Industrial Internet Maturity Model for Industry 4.0**

Overall Assessment Score = **4%-21%**

##### **Pros:**

- It provides a framework for integrating the industrial internet with the complex machinery and software-based tools of Industry 4.0.

##### **Cons:**

- It is an incomplete model with ongoing research.
- No dimensions and elements have been defined for this model.

#### **MM7: SIMMI 4.0 Maturity Model for Industry 4.0**

Overall Assessment Score = **22%-56%**

##### **Pros:**

- It categorizes each company into stages based on its maturity in the IT segment.

- It is a complete model to determine the IT maturity of an Industry 4.0.

#### Cons:

- It only focuses on the technological and IT aspects of Industry 4.0.
- It disregards the competitors and the market structure.
- It has no regard for the company's vision and mission.

## CONCLUSIONS and FUTURE RECOMMENDATIONS

When implemented correctly, the Industry 4.0 concept can change the face of the manufacturing industry forever. Assessment of Industry 4.0 via maturity models presents a systematic way to implement Industry 4.0 in a production environment. The maturity models also mark the path for companies to overcome the shortcomings in implementing Industry 4.0. The seven maturity models presented in this paper are some of the many maturity models described in the literature. Each of these models has some upsides as well as some downsides. The scenarios in which each model can be used will differ from industry to industry. No one wholesome model can be applied for the perfect implementation of Industry 4.0 standards in a production environment.

The work towards a comprehensive maturity model for the assessment of Industry 4.0 must continue. An ideal model should clearly define the elements and dimensions that must be measured to assess Industry 4.0. Secondly, it should classify the companies using some level or stage criteria. It should consider all the environmental, organizational, competitive, and performance parameters while doing so. The model should enable the company to overcome the shortcomings in implementing Industry 4.0 standards. It will be a huge success if we can develop such a comprehensive model.

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# The Adoption of Renewable Energy Practices in MSME-s in North Macedonia: Barriers and Benefits

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**Abstract:** This research aims to identify the current status of MSME-s in North Macedonia about their approach to the adaptation of renewable energy practice as a key factor towards the development of a sustainable economy, green innovations and eco-friendly environment. For data collection we used primary data and as an instrument we used a structured questionnaire in 70 MSME-s of different sectors. Through this questionnaire, we have investigated present state of renewable energy utilization among companies, level of awareness of renewable energy technologies, their perception of financial viability, concerns on reliability, assessment of government support, and the level of attention given to environmental sustainability. Our findings show that only some businesses are partially equipped with these renewable energy practices. Despite this fact, there is a moderate level of businesses that are aware that these practices are profitable and reduce costs. As the study explores, outcomes from research are relevant sources of information for policy makers, researchers and debaters on sustainable energy experts within the business community and marketing environments.

**Keywords:** renewable energy, sustainability, green innovations, eco-friendly environment.

## 1. Introduction

Climate change and environmental sustainability is a great challenge for the globe. Nowadays, everyone is trying to come up with new ideas and solutions on how the small businesses can go green. But recent studies show that small businesses in many countries are some steps behind in the implementation of a renewable energy utilization. As climate changes continue to threaten the globe, it becomes increasingly important to analyze the role of the small businesses have in the transition of energy to renewable sources. In the context of North Macedonia, where small enterprises are the building bricks of the entire economy, knowing pipeline of the dynamics of renewable energy adoption are the way forward in sustainability. The objectives of this research aims to determine the degree of renewable energy adoption in the small businesses operating in the North Macedonia, finding the barriers and the challenges on the implementation of renewable energy resources and to provide a strategy regarding on promoting renewable energy practices.

This topic has been the subject of a number of studies which have shown that small businesses are key drivers to sustainable energy practices (Smith, 2018). Smith et al. (2019) state that small businesses have low innovation rates and their role in transforming local communities into more sustainable areas is fundamental. In addition, Jones (2020) emphasized that targeted approaches to supporting small businesses in their transition to sustainable energy use essential. The implementation of green energy solutions by Micro, Small and Medium Trades (MSMEs) is a crucial topic of environmental and economic educational arena. Whereas the rising up of environment change issues and the pandemics of lowering carbon emissions have grown to be renewable energy resources become the only used source. Evaluating the adoption of renewable energy practices in small scale businesses has urgent implications since renewables have a few points on their behalf and these points are crucial. Consequently, their individual energy consumption patterns have got such a great weight to be a huge determinant of the total energy utilization and pollution levels to the environment. In addition, there are several reasons which make the transition to renewable energy sources as much as they are subject to global sustainability goals as they offer some cost savings as protective measures against unstable fossil fuel prices.

Key questions to be addressed in this study include: *What are the present attitudes and perceptions of the small business owners in North Macedonia relating to the implementation of renewable energy into their businesses? What are the obstacles that prevent the implementation of renewable energy in smaller businesses? How can the implementation of renewable energy in small business be promoted?* By answering these questions, a holistic understanding in regard to the barriers, drivers, and implications of small businesses adopting renewable energy technology can be obtained. It is an attempt to look beyond the complexity and proffer solutions which can guide policy formulation and strategic decision making towards a greener and sustainable future. Understanding what promotes or what prevents the adoption can give policymakers, business owners, and other stakeholders awareness about ways to fulfil the switch in due time.

## 2. Literature Review

The debate regarding the concept and adoption of renewable energy has dominated the global conversations in the past few decades (Holley, 2014). Smith et al. (2018) point out that the conceptual framework of renewable energy adoption is based on technological, economic, and policy factors. They suggest that renewable energy is dependent upon all these factors to be in operation. Brown and Jones (2019) argue of the social and cultural factors within the framework of the renewable adoption. They contend of the factors of community engagement, public perception and cultural norms towards the renewable energy adoption. Smith (2018) suggests that the adoption and diffusion of renewable energy technologies involve many interactions of the various contexts that encompass the single model of renewable energy adoption.

The environmental and sustainability dimensions have been probed by Johnson and Wang (2020) as the conceptual framework of renewable energy adoption. According to them, the technology adoption has to be subject to the long term ecological effects together with the carbon footprint reduction potential. Garcia and Patel (2017) argue that the geopolitical frameworks of renewable energy adoption have to be taken into consideration which include international relations, energy security and the geopolitics as all these may affect the global spread of the renewable energy adoption. It is important to note that the conceptual framework of renewable, therefore, takes into account the technological, economic, policy, social, environmental and geopolitical aspects.

Small business often have limited resources. This consequently makes small business be demotivated. The high cost of renewable energy technologies may prevent small businesses from adopting renewable energy system even though they provides most significant ways of energy saving (Smith & Jones, 2018). Therefore, lack of knowledge of some business owners in respect of the benefits or even cost saving in relation to renewable energy system can act as a key factor to non-adoption (Johnson et al., 2019). The use of renewable energy in North Macedonia can only be satisfyingly implemented with government policies and incentives in place as it is common that the government plays a major role in shaping the energy landscape of a nation (Jonas & Smith, 2018). North Macedonia government can put policies in place which can encourage to generating electricity using solar, wind and hydro electric power. Some incentives the government can provide are financial incentives. Financial incentives come in the form tax credits or subsidies.

Financial incentives promote the installation of renewable energy technologies by reducing their initial costs, which in turn makes them more attractable to investors and end-users (Johnson et al., 2019). By providing financial incentives, the end-users will not have to cover the whole cost of installing or using a renewable energy system. These incentives could in the short term make renewable energy systems less expensive and more attractive to potential residential end-users and businesses or investors. The Government can introduce regulatory policies which will make it compulsory for example 50% of all electricity to be generated using renewable energy.

Renewable energy is beneficial for environment and economy. Firstly, renewable energy resources like wind, solar, and hydroelectric power can help in reducing greenhouse gas emissions and in turn have a positive impact on climate change. Secondly, the introduction and development of renewable energy technology helps in creation of job opportunity and boosts the economy of the country. According to International Renewable Energy Agency (IRENA), in 2018, renewable energy employed directly and indirectly 11 million people around the world. Hence, there's a potential to create further jobs with the increase of renewable energy technology IRENA (2019). The other opportunity is that, the use of renewable energy helps in reducing the dependence on fossil fuel which in return will help in having energy security.

Countries' depending on their own domestic renewable energy resources, they will be less reliant on imported energy sources. This has implications for energy security and for the stability of the energy infrastructure. Renewable energy could be even more decentralized than fossil fuels, which can help with such things as rural development and could be more politically stable. We could apply renewable energy technology to the distribute of energy to the remote areas. Fthenakis and Kim (2011) point out, the development of renewable technology would as well enhance economic growth. Countries investing in renewable energy development would create more jobs, become less dependent on fossil credibility and have a decrease in their fuel cost.

Challenges and barriers to the adoption of renewable energy sources are complex and require a multifaceted understanding of the different factors. One major challenge is the high initial cost of implementing renewable energy technologies, which can make them unattractive to invest in and slowing down the adoption process (Hirth 2018). Furthermore, intermittency of renewable energy sources such as solar and wind power is a

significant challenge in terms of availability and grid integration (Zakeri & Syri 2015). This poses a threat to the security and stability of energy, therefore requiring the development of energy storage systems or energy grid infrastructure to ensure the power is delivered consistently (Hirth 2018).

Finally, policy and regulations can also pose barriers to widespread adoption of renewable energy as complex and changeable regulations can prohibit the development of renewable energy projects (Büsgen et al. 2018). In addition to economic and technical barriers, social and cultural barriers can also affect the adoption of renewable energy. Acceptance and public perception of renewable energy technologies are key to the successful implementation of renewable energy technologies (Walker & Devine-Wright 2008). In particular, evident of negative attitudes and lack of awareness of the benefits renewable energy can create resistance to change and slow down the transition to a sustainable energy system.

Furthermore, a lack of knowledge and information about renewable energy can create mistrust in the public, indicating the importance of successful communication and outreach efforts to promote the adoption of renewable energy (Walker & Devine-Wright 2008). To address the challenges and barriers to renewable energy adoption, a multi-faceted approach is required by considering inclusive of technical, economic, social, and policy dimensions. Collaboration between government, industry and the academia is necessary in order to develop innovative solutions and strategies to tackle the barriers and speed up the transition towards a more sustainable energy future (Büsgen et al. 2018). By recognizing the complexities of renewable energy adoption from a multidisciplinary approach, renewable energy sources can be integrated in the energy system more widely, resulting in a sustainable and resilient energy system for the future.

### **3. Methodology**

The study is based on primary data collected from leaders and managers of MSMEs in the North Macedonia, with a sample of 110 respondents. The quantitative approach has been chosen to analyze the results, where the questionnaire as a primary instrument is conducted to collect the data. The questionnaire we used was adapted by different authors to achieve this goal. It is divided into three parts where each part contains 5 questions.

### **4. Results**

The questionnaire responses are a good foundation allowing observation of fairly clear patterns that exist in the current use of the renewable energy by MSMEs in North Macedonia. Around 28.6 percent of the firms we surveyed stated that utilizing renewable energy was not something they were into at all, this suggesting that there is a non-trivial fraction of small firms that are unable to wean themselves off the more traditional sources of energy. Also, it is noteworthy that the largest portion (21.4%) of the companies answered that they use renewable energy to a fairly small extent and it is less than 30% of the companies which utilize renewable energy to a great or fairly extent. This fact implies accordance of widespread need for an increased employ of renewable energy mechanisms in the business community aimed at ecology and the environment protection enhancement.

Regarding the understanding of renewable energy techniques result, it is evident that people knowledge about it is increasing, and 71.4% of the respondents, at least moderate know how it work. Nonetheless, it should be noted that just a few (7.1%) reported to be fully unaware about the renewable energy technologies. These informs of the targeted educational program designed to boost business awareness and comprehension to renewable energy as an alternative to conventional energy means among small-scale business with little or no practice in this area.

As regards how feasible it is to implement renewable energy technologies financially, the results expose that the opinion of respondents differ. Credit has to be offered that about half of them (50%) treated the implementation of renewable sources of energy as financially-sensitive or at least financially-viable while some of them (14.3%) were very skeptical about the financial feasibility of it. Financial analysis should be part and parcel of both internal and policy level decision making to address constraints to investing bar use renewable energy technologies.

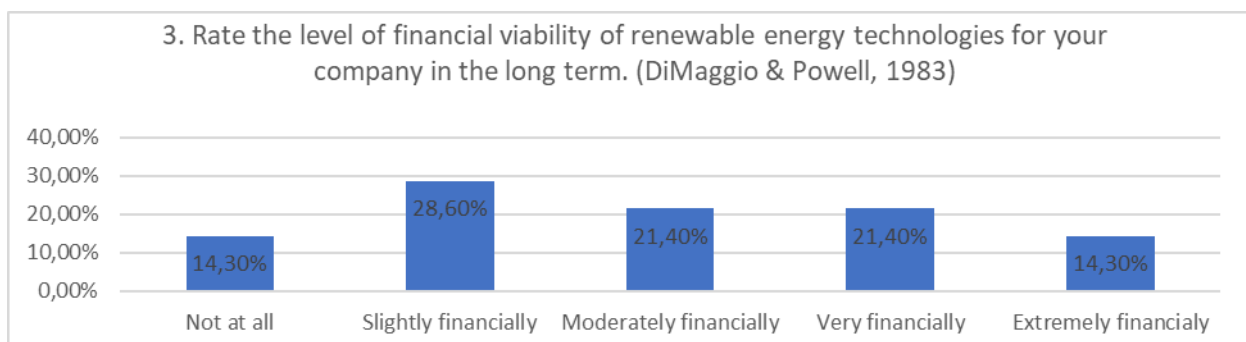
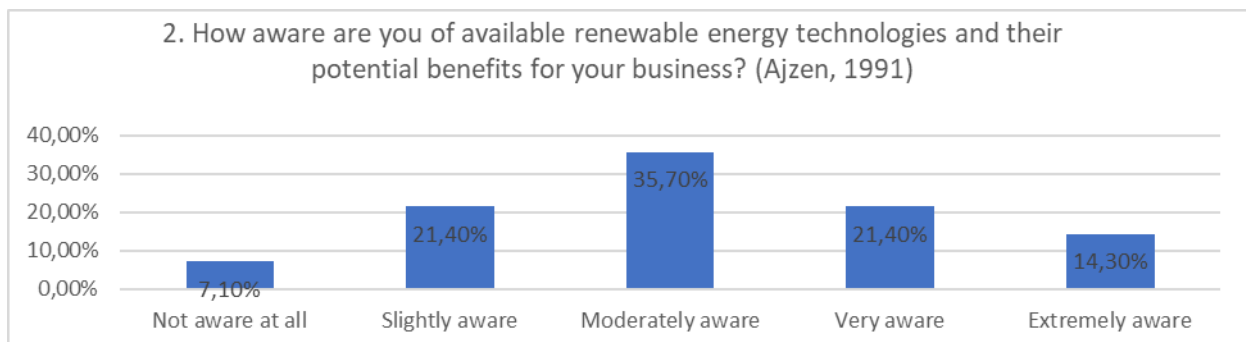
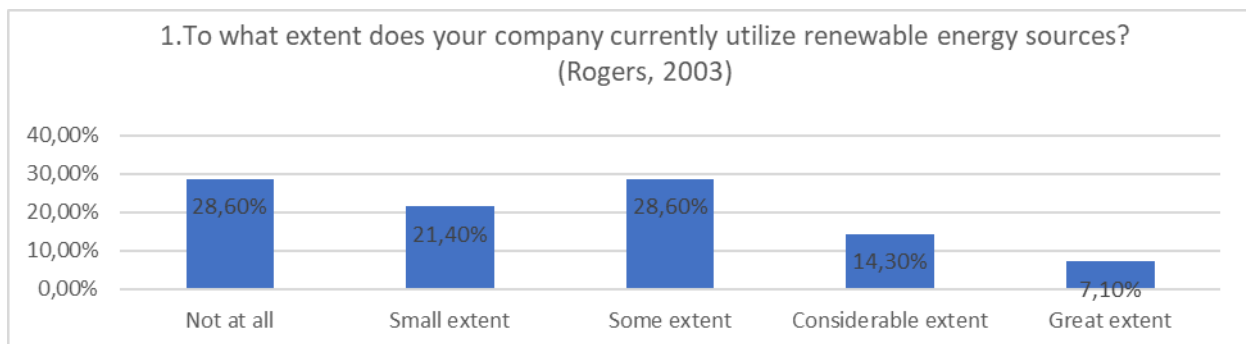
The main issue people talked about was the reliability of renewable energy sources, and many of them (57.2 %) gave answers at least to the considerable extent expressing their worries in this regard. This exemplifies the

fact that solutions for reliability problems with renewable energy can be seen in technological improvements, energy storage systems, as well as in risks mitigation measures-knowing that all this promotes confidence and further adoption of sustainable renewable energy approaches.

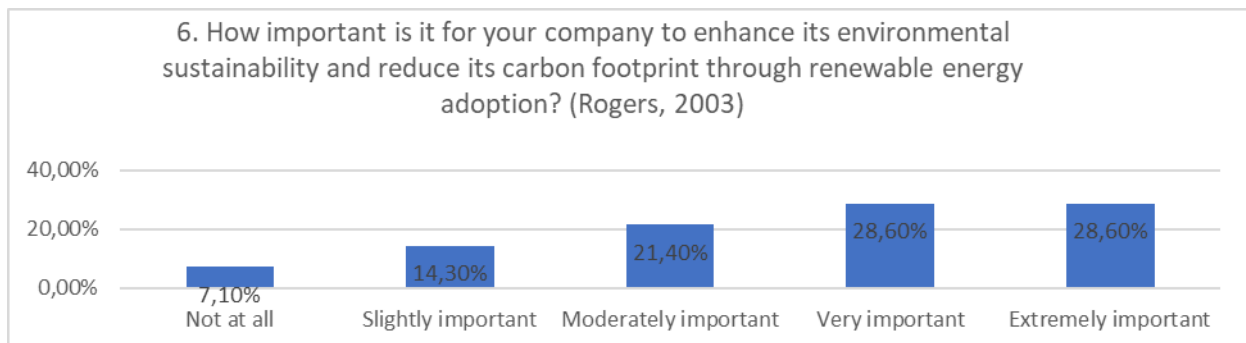
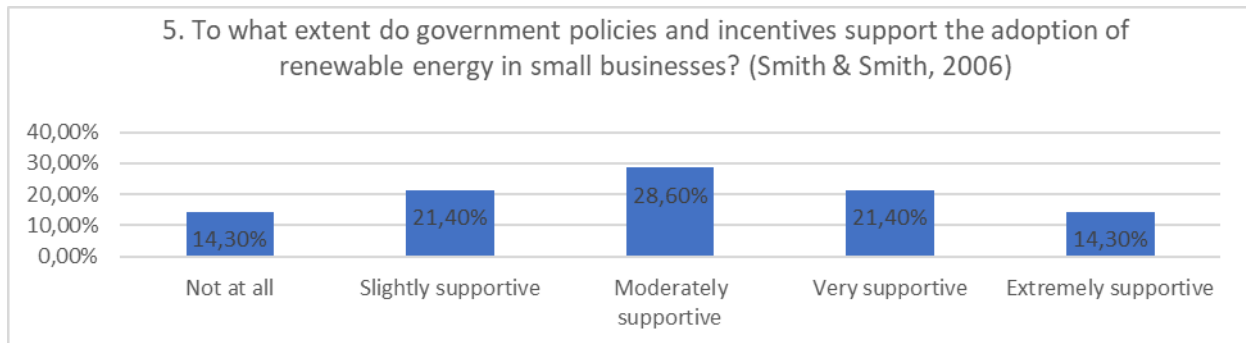
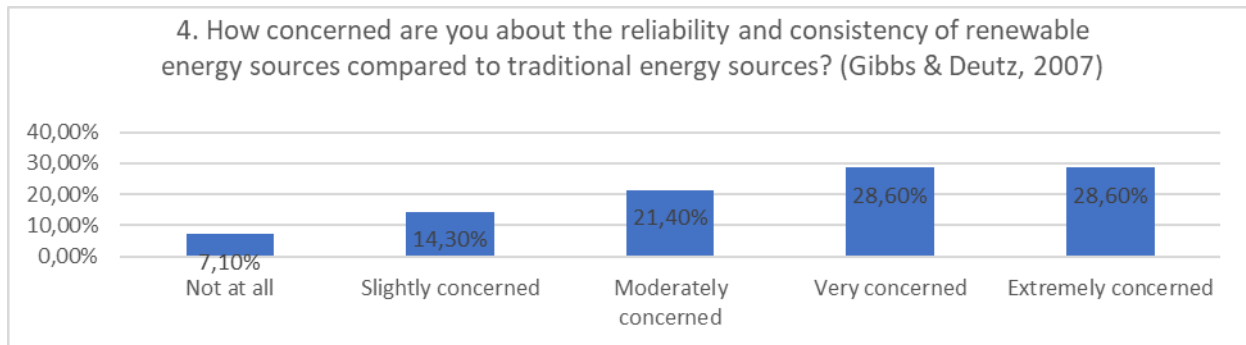
Attitudes of the respondents towards governmental support for solar energy adoption ranged among respondents with about 50% of those questioned showing at least medium levels of perceived support. Nonetheless, there were a spread of voices (35.7%) who expressed dissatisfaction with the current extent of government support, hence there is an opportunity to work out more reliable policy frameworks and mechanisms for incentive of renewables investment and innovation.

Likewise, more small businesses in North Macedonia are adopting new clean energy technologies because of interest in sustainability issues as the main reason. Now, let's evaluate one of the bolder findings: a yet, a small majority (57.2%) of the respondents rated environmental sustainability as very to extremely important, emphasizing the shared desire to decrease the carbon footprint and encourage environmental stewardship by renewable energy practices. And this will be in line with the trend of sustainability as well with an indication of the possibility of renewable energy to occupy the niche of playing a vital part within environmental goals of business entities.

In this section, the results of the most important responses will be presented.







## 5. Conclusion

The research was conducted for companies of different sizes, comprising small-scale organizations as well as including large corporations, offering the research with a wide spectrum of understanding as to the importance of renewable energy in various organizational structures. The startup firms that participated in the survey seemed to have a moderate level of implementing green energy sources which probably indicates an increasing shift towards environmentally sustainable business within the sector. Moreover, results shows noticeably different responsiveness and viewpoint about renewable energy technologies among participations. Although the same number of participants showed great awareness regarding these sources, a significant number, nonetheless, adduced their limited knowledge. It is probably the most important factor when it comes to the necessity to develop the educational programmes that would educate and popularize the positive effect of renewable adoption from the side of small businesses that do not have even the smallest budget for research and development.

The respondent's views on financial viability of renewable energy technologies, rated at the mixed sentiment level. Whilst, the big portion sided in the aftermarket renewable investment to be between moderately to extremely financially logical, a number of them have concerns about affordability and returns on investment. This not only points to the role of enacting supportive measures but also to providing prevalent incentives so among small businesses financial barriers that hinder the scaling up of renewable energy infrastructure could be overcome.

Particularly, the latter tends to reveal that the interviewees worry more about the reliability of the renewable energy in comparison to the conventional sources of energy respectively. More than half of them chose the option on a scale of moderate to highly worried, which could mean that the renewable energy faces risks in terms of reliability to supply energy to the business operations. Implementing the measures of increased reliability of technology, creating effective energy storage Technology system and risk mitigation strategies, is necessary to build everybody's trust and to promote wider use of Renewable Energy practices.

Considering the role of government, the research results demonstrate a diverse stance that can generally be attributed towards the respondents whether the particular products and policies instigated by the government are effective in driving a transition to renewable energy sources. Whereas there are those who find government assistance to be moderately to extremely supportive, or even too little, others complain about a lack of clarity in the current regulatory environment. Some call for more specific incentives and clearer rules. This highlights the need for policy coherence and stakeholder dialogue as they help in creation of an environment which is conducive and favorable for green energy investments and innovations.

On the other hand, the findings from the questionnaire demonstrate a clear and solid agreement among the participants about the priority role that environmental sustainability is playing in creating the context for renewable energy adoption. The incorporation of renewable energy into the operations of various firms in different economic sectors and sizes is increasingly recognized by companies as a financially important part of their environmental protection and stewardship. This group consensus indicates that small-scale sustainable energy practices may be used as a start to bring around interest in green environment and social change among the North Macedonian entrepreneurs and the beginning of a long journey towards a more robust and environmentally friendly economy.

In summarizing the results from the survey implementation of the small businesses in various enterprise sectors in the North Macedonia reveals both the possibilities created and the difficulties encountered with the implementation of renewable energy technologies among the small business. The study findings indicate the diverse picture, a big bulk of companies, and the innovators in the same area have done little or not very much renewable energy awareness and utilization. The uncertainty about financial viability and the reliability of the technology that can limit the rate of adoption became key factors the government needs to consider as it looks into addressing adverse effects that the change may bring. Besides that, the respondents opinions regarding the level of the government support were different. That leads to the idea of improvement of the policy frameworks and the incentive measures in order to attract investments in the renewable energies (solar and wind). Seemingly, differing attitudes among small businesses are the greatest barrier on the way to increasing percentage of renewable energy use in the region; however, the commitment of small business towards ecological sustainability indicates that there are several promising ways to continue this development.

In our future research, the major issues at hand will need a joint authority between policymakers, companies, and other partners to create a good ground for alternative energy use. Governments can set up financial incentives to promote eco-friendly practices or provide technological assistance and capacity-building support to help small producers adopt more sustainable methods. They can also organize networks and knowledge-sharing forums where the participants can interact and share their experiences. Through using these tactics, North Macedonia will unveil the economic, ecological, and social benefits of the renewable energy investment, improving environment and social wellness at large.

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## Wage Disparities Between Districts in Bulgaria: The Role of Foreign Affiliates Versus Local Firms

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**Abstract:** The causes and effects of income inequality have become widely discussed among researchers and policy makers in recent years. Rising income disparities are of particular concern in Bulgaria, as it is not only the country with the most unequal income distribution in the European Union, but also the member state with the lowest GDP per capita. An important dimension of income inequality in Bulgaria is related to the significant regional wage disparities existing in the country. What is more, of rising interest is the impact of foreign-owned companies on wage inequality, as a particular feature of foreign direct investment (FDI) in Bulgaria is its highly uneven regional distribution, with half of inward FDI stock being concentrated in the capital city. Hence, the aim of the paper is to explore wage differences and wage inequality between the districts in Bulgaria in the period 2008-2021, comparing the role of foreign and local firms. To estimate between-district wage inequality for all enterprises, as well as separately for the two types of firms, we use the between-group component of the Theil's T Statistic, as this approach allows not only to trace the evolution of between-district wage inequality over time, but also to reveal the changing contribution of each district. The results show an upward trend in the overall wage inequality across districts. When distinguishing between the two types of firms, the analysis shows that between-district wage inequality in the case of foreign firms is greater compared to local companies. However, the between-district wage inequality among foreign affiliates' employees tends to decrease which is mainly due to a narrowing gap between foreign firms' average wage in the capital and the country average wage level of foreign firms. Conversely, there is an upward trend in between-district wage inequality among local firms' employees. This is mostly due to an increasing contribution of local firms in the capital, which experience an expanding employment share and rising relative wages.

**Keywords:** wage inequality, regional disparities, foreign affiliates

### 1. INTRODUCTION

Widening income disparities have emerged as an important topic of research interest and public policy concern in recent years, as the large social and economic costs of high and sustained levels of income inequality have been widely acknowledged (e.g. Stiglitz, 2012; Ostry, Berg and Tsangarides, 2014; Dabla-Norris et al., 2015; Polacko, 2021). Focusing on income disparities is especially important for the Bulgarian economy, as in addition to being the member state with the lowest GDP per capita in the European Union (EU), it has the most uneven income distribution since 2016. According to Eurostat data, in 2022 the Gini coefficient in Bulgaria was 38,4, while the EU-average was 29,6. What is more, in the same year the ratio of the total income received by the top quintile to that received by the lowest quintile was 7,3 in Bulgaria, against 4,7 in the EU. A key dimension of income inequality in Bulgaria is related to the significant regional disparities in the country. Leading in terms of economic development is the South-West region, which accounts for one third of the labor force, half of the gross value added and 60 % of the inward foreign direct investment (FDI) stock in the country. On the contrary, the least economically developed region, the North-West, has the lowest share in the labor force (9%), the gross value added (7%) and the inward FDI stock in the country (just 2%). The difference in the standard of living between the two regions is substantial, with GDP per capita in the South-West region being 2,5 times higher than in the North-West.

Given the significant income disparities in the Bulgarian economy and the threat they might pose to both its social cohesion and future growth, it is worth studying their regional dimensions in more detail. In particular, the aim of the paper is to explore wage differences and wage inequality between the districts in Bulgaria in the period 2008-2021, comparing the role of foreign-owned and local firms. The choice to focus on wage disparities stems from the fact that first, wages constitute more than half of total income and second, they are found to have the largest and also rising contribution to overall income inequality in Bulgaria (Bratoeva-Manoleva, 2021). Distinguishing between foreign affiliates and local firms will shed light on the role of FDI for wages and wage inequality in the Bulgarian economy, which is characterized by high level of foreign capital penetration. To estimate between-district wage inequality among all enterprises, as well as separately for the two types of firms, we use the between-group component of the Theil's T Statistic, as this approach allows not only to

explore the evolution of between-district wage inequality, but also to outline the changing contribution of each district.

The rest of the paper is organized as follows. Section 2 provides a brief literature review about the regional disparities in Bulgaria. Section 3 describes the data and the methodology used. Section 4 presents the results from the analysis and the last section concludes.

## 2. REGIONAL DISPARITIES IN BULGARIA: LITERATURE REVIEW

The substantial differences in social and economic development between the regions in Bulgaria have attracted the interest of researchers and have also raised important policy implications. For example, Shopov and Tzanov (2015) focus on the territorial disparities between the six regions and between the 28 districts in Bulgaria in terms of various dimensions of living standard, such as: income and expenditure, inequality in income and social inclusion, education, social services, health care system, migration and overall living standard. The ranking of the regions and districts based on the scores of the analyzed indicators leads to the conclusion that between 2007 and 2012, the territorial disparities in living standard have become more pronounced, with the most significant increase being in two dimensions - income and expenditure, and social services. Another study of the inter-regional disparities in Bulgaria is Ivanov (2018), which applies a Regional Competitiveness Index based on data for 2016. The index is based on 10 indicators, which assess four key areas of regional development - market size, quantity and quality of labour resources, region attractiveness and competitiveness of local businesses. The results reveal significant disparities between the capital region and all other regions, and insignificant differences between all other regions excluding the capital. The research also outlines some specific recommendations, aimed at enhancing regional policy's focus on investment and development of 'modern' economy, R&D, smart work, high-value-added activities etc. Slaveva, Petkov, Kasabova and Ganeva (2021) explore the trends in the demographic, social and economic development of North and South Bulgaria and identify the existing regional disparities based on a statistical analysis of their dynamics, structure and factor determination in the period 2005-2019. The analysis reveals that the North lags behind the South on key economic indicators. The study suggests that improvement of the functional and spatial connectivity between the regions in North and South Bulgaria will mitigate the economic, social and demographic differences and inequalities between them. The substantial north-south gap in Bulgaria is also discussed in Hermansen (2021). The study points out that the growth of the Bulgarian economy is driven by regions with large cities, while many rural regions experience the negative trends of depopulation and rapid ageing. It is also outlined that the regional income differences in Bulgaria are larger than in most OECD countries and have increased over the last two decades. In order to reduce the regional imbalances, policy action in several areas is suggested – expanding the coverage and access to public services, improving infrastructure and housing, and realizing the potential from specialization in agriculture and tourism in lagging regions.

Some studies focus exclusively on the inter-regional differences in income and wage levels. For example, Kosuliev (2018) undertakes structural decomposition of regional income inequality in Bulgaria in the period 2008-2016. The structural decomposition of households' incomes shows that wages have the largest weight in determining overall income levels, while the regression analysis reveals that regional income disparities are affected by differences in the districts' rates of employment and average wages. The author also suggests that in order to mitigate the regional imbalances in the country, the government should encourage employment and investment activity, rather than relying on social transfers. Using the between-group component of the Theil's T Statistic, Mihaylova (2023) explores the evolution of wage inequality in Bulgaria in the period 2008-2021, focusing on wage disparities across economic sectors, occupation and districts. The results at a district level reveal an overall upward trend in between-district wage inequality, with the capital being the greatest positive contributor, due to offering the highest average wage and accounting for around one third of the employment in the country.

While most authors analyze the overall wage disparities between regions in Bulgaria, few studies explore how these regional disparities are affected by the activities of foreign-owned firms. Here it is worth mentioning the study of Kolev (2012) which provides an assessment of the role of multinational enterprises (MNEs) for the regional development in Bulgaria. The results show that while MNEs are one of the most important vehicles for local development in the country, they are also a factor in extending the regional income disparities. In less attractive districts MNEs are mainly efficiency-seeking and benefit from the available natural resources and cheap labour force, while most of the positions requiring high skilled and therefore high paid labour are concentrated in the capital and several large cities. Given the labour payment policy of MNEs, this results in

larger wage differences between foreign and local firms in the developed districts, and similar wage levels in the less developed and unattractive districts. As the study concludes, while MNEs create employment, they do not reduce the huge regional income disparities in the country.

The present paper tries to account for the role of foreign affiliates and local firms in shaping between-district wage disparities in Bulgaria. In order to estimate between-district wage inequality, the paper uses the between-group component of the Theil's T Statistic. In that aspect, it builds on the previous study of Mihaylova (2023) but extends the analysis in order to distinguish between foreign and local firms. The methodology and the data used are described in more detail in the next section.

### 3. DATA AND METHODOLOGY

We use annual data on average wages and employment across districts in the period 2008-2021. The data refers to the non-financial sector and distinguishes between two types of enterprises – enterprises with foreign ownership exceeding 10%, and enterprises without foreign ownership or with foreign ownership below 10%. The regional data includes 28 districts and is in accordance with the Unified Classification of Administrative-Territorial and Territorial Units in Bulgaria. All data is provided by the National Statistical Institute of Bulgaria (NSI).

To provide an overall picture of the wage differences between districts, first the average annual gross district-level wages for both foreign-owned and local firms are compared in terms of their average levels, the ratio between them, as well as their average annual growth rates during the analyzed period. In order to explore the wage dispersion across districts for foreign affiliates and local firms, we also calculate the ratio between the highest and the lowest district-level wage for the two types of firms.

To analyze between-district wage inequality, however, in addition to wages, employment must be also taken into consideration. Therefore, we use the between-group component of the Theil's T Statistic, a generalized-entropy-based measure, which is very useful when the data used are presented in mutually exclusive and completely exhaustive groups. A main advantage of the Theil index is that, compared to other inequality measures, it not only allows the decomposition of inequality into the sum of between-group and within-group component, but it also has less stringent data requirements and can be used when group data is available instead of individual survey data (Zhang, 2016). Theil's T Statistic has two components, the between-group ( $T^B$ ) and the within-group component ( $T^W$ ), i.e.  $T = T^B + T^W$ .

The within-group component of wage inequality is unobserved because we use aggregated data. However, in this case the between-group component provides the lower-bound estimate of overall wage inequality (Theil, 1972). A disadvantage of the Theil index is that its values are not comparable across different groups, because if the number and the sizes of the groups differ, then the limit of the index will also differ (Elveren, 2010). However, using the between-group component of the Theil's T Statistic still allows us to explore the overall trend in wage inequality, because what is essential in the interpretation of the calculations is not the magnitude of the values of the index, but how they evolve over time. The between-group component of Theil's T Statistic can be stated as:

$$T^B = \sum_{i=1}^n \left\{ \left( \frac{p_i}{P} \right) * \left( \frac{y_i}{\mu} \right) * \ln \left( \frac{y_i}{\mu} \right) \right\}$$

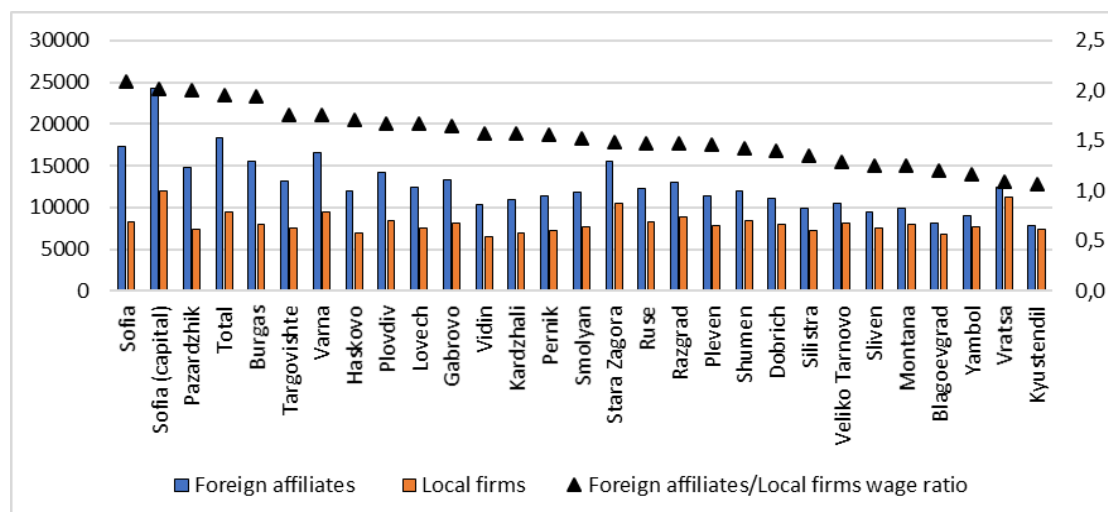
where  $i$  indexes the groups,  $p_i$  is the population of group  $i$ ,  $P$  is the total population,  $y_i$  is the average wage of group  $i$ , and  $\mu$  is the average wage of the entire population. The individual terms within the summation are known as "Theil elements" and show the contribution of each group to overall between-group wage inequality.

Wage inequality between districts depends on each district's employment share and relative wage. A rise in between-district wage inequality can be a result of high wage districts expanding their employment share or experiencing an increase in wages relative to the mean, or of low wage districts either increasing their employment share or experiencing falling wages relative to the mean. Likewise, a decrease in between-district wage inequality can be caused by high wage districts losing employment or falling back toward the mean wage, or by low wage districts experiencing shrinking employment share or rising relative wages. In addition to showing the evolution of between-district wage inequality over time, calculating Theil's T Statistic allows us to outline the contribution of each district to wage inequality. The Theil element of a district can be positive or negative, depending on whether its average wage is greater or lower than the national average. By construction, the sum of the positive elements must exceed the sum of the negative elements, so that the total is positive.

#### 4. RESULTS

The district-level data on wages, presented in Figure 1, shows that in both foreign-owned and local firms the highest average wage during the period under study is found in the capital Sofia (BGN 24 298 and BGN 12 061 respectively). This is not surprising given that Sofia (capital) ranks first in terms of GDP per capita, exceeding more than twice the country average. Key institutions, businesses, infrastructure and one third of the employment of the country are concentrated there. This makes the capital very attractive for foreign investors and explains why it accounts for more than half of FDI stock in the non-financial sector. Wages in foreign affiliates are not only the highest in the capital, but they are also twice higher than in local firms. This is clearly related to the employment structure in the foreign-owned firms in the capital - more than one third of the employees work as professionals, while 9% occupy managerial positions. Next in terms of the average wage in foreign affiliates is the district of Sofia (BGN 17 382), followed by Varna (BGN 16 522), Burgas (BGN 15 571) and Stara Zagora (BGN 15 537). This trend is expected as these are economically developed districts which are the most attractive for foreign investors after the capital city. The lowest average wage in foreign firms during the period under study is found in Kyustendil (BGN 7 878), followed by Blagoevgrad (BGN 8 097) and Yambol (BGN 8 969). While Kyustendil and Yambol are among the districts with the lowest amount of FDI stock and the low wage levels in the foreign firms operating there are somewhat expected, an interesting case is the position of Blagoevgrad. As of 2021, Blagoevgrad ranks seventh in terms of FDI stock and with regard to the average share of employees in foreign affiliates during the period under study, it occupies the fourth place. Explanation for the low wages in the foreign firms in this district can be found in employees' occupational structure – more than one fourth of them have elementary occupations, which do not require specific qualification and are therefore low paid.

Figure 1: Average gross annual wage in foreign affiliates and local firms (averaged over the period 2008-2021)



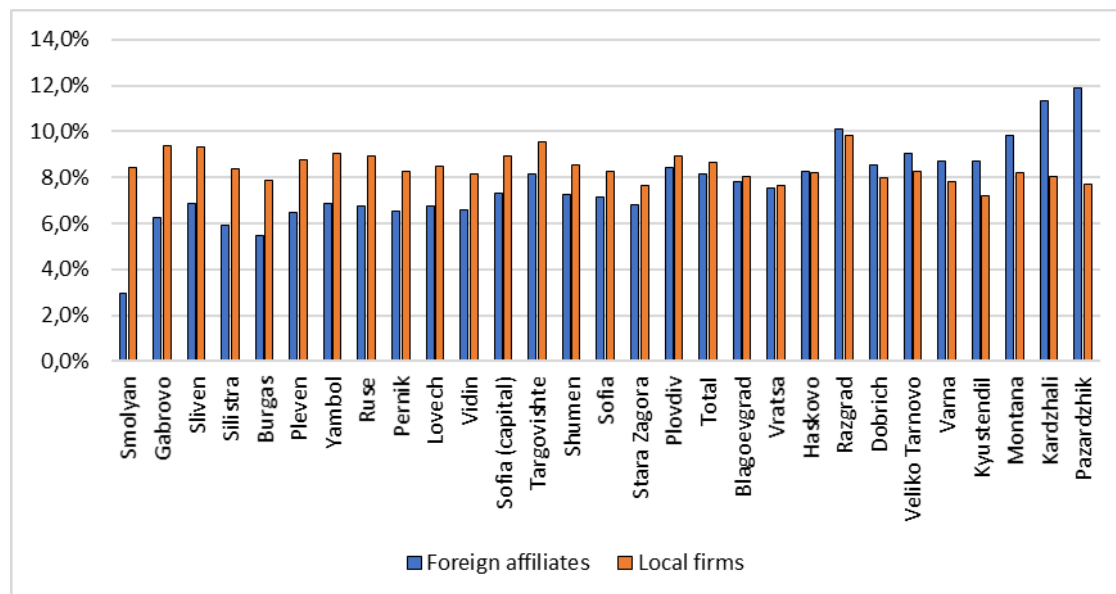
Source: Author's calculations based on data from the National Statistical Institute of Bulgaria

As for local firms, as the above analysis suggested, the capital offers the highest wages. Second is the district of Vratsa, where the average wage amounts to BGN 11 310 . This is mostly due to the employees in the high-paid energy sector, in particular the Kozloduy nuclear power plant. The third place is occupied by Stara Zagora, followed by Varna and Razgrad. At the other extreme are the districts with the lowest average wage in local firms (below BGN 7000), namely Kardzhali, Blagoevgrad and Vidin.

If the wage differences between the two types of firms are considered, Figure 1 shows that the average wage in foreign affiliates exceeds the corresponding wage in local firms in all districts. The largest differences are found in Sofia (district), Sofia (capital) and Pazardzhik, where the wages paid by foreign affiliates are on average twice as high as in local firms. The smallest differences are found in Vratsa and Kyustendil, where foreign firms pay only 10 % more than their local counterparts. While in Vratsa this trend is due to the relatively high wages in local firms, in Kyustendil it is the relatively low wage in foreign-owned firms that explains the small wage difference between the two types of firms.

The analysis of the dynamics of wages in the two types of firms shows that in 19 out of the 28 districts local firms outpace foreign affiliates in terms of wages' average annual growth rate during the period under study (Figure 2). The annual average growth rate of wages in local firms is the highest in Razgrad, Targovishte and Gabrovo (9,9%, 9,5% and 9,4% respectively), and the lowest – in Kyustendil (7,2%). Wages in foreign affiliates increase at the highest rate in Pazardzhik, Kardzhali and Razgrad (11,9%, 11,3% and 10,1% respectively), and at the lowest – in Smolyan (2,9%). It is worth noting that in four out of the five districts where foreign firms pay the highest wages (namely the capital Sofia, Sofia (district), Stara Zagora and Burgas), wages in foreign firms increase at a slower rate compared to the country average wage level for this type of firms. In the same time in 11 districts the growth rate of wages in foreign firms exceed the growth rate of the country average wage in this type of firms. In eight of these districts foreign firms' wage level is relatively low and divided by the country average foreign firms' wage, it varies between 0,43 in Kyustendil and 0,72 in Targovishte.

Figure 2: Average annual growth rate of wages in foreign affiliates versus local firms (2008-2021)



Source: Author's calculations based on data from the National Statistical Institute of Bulgaria

The data above suggests a possible decrease in foreign firms' wage dispersion across districts. To account for such a trend and to make a comparison with local firms, we calculate the ratio between the maximum and the minimum district-level wage for the two types of firms. Table 1 suggests that foreign firms' wage dispersion across districts is higher than in local firms, but it indeed tends to decrease during the analyzed time span. If in 2008 the ratio between the maximum and the minimum district-level wage in foreign firms was 3,5, in the end of the period it fell to 3. On the contrary, as seen in Table 1, local firms' wage dispersion across districts experienced a slight upward trend.

Table 1: Ratio between the highest and the lowest average gross annual wage across districts

Firm's type	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Foreign firms	3,50	3,59	3,44	3,20	3,18	3,22	3,16	3,22	3,28	2,93	3,01	2,92	2,97	3,00
Local firms	1,73	1,83	2,01	1,98	2,00	1,86	1,83	1,88	1,83	1,87	1,90	1,97	1,92	1,95

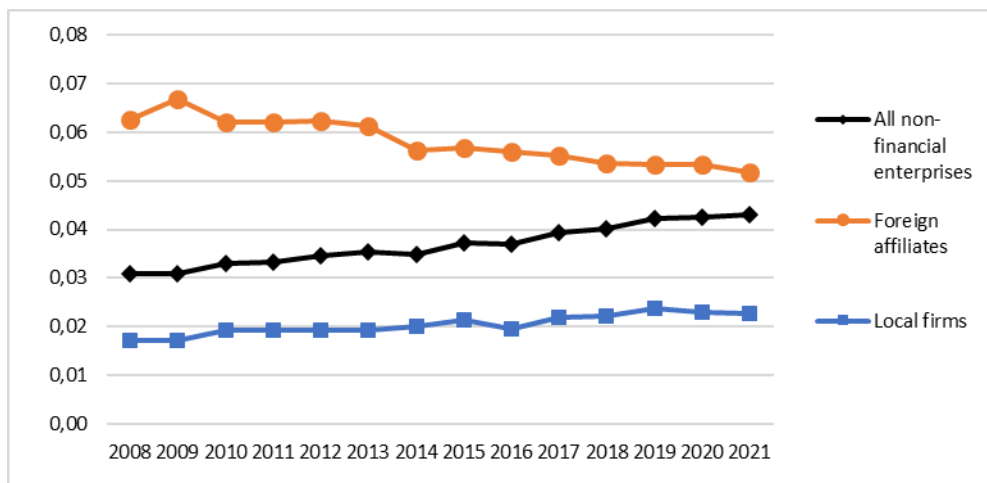
Source: Author's calculations based on data from the National Statistical Institute of Bulgaria

The above-outlined trends in the wage dispersion across districts for the two types of firms lead to the expectation that the between-district wage inequality among foreign-owned firms is higher in comparison to local firms. However, to explore between-district wage inequality, in addition to wages, the districts' employment shares must be also taken into consideration, i.e. the Theil's T Statistic is presented next. As seen in Figure 3, the Theil index for all non-financial enterprises shows an upward trend and increases from 0,031 in 2008 to 0,043 in 2021, suggesting rising overall between-district wage inequality. Distinguishing between the



two types of firms shows that between-district wage inequality in the case of foreign affiliates is higher compared to local firms, as was suggested above. Furthermore, despite being more pronounced, foreign firms' between-district wage inequality tends to decrease – from 0,062 in 2008 it fell to 0,052 in 2021. The opposite trend is observed with regard to the Theil index of local firms, which increased from 0,017 in 2008 to 0,023 in the end of the analyzed period. This suggests that local firms have an increasing role for the upward trend in the country's between-district wage inequality.

Figure 3: Theil's T Statistic for between-district wage inequality



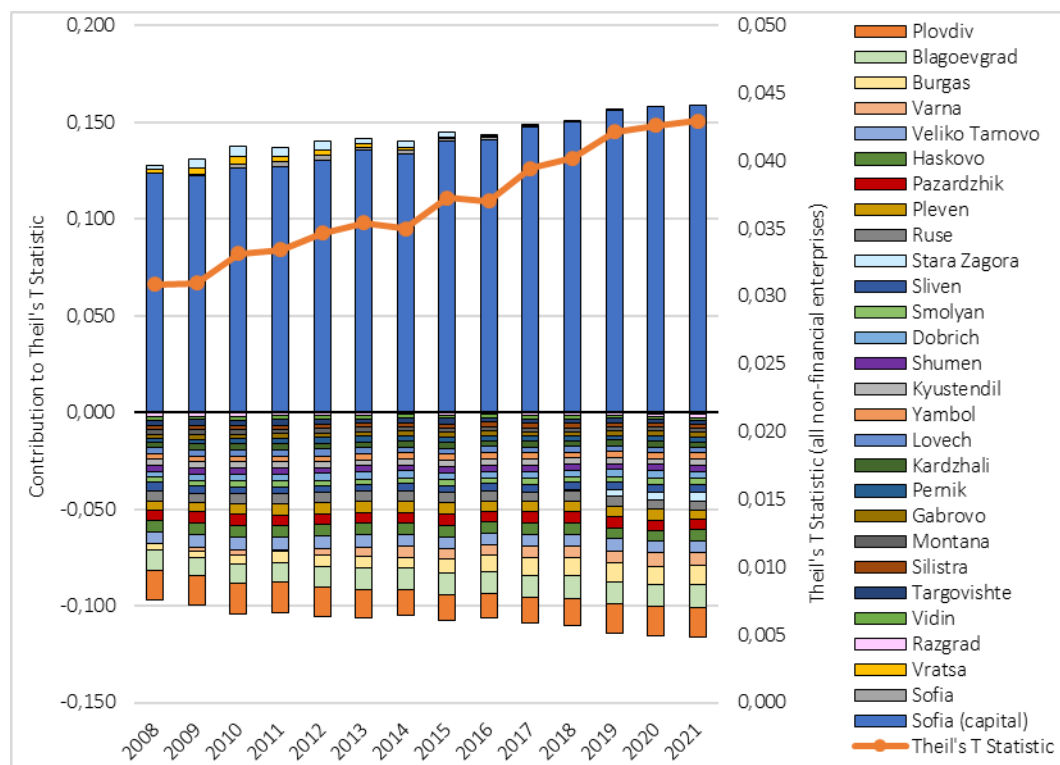
Source: Author's calculations based on data from the National Statistical Institute of Bulgaria

The contribution of each district to the overall wage inequality, i.e. among all non-financial enterprises' employees, is shown in Figure 4. The capital city has the largest positive contribution, which is not surprising since one third of the employees in the non-financial sector work there and receive wages which exceed with 40% the country average. Moreover, the contribution of Sofia (capital) increases over time mostly due to a rise in its relative employment share (from 28% in 2008 to 35% in 2021). The capital's weight in shaping between-district wage inequality is related to its employment structure. According to NSI data for 2021, the capital boasts a concentration of the highest paid positions, namely managers (9%), professionals (21%) and technicians and associate professionals (13%). It also has the largest shares of employees involved in the highest paid economic activities such as Information and communication (14%), and Professional, scientific and technical activities (8%). Besides the capital city, several other districts have also contributed positively to between-district wage inequality, but only during a part of the analyzed period (Vratsa – until 2016, Stara Zagora – until 2017 and Sofia (district) – until 2019). After that their contributions turn negative, as their wages fall below the country average.

The rest of the districts are negative contributors to between-district wage inequality because their wages are below the national average during the entire period. Among them Plovdiv has the largest weight, which is due to the fact that while the average wage in Plovdiv is around 84 % of the country average, it has the second largest employment share after the capital (10 % on average). Next in terms of its negative contribution to the Theil's T Statistic is Blagoevgrad. This is explained, by the fact that, on the one hand, the average wage in Blagoevgrad is one of the lowest in the country (around 65% of the national average), and on the other - the district ranks sixth in terms of its average employment share (4%). The positions of these two districts again reflect their employment structures. As of 2021, in both Plovdiv and Blagoevgrad, the largest employment shares belong to relatively low paid occupational groups such as plant and machine operators, and assemblers (25% and 19% respectively), followed by those with elementary occupations (20% and 16% respectively). The sectoral composition of the employment shows that in both districts around one third of the employees is concentrated in manufacturing, where wages are below the country average. Third in terms of its negative contribution to between-district wage inequality is Burgas, which is the fourth largest district in the Bulgaria. Its position is due to the combination of wages what are around 85% of the country average and employment share which is 5% on average for the analyzed period. As in the other districts, the relative position of Burgas reflects the structure of its employment. NSI's data for 2021 shows that almost half of the district's employment is in trade, manufacturing, and accommodation and food service activities, where the average wage level is below the national average. Moreover, 25% of the employees work as service and sales workers, and 18% is the share of those with elementary occupations, with average wages in both cases being lower than

the country average. It is also worth noting that while the contributions of Plovdiv and Blagoevgrad are relatively stable, the role of Burgas for increasing Theil's T Statistic has become much more pronounced over time, which is due to the district's continuously falling relative wage (from 0,94 in 2008 to 0,76 in 2021).

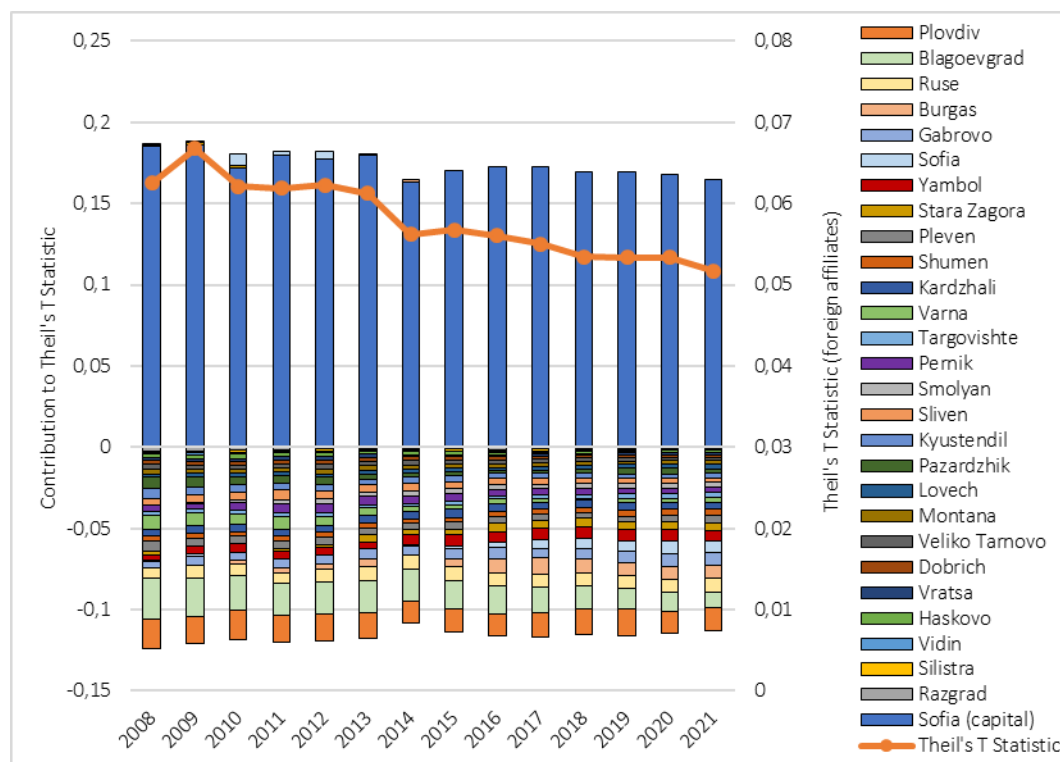
Figure 4: Theil's T Statistic for between-district wage inequality (all non-financial enterprises)



Source: Author's calculations based on data from the National Statistical Institute of Bulgaria

Next, we focus on the between-district wage inequality among foreign-owned firms' employees. As outlined above, it experiences a downward trend, with more pronounced decreases in 2010 and 2014. If districts' contributions are considered, Figure 5 shows that during the entire period the foreign affiliates in Sofia (capital) have the largest positive contribution to the Theil's T Statistic. On the one hand, this is due to the fact that these companies offer the highest wages, exceeding with more than 33% the country average wage level of foreign firms. On the other hand, foreign affiliates in the capital account for the largest average employment share during the analyzed period - namely 46 % the total number of people employed in foreign firms in the country. In the same time the contribution of the foreign affiliates in the capital tends to decrease. It is worth noting that this trend exists despite the increasing employment share of the capital (from 38% in 2008 to 53% in 2021). This means that the fall in the contribution of the capital's foreign-owned firms to between-district wage inequality is entirely due to shrinkage of the wage gap between them and the country average wage in this type of firms. The data shows that the ratio between them was 1,41 in 2008 and in 2021 it fell to 1,28. This is explained by the fact that the country average foreign firms' wage increases at a higher pace than the wage in the foreign affiliates located in the capital. Figure 5 shows that the dynamics of the Theil index follows the trend in the capital's contribution (especially in the periods of more pronounced decreases in 2010 and 2014), which reveals the leading role of Sofia (capital) for the mitigation of between-district wage inequality among foreign-owned firms' employees.

Figure 5: Theil's T Statistic for between-district wage inequality (foreign affiliates)



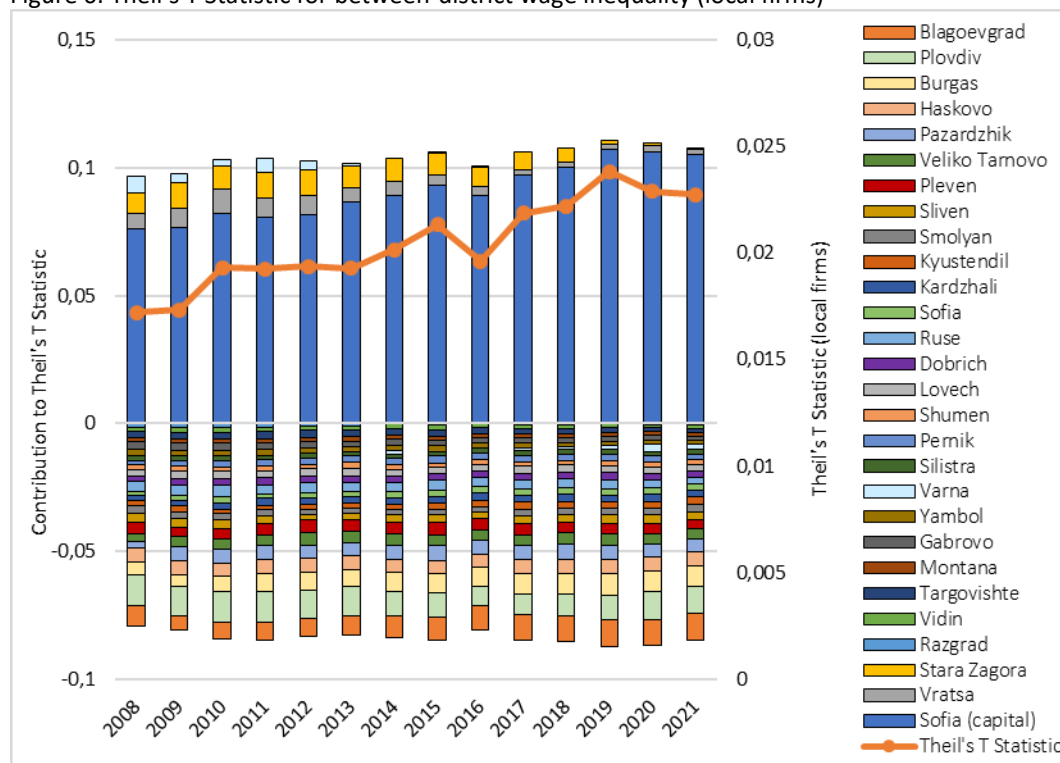
Source: Author's calculations based on data from the National Statistical Institute of Bulgaria

Some of the other large and economically developed districts also have positive contributions to foreign firms' between-district wage inequality, but only in some parts of the period (for example, Burgas – in 2008, 2009 and 2014, Stara Zagora – in 2009 and 2010, and Sofia (district) – between 2010 and 2013). This is because only in these years foreign firms' wage level in these districts exceeds the country average wage level in this type of firms. In the rest of the period, it tends to be lower, which makes these districts' contributions negative.

The largest negative contributions to between-district wage inequality among foreign firms' employees belong to the districts of Plovdiv, Blagoevgrad and Ruse. The position of Plovdiv is due to a combination of foreign affiliates' below-average wages (around 77% of the country average) and the fact that they have the second largest employment share (8 % on average). The positions of Blagoevgrad and Ruse are also explained by the below-average wages of the foreign firms in these districts (respectively 44% and 67% of the country average), as well as by their relatively large employment shares (respectively 5% and 3%), in terms of which they rank fourth and seventh respectively. If we trace the evolution of these districts' contributions, we can see that the weights of Plovdiv and Ruse are relatively stable, while the weight of Blagoevgrad decreases substantially. This is due to the district's significant drop in the share of employees in foreign affiliates (from 7% in 2008 to 3% in 2021). In this way Blagoevgrad contributes to the fall in the between-district wage inequality among foreign firms' employees.

As outlined earlier, while between-district wage inequality among foreign affiliates' employees tends to decrease during the analyzed period, the role of local firms in widening wage inequality between districts becomes more pronounced over time. The contributions of the different districts to the dynamics of between-district wage inequality among local firms' employees, is illustrated in Figure 6. As expected, Sofia (capital) has the largest contribution which is due to the fact that the capital city has the largest employment share (around 29%), as well as the highest average wage, exceeding with around 28% the country average wage level of local firms. Moreover, the capital's contribution experiences an upward trend over time. This is a result of the expanding employment share of the capital's local firms (from 26% in 2008 to 31% in 2021), as well as their rising average wage relative to the country average wage level of local firms (from 1,26 in 2008 to 1,30 in 2021). Figure 6 clearly shows that the change in the contribution of Sofia (capital) is similar to the dynamics of the Theil's T Statistic, which suggests that the capital city has a leading role in widening between-district wage inequality among local firms' employees.

Figure 6: Theil's T Statistic for between-district wage inequality (local firms)



Source: Author's calculations based on data from the National Statistical Institute of Bulgaria

Two other districts where local firms offer above-average wages and hence contribute positively to Theil's T Statistic, are Vratsa and Stara Zagora. However, the contributions of both districts experience a downward trend, which is more pronounced after 2010 in Vratsa and after 2014 in Stara Zagora. In both cases this is due to a fall in local firms' relative wages and a slight decrease in their employment shares. Varna has a positive contribution to Theil's T Statistic only in some part of the analyzed period. After 2016 it becomes a negative contributor because the average wage of its local firms falls below the country average for this type of firms.

The largest negative contributors to between-district wage inequality among local firms' employees are Blagoevgrad, Plovdiv and Burgas. On the one hand, the position of Blagoevgrad is due to the fact its local firms' average wage is one of the lowest – around 73% of the country average wage of local firms. On the other hand, in terms of local firms' employment share, Blagoevgrad ranks sixth (3,7% on average). It is also worth noting that Blagoevgrad's contribution to the increase in the Theil's T Statistic rises over time. The data shows that this is due to a slight increase in the employment share of the district's local firms, as well as a fall in their relative wage (from 0,73 in 2008 to 0,67 in 2021). In the case of Plovdiv, its contribution tends to decrease until 2016 and after that it experiences an upward trend due to an expansion of local firms' employment share and a fall in their relative wage. The contribution of Burgas to the evolution of between-district wage inequality among local firms' employees increases during the entire period. This is a result of the decreasing average wage in the district's local firms relative to the country average wage of local firms – from 0,92 in 2008 to 0,83 in 2021.

## 5. CONCLUSION

The paper explored wage disparities between districts in the Bulgarian economy in the period 2008-2021. The findings of the analysis can be summarized as follows. First, foreign-owned firms pay higher wages than their local counterparts in all districts. Second, in terms of wages' average annual growth rate local firms outpace foreign affiliates in 19 out of the 28 districts in the country. Third, using the between-group component of the Theil's T Statistic, we estimated between-district wage inequality for all non-financial enterprises, as well as separately for foreign-owned and local firms. The results show an overall increase in between-district wage inequality, with the capital having the largest positive contribution, which also rises over time. Distinguishing between foreign and local firms shows that in the case of foreign affiliates between-district wage inequality is higher but tends to decrease over time. This is mostly due to the narrowing gap between the average wage of the foreign firms in the capital and the country average wage level of foreign firms. Conversely, in the case of local firms, an upward trend in the between-district wage inequality can be observed. The capital city is the

largest contributor to this trend. This is due to an expansion of the employment share of the capital's local firms, as well as an increase in their relative wage.

Based on the analysis, we can also outline some policy implications. For between-district wage inequality to be reduced, there is a clear need for enhancing the economic development of the lagging districts. The largest share of employees in these districts is usually involved in manufacturing, where wages are lower than the country average. Although the employment share of low-technology manufacturing in Bulgaria has decreased with ten percentage points during the analyzed period, according to Eurostat data, as of 2022, it still employs 50% of the workers in the sector, which is much higher compared to the EU average (35%). Therefore, it is important to promote further manufacturing enterprises' technological modernization, and expand the share of high- and medium-high tech manufacturing in the districts with below-average wages. This will have positive implications for the sector's productivity and wage level in these districts, contributing to a decrease in between-district wage inequality. Additionally, further efforts are needed to enhance the foreign investment attractiveness of lagging regions, such as improving transport infrastructure and investing in human capital.

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## Legal Importance Of The Preliminary Stage Of Expropriation For The Cause Of Public Utility

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**Abstract:** Expropriation for reasons of public utility is a subject very often debated in specialized literature, but it is noted that the contemporary doctrine has not extensively addressed such a current and present field before the courts, but only occasionally, an aspect that motivates us to study the issue of expropriation for reasons of public utility and especially the procedure prior to expropriation (administrative procedure). In the Republic of Moldova in recent years, the topic is all the more current as the economic situation and, by way of consequence, the social situation are inextricably linked to the development of the infrastructure, and as a relevant part of it, the network of public roads, highways, etc. The legislative ambiguities at the present time and the political involvement to a large extent in the sphere of public administration determine the realization of a detailed analysis of the main theoretical and practical problems existing in the field of patrimonial relations of public authorities and the finding of viable solutions. Compared to those mentioned above, the present work aims to study the "phenomenon" of expropriation for public use, namely the administrative procedure - prior to expropriation for public use in relation to the provisions of the normative acts in force. Scientific research is all the more necessary for the fact that this law complements the common law in the matter, namely the Civil Code of the Republic of Moldova, which can cause non-unitary jurisprudence and inequities in practice. The considerations presented in the research are not exhaustive, but they are likely to underline the actuality of the topic and its importance on a socio-economic and legal level.

**Key words:** property, property right, expropriation for reasons of public utility, prior procedure, public utility.

### 1. INTRODUCTION

It is important that our scientific research begins with an analysis of the right to property, in order to show the role and contemporary constitutional position of the right to property, landmarks that reveal the importance of immersion in the domain of property and the exception to the rule, namely expropriation for the cause of utility public.

The authors define property, both in the economic and legal sense, as the ultimate expression of people's access to the possession, use and disposal of goods (Pop, 2001), the right to private property representing one of the fundamental rights (Favoreau, Gaia, Gheventian, Mestre, Pfersman, Roux, Scoffoni, 2001) unanimously recognized by domestic and international instruments, in the foreground in the context of a modern society, in continuous transformation.

The property right is not only the most complete, but also the most stable right, constituting the main legal condition for a sustainable rotation of property (Sinaiskii, 2002)

The forced termination of subjective property rights, due to the special social significance of the institution of property itself, requires a particularly careful regulation by imperative norms of civil law. The termination of property rights in an objective sense, as a set of legal norms, is a unique example of the use of coercion by the legislator as a way to solve the most pressing social problems. At the same time, the forced termination of private property rights is a controversial and not fully developed tool in terms of the regulation of property relations that arise in society.

Nevertheless, expropriation for the cause of public utility represents a genuine exception to the absolute and inviolable nature of the right to private property, if not the most significant (Florescu, Rotaru, Olteanu, Safta, Martinescu, 2013).

Public authorities often abuse the legal opportunity to forcibly terminate private property rights. In some cases, the current civil legislation does not contain mechanisms to counteract the termination of private property rights carried out in conflict with public interests and with the owner himself. For an effective protection of property rights, it is very important to establish as precisely as possible, without allowing the possibility of broad interpretation, the legal norms that allow the expropriation of assets from a natural person or legal entity (even for the benefit of society).

The phenomenon of coercion in civil law has not been sufficiently studied and requires reflection in relation to the realities of modern society. Clarification of the theoretical content of such a category of civil law as forced termination of property rights, expropriation, including expropriation for public utility, has a special methodological and practical significance.

## **2. THE NOTION AND LEGAL NATURE OF EXPROPRIATION FOR THE CAUSE OF PUBLIC UTILITY.**

We must mention that the foundations of property law have not changed profoundly, an aspect that results from the multitude of latin expressions established in private law, still used today, as well as from the majority of institutions preserved, at least in name, from the period when Justinian's legislation was drafted .

However, although expropriation has as its premise both private property and public property, we do not find this institution in Roman Law, under this name, but we find a similar concept from the period of Justinian's laws, namely the principles of public utility and law and prior compensation, the term and legal notion being taken over from the French in Romanian Law, then in the legislation of the Republic of Moldova. The main normative act that regulates expropriation in France is the Expropriation Code for Public Utility, entered into force in 1977, it being essential to remember that up to this point the evolution of the mentioned law was dominated by two diametrically opposed ideological currents: until the beginning of the century 20th, the procedure was intended to protect private property; after the First World War and the economic and social upheavals caused by the conflagration, it aims, on the contrary, to defend the general interest, being designed largely against private property(Ferbos, Bernard, 1998)

At the doctrinal level, expropriation for reasons of public utility is defined in France, similar to the native doctrine, as an administrative and judicial procedure through which the administration uses its coercive power to obtain ownership of an asset with the aim of achieving an objective of general interest (*Bernard., Hayghe, 2006*)

*And in the Romanian doctrine we find such definitions, in the sense that expropriation is a legal institution under public law which consists in the forced acquisition, for a fee, for reasons of public utility, under the conditions of the law and under judicial control, of privately owned real estate(Chelaru, 1999).*

Also, the Romanian author V. Stoica appreciates that expropriation is a complex legal operation, which produces specifically multiple effects, not only in terms of real rights, but also in terms of rights of obligations, a combination of legal relations in the content of which real rights are included, but and legal relationships containing claims (Stoica, 2017).

We also find in the doctrine the opinion according to which expropriation is an original way of acquiring the right of ownership, but also through the forced transfer of some goods from private property to public property, to satisfy some needs of national or local interest, with fair and prior compensation , amicably or judicially (Dogaru, Strîmbanu, 1996).

We agree with the opinion of the author, A. M Nicolcesu, who believes that in fact, expropriation has a double effect, of extinguishing a private property right, and of bringing it closer, which, paradoxically, is the antonym of expropriation (Nicolcescu, 2019).

The question of the nature of legal relations related to expropriation for the cause of public utility is debatable in legal science. Different points of view on this topic have been expressed in Russian specialized literature.

Some of the researchers believe that the legal relationships that appear in the process of expropriation for reasons of public utility are of a mixed nature (Altengova, 2012); followers of the second point of view, believe that the legal relations considered are built on the principles of public law (Sidotova, 2010), finally, the followers of the third point of view talk about the civil legal nature of such relationships (Kabytov, 2004).

We lean towards the idea of the civil legal nature of the legal relations regarding expropriation for public utility, although the basis for their appearance is the expropriation decision taken by an authorized body of state power or local administration, mean an administrative act. Moreover, the achievement of a balance between private and public interests in the regulation of relations regarding expropriation for reasons of public utility can be ensured by the regulations of civil law which, in turn, will guarantee the stability of property relations.

It is important to emphasize that in the preamble of the law of the Republic of Moldova on expropriation for reasons of public utility number 488/1999 there is an explicit definition of expropriation, namely through expropriation means the transfer of goods and patrimonial rights from private property to public property, the transfer to the state of public property belonging to an administrative-territorial unit or, as the case may be, the transfer to the state or to an administrative-territorial unit of patrimonial rights in the purpose of carrying out works for a cause of public utility of national or local interest, under the conditions provided by law, after fair and prior compensation.

### **3. ADMINISTRATIVE PROCEDURE PRIOR TO EXPROPRIATION FOR PUBLIC UTILITY CAUSES**

As a process, the expropriation of a piece of land for reasons of public utility, for example, is the implementation by the bodies and authorized persons of the method of termination of the right of ownership provided by law within a complex set of legal facts (grounds) for termination, irremediably ensuring the loss of the legal link between the owner of this land and the land itself as a result of the application of state coercion measures.

The classic structure of expropriation is divided into the administrative stage and the judicial stage, but there are authors who prefer the declaration of public utility to these stages (Adam, 2013), forming a tripartite structure, in which the declaration of public utility constitutes an independent first stage.

The Constitutional provision found in art. 46, which guarantees the right to private property, nevertheless establishes the exception to its inviolability - expropriation for reasons of public utility. Also, the civil code of the Republic of Moldova lists expropriation among the causes of forced transfer of private property and refers to the special law on expropriation for reasons of public utility number 488/1999.

Although the Law of the Republic of Moldova on expropriation for reasons of public utility in detail the expropriation procedure, as a result of which the real estate is transferred from private ownership to public ownership, however highlights the stages of expropriation which are:

- 1) public utility and its declaration;
- 2) measures preceding the expropriation designed as a purely administrative phase;
- 3) expropriation and compensation determination.

However, we consider that regarding the object of expropriation, based on the large number of immovable, movable and patrimonial rights allowed for expropriation, this law is disproportionate in relation to the interests of the private owner.

The law in question does not provide real guarantees for the protection of private property rights, or at any time under the purported protection of public interests or public utility, a person inconvenient to the governing power may be deprived of his assets by means of a formal expropriation.

Analyzing the content of art. 4 and 6 of the Law of the Republic of Moldova regarding expropriation for reasons of public utility number 488/1999 we note that the holders of this procedure are representative institutions of the central or local public administration, depending on the public interest of the work being considered, but also the Parliament, when public utility is declared by law.

We can distinguish, therefore, between an active subject of the expropriation, represented by the mentioned owners, and the passive subjects, the expropriated persons, within a legal relationship under public law, in this initial phase of the administrative stage.

Author AM Nicolcescu (Nicolcescu, 2019) researching the issue of expropriation in Romania, but also researching comparative law, including making some comparisons of the legislation of the Republic of Moldova with the legislation of Romania, he mentions that, in the spirit of interwar doctrine and jurisprudence, it is believed that even today the right to take this measure is non-delegable, by its nature, if we relate the holder to the interest of a community and to the fact that that community gives the mandate of representation electively, according to which a local council cannot be mandated in this sense by the county council (Romania) or rationally (in the case of the Republic of Moldova) for to declare the public usefulness of an objective achieved in favor of the latter, and in the case of works carried out on the territory of several counties/districts, one cannot speak of a delegation at a higher level, because it is natural for a higher authority to check the



authorities in the territory and to supervise such work, decentralization allowing only limited attributions at the level of a certain administrative-territorial unit.

The initiative regarding the declaration of public utility rests with the public authorities and is carried out directly through submission of the respective proposals or the relevant agencies, in the manner provided by the legislation. The declaration of public utility is made only after conducting a preliminary investigation and only if all the conditions for expropriation, provided by law, exist (Şumleanski, Nistor-Lopatenco, 2018).

The measures preceding the expropriation according to the law are designed as an administrative phase (Chirtocă, 2012).

### 3.1. Prior research

*Prior research.* Art. 7 of the Law of the Republic of Moldova regarding expropriation for reasons of public utility number 488/1999 establishes the obligation of a preliminary investigation before the declaration of public utility, on the condition that the work is entered in the urban planning and land development plans.

This first sub-stage, as can be deduced from its name, is a preliminary one, given that it foreshadows the declaration of public utility, once the work has been registered in the mentioned plans, the character of national or local public interest of an objective cannot be predetermined, but the natural consequence of a specialized investigation (Burlacu, 2020).

Prior research for works of national interest according to art. 7 para. (2) and para. (3) of law number 488/1999, is carried out by the commissions established by the Government, including: a representative of the central public administration authority coordinating the field of activity for which the work of public utility is carried out, a representative each of the Ministry of the Environment, of the Ministry of Finance, of the Ministry of Economy, of the Ministry Infrastructure and Regional Development, as well as the president of the district and the mayor of the locality in whose territorial radius the public utility work is carried out. For works of local interest, including common interest, the preliminary research is done by the commissions appointed by the councils of the respective administrative-territorial units, made up of representatives of the local administrative authority that manages the field of activity for which the work of public utility is carried out, of the public administration local ones that coordinate the financial-budgetary field, from the representatives of the respective councils.

The preliminary research will establish the existence of the justifying elements of the national or local interest, the economic-social, ecological or other premises of the needs of the works, their inclusion in the town planning and land development plans, approved according to the law. The preliminary research will be done according to the procedures established by the regulation approved by the Government of the Republic of Moldova. The result of the investigation will be recorded in a report that will be submitted to the bodies that appointed the commission.

We support the opinions of the author AM Nicolcescu (Nicolescu, 2019), that the commissions should have as members and external specialists, who take into account the private interest to the same extent and propose from the very beginning the most fair solutions, balanced for both parties, because the court has limited means to verify, even through expertise, if the declaration of public utility is imperative, considering that all the documentation is issued by representatives of the public administration.

That is why, to the section dedicated to commissions, in a unitary regulation dedicated to expropriation, we would also add cases of incompatibility, similar to those provided by the Code of Civil Procedure, the composition of such a commission being difficult to challenge at present, as long as in this phase the procedure is unilateral.

We note that according to art. 8 of the Law of the Republic of Moldova regarding expropriation for reasons of public utility number 488/1999 regulates that the act declaring the public utility of national and local interest is brought to public knowledge by posting it at the headquarters of the local council in whose radius the object of expropriation is located and by publication in the Official Monitor of the Republic of Moldova. We can interpret that only the final act of public utility is brought to public knowledge, a context in which we reiterate the previously stated idea that the entire procedure should be transparent and involve not only representatives of the public administration, ab initio, in order to guarantee its fairness, including through the possibility of access of interested persons to any document related to the first stage of expropriation, based on the organizational measures of the authorities.

He also mentions S. Burlacu (The Bachelor, 2020) it is not enough only to notify the owners or the other holders of real rights of the expropriation proposal and the preliminary investigation minutes, but it would be necessary that the declaration of public utility be also notified to them, in order to have the real possibility to take note of the administrative act represented by the declaration of public utility, considering that, without its annulment, the other subsequent acts issued in the framework of the expropriation procedure can no longer be annulled.

In such situations, the interested parties are actually prejudiced, as it can be seen from practical cases that the method of publicity chosen by the legislator is not an effective one for them, representing rather a formal variant of fulfilling the obligation to bring to public knowledge the intention of expropriation, in no way to protect the private interest of the people to be expropriated, therefore we consider that they are the first to be notified.

We propose that, the faculty of notating the declaration of public utility in order to expropriate a building should be transformed into an obligation to make the initiation of the expropriation procedure opposable to third parties.

We propose that the owner himself have the possibility to request the initiation of the expropriation procedure for his building, when the public utility works carried out in the area indirectly affect his possibility to later capitalize on his private property right at the same pecuniary level.

The opportunity is the very main side of such a measure, which must be verified as a priority to avoid abuses and the forced limitation of the right to private property when it is not imperative, as an expression of the excess of power.

### **3.2. Plan execution stage**

The stage of public utility declaration is followed by the stage of execution of the plans including the lands and constructions proposed for expropriation, with the indication of the names of the owners, as well as the compensation offers. In this phase, after submitting the documentation to the competent institutions, those interested have the opportunity to consult it, with the exception of those related to the defense of the country and national security, in which case only the list of buildings proposed for expropriation, their owners and compensation offers is submitted to the local council .

Based on art. 9 of the Law of the Republic of Moldova regarding expropriation for reasons of public utility number 488/1999, the expropriator will execute the actions of submitting the expropriation proposal within 10 days from the publication of the public utility declaration act.

The proposals for the expropriation of the buildings and the minutes recording the results of the preliminary investigation are notified to the holders of the real rights, within 10 days from the publication, it being noted that until this moment the procedure is unilateral.

The owner of the object of expropriation is entitled to consent to immediate and fair compensation. This expropriation proposal will contain the notification addressed to natural and legal persons with real rights over the object of expropriation, the compensation offer, the method of transfer of assets and patrimonial rights or, as the case may be, the method of transfer of patrimonial rights.

The owner of the object of expropriation has the right to give his consent for an immediate and fair compensation.

In the case of land expropriation, the owner will be offered another land. If the cost of the proposed land is lower than that of the expropriated land, the expropriator will pay the difference between the cost of the expropriated house or the expropriated land of the proposed land.

Law number 488/1999 in art. 10 allows the expropriated person to object to the expropriation proposal. The reception is the act by which the expropriated puts forward its own requirements regarding the conditions of the expropriation. However, these proposals can be challenged based on an appointment, within 45 days of receiving the notification, to the body that made the expropriation proposal. The objections will be resolved within 30 days by a commission established by Government Decision for works of national interest and by decision of the local council for works of local interest or by decision of the respective local councils for works of common interest.

The commission will be made up of 3 specialists from the field of activity in which the public utility work is performed. They elect, by direct and secret vote, a president who will organize the commission's activity. Following the deliberation, the commission adopts a reasoned decision. The Commission will record in the decision, as the case may be, the agreement between the parties, under their signature. The commission's decision is communicated to the parties within 5 days of its adoption and will serve as the basis for determining the amount of compensation, which in no case can be lower than that established in the expropriation proposal.

The commission's decision is taken by secret vote according to art. 11 paragraph (5) of the Law on expropriation for public utility number 488/1999.

### **3.3. The agreement of the parties prior to the expropriation**

The agreement of the parties prior to the expropriation. Called in the legal literature the subsidiarity of expropriation (Chelaru, 1998) represents the possibility offered by the law to the parties, for those interested to agree on the amount and nature of the compensation, in order to eliminate the cumbersome procedure of expropriation. Practically, the transfer of the ownership right is carried out through one of the ways of acquiring the ownership right, and one of the most well-known is the contract. Between the expropriator as the buyer and the holder of the property right or another real right, as the seller, a sale-purchase contract is concluded, in written form. Also, by agreement of the parties, an exchange of land or real estate can take place. If the object of the sale-purchase, exchange, etc., is formed by immovable property, according to art. 510 para. (2) of the Civil Code of the Republic of Moldova, the ownership right is acquired on the date of entry in the real estate register, with the exceptions provided by law.

The interested parties can agree both on the way to transfer the property, to transfer the patrimonial right, as well as on the amount of the compensation and its form, in compliance with the legal provisions regarding the substantive, formal and publicity conditions, without triggering the expropriation procedure. The agreement between the parties in this case will be notarized, the related expenses being borne by the expropriator (Dumitru, 2013).

After receiving the notification, the owner and holders of other real rights on the object of expropriation are obliged to take measures to preserve this object.

## **4. CONCLUSIONS**

If the parties do not reach an agreement on the expropriation in the manner established above, the expropriation for reasons of public utility can only be done by court decision with fair and prior compensation. The main effect of the expropriation consists in the fact that, based on the final and irrevocable expropriation court decision, the property becomes the property of the expropriator, free of any encumbrances. At the same time, all real rights derived from property rights (usufruct, dwelling, surface area, servitude) are extinguished.

All this presented administrative procedure reveals the dominant position of the representatives of the authorities and its non-transparent character, at least in the initial phase, aspects that tilt the balance in favor of public property rights (Nicolcescu, 2019).

In fact, the criticism brought to the administrative phase regarding transparency and the real impossibility of currently canceling a public utility declaration could be the result of this concept and the fact that the expropriation procedure has not undergone major changes over time in the Republic of Moldova.

In conclusion, no society can exclude the idea of expropriation, but can only identify the most effective methods at a given time to protect the right to private property and resort to the extreme means of acquiring public property only in situations where necessarily imposes. Society should, therefore, develop in such a way as to avoid forced measures, as a guideline to follow in the conception and public policies.

For these reasons, the initiative regarding the regulation of this measure must equally belong to the holders of private property rights, but the measure as such must also be effectively avoided in most cases and resort to expropriation as the main means of solving the needs of order public only in exceptional situations. This is actually the essence of what must be pursued or avoided from the perspective of expropriation, that is why the term "guarantee" of private property used in art. 46 no longer seems to be contradictory, but the guarantee comes as a basic principle.

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## Application of the Break-Even Method in the Analysis of Profit Elasticity: Case of Republic of Moldova

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**Abstract:** This article specifies the methodology for calculating profit elasticity with the application of break-even point. It is argued the need to determine break-even point in agricultural enterprises based on the minimum productivity of agricultural crops, because this indicator depends on the enterprise's own effort, while the selling price of products and their unit cost largely change depending on the market conjuncture and prices of purchase of material resources. Profit fluctuations and prices translating operational risk have been found to depend on the contribution margin and proximity of agricultural enterprises to the break-even point. As a result of the research, it was established that as the effective productivity of agricultural crops moves away from the break-even point, the profit per unit of product has an increasing trend. The areas of profit elasticity have been delimited in the calculation per quintal of product, which certifies that the highest profit elasticity is obtained in the range of reduced productivity. Thus, when the corn yield is up to 20 quintals per hectare, the increase in productivity by one unit influences the increase of the unit profit by 5.26 lei. Research conducted demonstrates the multiplicative influence of crop productivity on profit elasticity.

**Key Words:** analysis, break-even point, crop productivity, elasticity, profit

### 1. INTRODUCTION

The main objective of the enterprise's activity is to obtain sufficient profit to cover expenses, repayment of debts and technological reinvestment of production. The achievement of this objective implies the need to analyze the elasticity of profit depending on the level of activity and the variation of costs and expenses. The analysis of profit sensitivity depending on such variables is performed by applying the break-even method, known as "critical point", "blind spot".

Break-even point is that volume of sales at which revenues accurately cover all expenses, the profit being nil. By exceeding this critical point, the activity carried out by the enterprise becomes profitable. The economic risk will be lower the lower the profitability threshold (Gh. Vâlceanu, V. Robu, N. Georgescu, 2005).

Being a forecasting method, the break-even point highlights that level of activity at which the enterprise must be situated in order not to work in losses.

### 2. MATERIAL AND METHODS

For the research were selected agricultural enterprises from Soldanesti district of the Republic of Moldova. As information sources served:

- Annual statistical survey 21-Sales "Sale of agricultural production";
- Cost register.

The break-even analysis methodology involves dividing costs and expenses into variable and constant (fixed) and differs depending on the homogeneous or heterogeneous character of production (V.Robu, I. Anghel, E. Șerban, 2014).

Taking into account that the break-even point in our research was analyzed at product level, we mention that variable costs included articles: direct costs with productive personnel, seeds, fertilizers and pesticides, fuels.

The constant costs according to their nature do not change depending on the volume of products obtained, which determined the following composition: depreciation of fixed assets for production purposes, maintenance and repair of fixed assets for production purposes, services of auxiliary activities related to the manufacture of products (electricity and heat, tractor services), costs related to the improvement of cultivation technologies and improvement of product quality, costs of security services of production subdivisions and delegation of workers involved in the production process, costs related to the management and servicing of production subdivisions.

### 3. RESULTS AND DISCUSSION

The model for calculating break-even point starts from the assumption that the enterprise can influence neither the prices at which the factors of production are bought nor the prices of the goods it produces and sells. The only variable on which it can act in order for revenues to exceed expenses remains the volume of production sold.

In agriculture, unlike other branches of national economy, the volume of sold production depends on the change in average production per hectare, because the increase in productivity determines the increase of sold production volume and vice versa. Based on this, we consider that the profitability threshold for agricultural enterprises should be determined according to the minimum yield ( $q_{min}$ ) expressed in natural units, i.e. in quintals per hectare. Thus, we propose the following calculation formula:

$$q_{min} = \frac{CF_h}{P - CV_p} \quad (1)$$

where:

$CF_h$  – constant costs in calculation per hectare, lei;

$P$  – average selling price per product unit, lei;

$CV_p$  – variable costs per product unit, lei.

If actual productivity ( $q$ ) is less than the minimum ( $q_{min}$ ) then the enterprise will incur losses and, respectively, if  $q > q_{min}$  the entity will make a profit.

Along with the minimum productivity ( $q_{min}$ ) we consider it appropriate to determine:

- critical productivity ( $q_{cr}$ ) that can only recover constant costs;
- optimal productivity ( $q_{opt}$ ), the level of which can ensure simple breeding;
- maximum productivity ( $q_{max}$ ) ensuring extended breeding.

From the above we propose the expression of critical productivity ( $q_{cr}$ ) according to the formula:

$$q_{cr} = \frac{CF_h}{P} \quad (2)$$

Our investigations carried out on the basis of data from agricultural enterprises show us that the minimum rate of return on crop production to ensure simple reproduction is 19-23%. This means that both variable and fixed costs must be increased to the given level in order to achieve optimal productivity ( $q_{opt}$ ). Thus, formula 1 will transform:

$$q_{opt} = \frac{(1+R) \times CF_h}{P - (1+R) \times CV_p} = \frac{1,23 \times CF_h}{P - (1,23 \times CV_p)} \quad (3)$$

where:  $R$ - rate of return, coefficient.

Determining maximum productivity requires parallel to the division of costs into variables and constants the calculation of unit cost, profit per unit of product and per hectare. Depending on this, the cost per unit of product formula (C) will be presented:

$$C = CV_p + \frac{CF_h}{q} \quad (4)$$

In such an approach, the profit per 1 quintal of product ( $B_p$ ) and in the calculation per hectare ( $B_h$ ) will be calculated according to the formulas:

$$B_p = P - C = P - (CV_p + \frac{CF_h}{q}) \quad (5)$$

$$B_h = q \times (P - CV_p) - CF_h \quad (6)$$

where:  $q$  – actual productivity, quintals per hectare.

The change in profit per hectare under the influence of productivity growth and unit cost reduction is traditionally determined using the formulas:

$$\Delta B_h^q = (q_1 - q_0) \times (P_0 - C_0) \quad (7)$$

$$\Delta B_h^c = -(C_1 - C_0) \times q_1 \quad (8)$$

The works of local scientists (D. Parmacli, A. Stratan, 2016) have shown that in order to ensure extended reproduction in agriculture, profit growth under the influence of productivity growth must exceed or be equal to profit growth under the influence of unit cost reduction. In this case, the relationship must be respected  $\Delta B_h^q \geq \Delta B_h^c$ . If  $\Delta B_h^q = \Delta B_h^c$  that is, the influence of productivity equals the influence of cost on profit, then formulas 7 and 8 will equal:

$$(q_1 - q_0) \times (P_0 - C_0) = -(C_1 - C_0) \times q_1 \quad (9)$$

Replacing unit cost (C) by components, formula 9 shall be expressed:

$$(q_1 - q_0) \times \left[ P_0 - \left( CV_{p(0)} + \frac{CF_h}{q} (0) \right) \right] = - \left[ \left( CV_{p(1)} + \frac{CF_h}{q} (1) \right) - \left( CV_{p(0)} + \frac{CF_h}{q} (0) \right) \right] \times q_1 \quad (10)$$

If q is considered as  $q_{max}$ , then by performing the respective transformations we obtain the formula for calculating the maximum productivity:

$$q_{max} = \frac{2CF_h}{P - CV_p} \quad (11)$$

Thus, the formula obtained attests that maximum productivity implies the situation in which constant costs per hectare exceed more than twice the contribution margin per product unit ( $P - CV_p$ ), which is explained by the investments in the implementation of intensive technologies (application of more productive varieties, administration of fertilizers and herbicides).

The results of calculations according to this methodology are presented in Tables 1 and 2.

The calculations made in Table 1 allow us to ascertain that at LLC "Pohoarna Agro" the effective productivity (q) during the analyzed period exceeded the profitability threshold ( $q_{min}$ ) for wheat by 25.1%, corn by 16.9% and sunflower by 40.9%. At the same time, the optimal level of productivity has not been achieved. Thus, for wheat the effective productivity is lower than optimal by 2.87 quintals, for maize by 30.07 quintals, for sunflower by 2.28 quintals, which does not allow the entity to ensure even simple reproduction.

Table 1: Comparative data on agricultural crop productivity at LLC "Pohoarna Agro" on average 2018-2020, quintals per hectare

Productivity indicator	wheat	corn	sunflower
Critical productivity ( $q_{cr}$ )	20.8	21.25	12.54
Minimum productivity ( $q_{min}$ )	31.87	43.57	17.85
Optimal productivity ( $q_{opt}$ )	45.36	81.0	27.43
Effective productivity (q)	42.49	50.93	25.15

Source: Author's calculations based on: 1. Cost register; 2. Annual statistical survey 21-Vânz "Sale of agricultural production"

At the same time, from the data presented in Table 1 it results that LLC "Pohoarna Agro" can recover all production costs and obtain profit, which means that the economic and financial situation of the entity is quite comfortable. The calculations made show us that the lower the share of minimum and optimal productivity compared to the actual productivity, the higher the efficiency of production. This quota is: 75% and 107.32% for wheat; maize 85.55% and 159.04%; sunflower 71.0% and 109.07%.

Analyzing the positioning of agricultural enterprises in relation to the break-even point in the product profile, we notice that the further the actual productivity (q) is from the minimum ( $q_{min}$ ), the higher the profit in the calculation per hectare and per quintal of product (Table 2). For example, in LLC "Şipca-Spicuşor" the proximity to  $q_{min}$  for wheat is 14.74 quintals or more than 35%, which allowed the entity to obtain 2983.68 lei profit per hectare, and in the calculation of one quintal of wheat the profit was 72.0 lei.

Table 2: Positioning of agricultural enterprises in relation to profitability threshold (average 2018-2020)

Company name	Actual productivity (q), quintals/ha	Break-even point ( $q_{min}$ ), quintals/ha	Constant costs, thousand lei	Variable costs per product unit, lei	Unit contribution margin, lei	Profit in calculation:	
						Per hectare, lei	For one quintal of product, lei
Wheat							
Agromais LLC	36.18	24.03	2433.14	105.37	127.22	681.99	18.85
Calv-Agro LLC	30.95	32.27	935.0	177.25	53.23	-209.22	-6.76
Madino-Agro LLC	30.21	24.14	809.85	132.43	118.33	1083.93	35.88
Nanderix LLC	38.95	43.28	442.8	137.63	87.97	-681.62	-17.5
Pohoarna-Agro LLC	42.49	31.87	1321.46	124.38	135.11	2255.37	53.08
Şipca-Spicuşor LLC	41.44	26.7	635.86	122.02	114.95	2985.68	72.0
Taduran-Agro LLC	28.93	22.06	242.05	117.38	92.14	832.61	28.78
Corn							
Agromais LLC	30.38	25.37	1161.5	110.6	117.11	997.38	32.83
Calv-Agro LLC	24.93	23.47	86.5	104.27	89.05	548.46	22.0
Madino-Agro LLC	51.04	38.39	711.1	110.97	94.63	3560.04	69.75
Nanderix LLC	29.9	34.5	263.85	88.62	88.84	-107.94	-3.61
Pohoarna-Agro LLC	50.93	43.57	737.0	141.98	87.64	1785.1	35.05
Şipca-Spicuşor LLC	47.17	36.33	594.6	139.6	87.5	3392.47	71.92
Taduran-Agro LLC	50.03	45.59	258.8	113.83	59.97	790.47	15.8
Sunflower							
Agromais LLC	17.09	13.87	2088.3	288.52	312.53	2155.22	126.11
Calv-Agro LLC	15.1	10.66	379.3	295.51	189.0	806.49	53.41
Madino-Agro LLC	18.92	14.54	765.1	195.57	373.69	5012.1	264.91
Nanderix LLC	16.32	12.5	339.9	169.34	339.68	3025.56	185.39
Pohoarna-Agro LLC	25.15	17.85	686.26	189.95	410.47	7935.58	315.53
Şipca-Spicuşor LLC	24.49	16.42	538.85	193.5	376.07	7219.16	294.78
Taduran-Agro LLC	22.65	19.28	264.7	248.45	205.14	2760.36	121.87

Source: Author's calculations based on: 1. Cost register; 2. Annual statistical survey 21-Vânz "Sale of agricultural production"

This law is also observed for corn and sunflower. Thus, within LLC "Madino-Agro" the differences between the effective productivity of corn compared to the minimum was 12.65 quintals and as a result were obtained the highest amounts of profit in calculation per hectare and per quintal respectively 3560.04 and 69.75 lei.

For sunflower, the farthest values of effective productivity compared to  $q_{min}$  are found at LLC "Pohoarna-Agro" – 7.3 quintals and at LLC "Şipca-Spicuşor" – 8.07 quintals, where the amount of profit in calculation per hectare is respectively 7935.58 and 7219.16 lei.

The results of the calculations (Table 2) show that if actual productivity is below the break-even point, this means that the entity cannot recover its costs and consequently suffers losses. Such a situation is observed within the entity "Nanderix" LLC, where  $q < q_{min}$  for wheat with 4.33 quintals and corn with 4.6 quintals and respectively losses per hectare amounted to 681.62 and 107.94 lei. A similar situation is characteristic at LLC "Calv-Agro", where losses per hectare of wheat amounted to 209.22 lei.

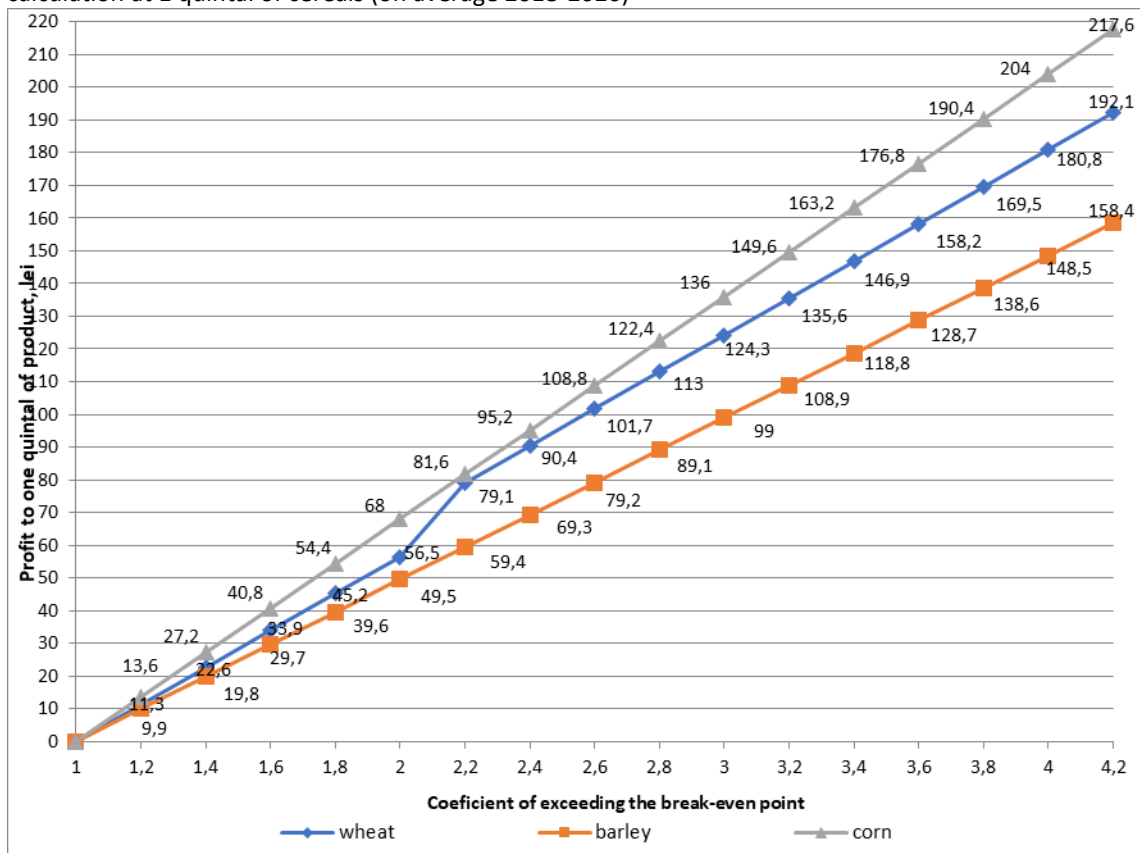
The results of the investigations allowed us to deduce that the determining factor that ensures the increase of profit is the productivity of agricultural crops, because it depends on the own effort of the enterprise, while the selling price and the unit cost largely change depending on the market situation and the prices of purchasing material resources.

Moreover, our investigations reveal that as the actual yields are removed from the break-even point, the profit increase per hectare and also profit per unit of product. The results attesting the existence of the link between



the coefficient of exceeding the break-even point and the profit at a product unit can be viewed in Figures 1 and 2.

Figure 1: Interdependence between the coefficient of exceeding the break-even point and the profit in the calculation at 1 quintal of cereals (on average 2018-2020)

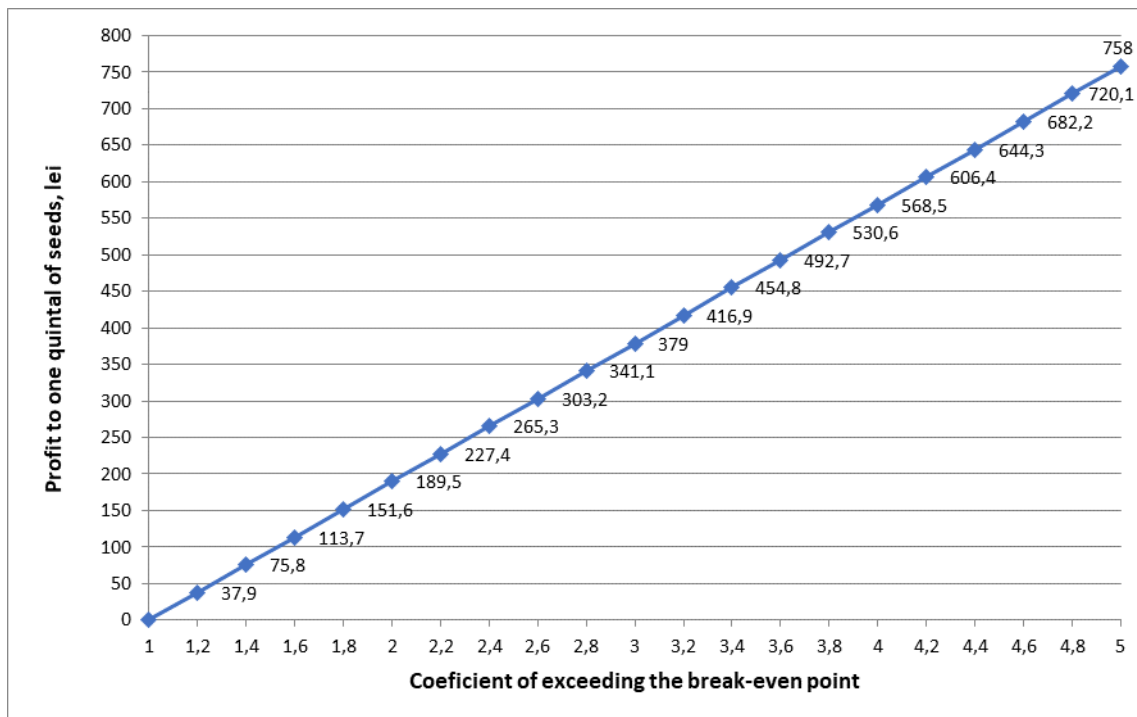


Source: Author's calculations based on: Cost register; Annual statistical research 21-Vânz "Sale of agricultural production,,

From the graphic presentation (fig. 1.) We note a considerable increase in profit to 1 quintal of product depending on the increase in the coefficient of exceeding the break-even point. Thus, when this coefficient is placed in positions 2,0; 3,0 and 4,0 the profit per 1 quintal of corn constitutes 68,0; 136,0 and 204,0 lei respectively.

The presence of the direct link between the increase in the coefficient of exceeding the break-even point and the change in profit per unit of product is also confirmed by the calculations made on sunflower seeds (fig. 2).

Figure 2: Interdependence between the coefficient of exceeding the break-even point and the profit at one quintal of sunflower seed (on average 2018-2020)



Source: Author's calculations based on: Cost register; Annual statistical research 21-Vânz "Sale of agricultural production,,

From Figure 2 we see a strong profit increase to 1 quintal of sunflower seeds depending on the increase in the coefficient of exceeding the break-even point. When the break-even point is exceeded of 2.0; 3.0 and 4.0 times, the profit per unit of product is increased by 151.6; 303.2; 492.7 lei.

It is known that the profit per unit of product expresses the difference between the selling price (P) and the unit cost (C). Taking into account the division of costs into variables and constants we obtain:

$$B_p = P - C = P - (CV_p + \frac{CF_h}{q}) = P - CV_p - \frac{CF_h}{q} \quad (12)$$

From the experience of many agricultural enterprises, it has been demonstrated that it is only on account of improving the quality of cultivation and harvesting without additional costs that it is possible to increase productivity and profit, respectively. In this case, the change in profit as a result of productivity growth it is proposed to calculate, performing the following transformations:

$$\begin{aligned} \Delta B_p^q &= B_p' - B_{p(0)} = \left[ P_0 - CV_{p(0)} - \frac{CF_{h(0)}}{q'} \right] - \left[ P_0 - CV_{p(0)} - \frac{CF_h}{q} (0) \right] = CF_h \left( \frac{1}{q_0} - \frac{1}{q'} \right) = \\ &= \frac{CF_h}{q_0^2 + q'} = \frac{CF_h}{[q_0^2 + (q_0 + 1)]} \end{aligned} \quad (13)$$

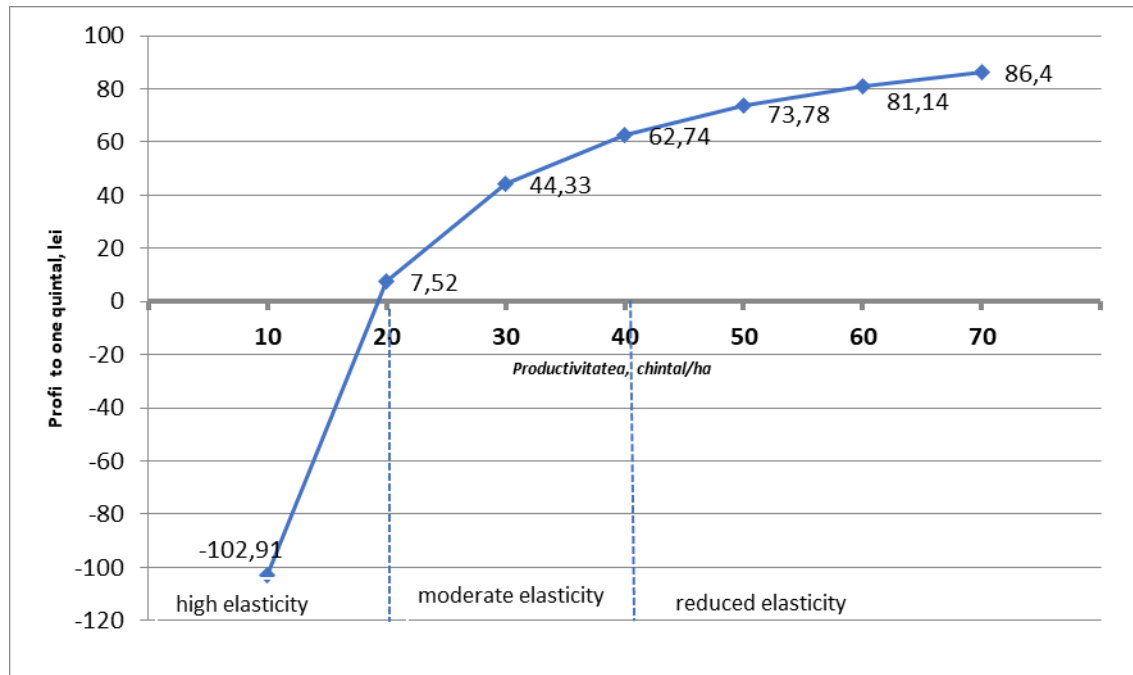
where: q' – increased productivity following improved quality of agricultural work or q'=q<sub>0</sub>+1, that is, growth with one unit;

B'<sub>p</sub> – profit per unit product obtained as a result of increased productivity of agricultural crops.

Using formula 13 and the information of the selected totality in the period 2018-2020, we will determine the change of the profit to 1 quintal of corn depending on the increase of productivity. The calculations carried out confirm the results of previous research (figure 3).

From the graphical presentation (figure 3) we consider it appropriate to delimit 3 areas of profit elasticity. Thus, we find that the highest profit increase is obtained under the conditions of low maize productivity, namely up to 20 quintals per hectare. This area, in our opinion, is considered high elasticity, because the increase in maize productivity by 1 quintal conditions the increase in unit profit by 5.26 lei.

Figure 3. Elasticity of unit profit according to the increase in maize productivity (on average 2018-2020)



Source: Author's calculations by methodology (Tcaci N., Tcaci A., Dombrovski I, 2020)

The second area includes productivity from 20 to 40 quintals and is called moderate elasticity, according to which the increase in yield by 1 quintal/ha leads to an increase in profit by 2.37 lei/ quintal. The third area – reduced elasticity with productivity from 40 quintals/ha to 60 quintals/ha, which attests that the increase in productivity by 1 quintal favors the increase of profit by 1.35 lei/quintal, which is, and in the aperture of over 60 quintals/ha, the profit increase is only 0.87 lei/quintal.

Investigations of the authors (Parmacli D., Tcaci N., 2016) demonstrated the multiplicative effect of the productivity of agricultural crops on the profit elasticity. Parallel to the direct influence of the yield on the profit, its increase also contributes to the reduction of the unit cost. These authors have identified that the profit increase on account of the reduction of the unit cost exceeds the profit increase obtained from the productivity growth per hectare.

Our research carried out during 2015 – 2017 confirmed the results of the investigations of the nominated authors. Thus, based on the data of 47 agricultural enterprises from the Center region of the Republic of Moldova, the cost of a wheat quintal that makes up:

$$C_0 = \frac{1976.83}{34.05} + 118.09 = 176.15 \text{ lei}$$

The increase in productivity from 34.05 to 35.15 quintals or by 3.2% leads to the decrease of the unit cost by 1.82 lei:

$$C_1 = \frac{1976.83}{35.15} + 118.09 = 174.33 \text{ lei}$$

$$\Delta C = 174.33 - 176.15 = -1.82 \text{ lei}$$

The profit in the calculation per hectare during the base period and after the increase in productivity is (Tcaci N., Tcaci A., Dombrovski I, 2020):

$$Bh_{(0)} = 34.05 (224.35 - 118.09) - 1976.83 = 1641.32 \text{ lei}$$

$$Bh_{(1)} = 35.15 (224.35 - 118.09) - 1976.83 = 1758.21 \text{ lei}$$

Thus,  $\Delta Bh = +116.89 \text{ lei}$ .

On account of productivity growth profit increase per hectare ( $\Delta B_h^q$ ) amounted to 53.02 lei:

$$\Delta B_h^q = (q_1 - q_0) \times (P_0 - C_0) = (35.15 - 34.05) \times (224.35 - 176.15) = +53.02 \text{ lei.}$$

At the same time, the reduction of the unit cost conditions the increase of the profit per hectare ( $\Delta B_h^C$ ) with 63.87 lei:

$$\Delta B_h^C = q_1 \times [-(C_1 - C_0)] = 35.15 \times [-(174.33 - 176.15)] = +63.87 \text{ lei.}$$

From the calculations made, it follows that on account of the increase in productivity per hectare, that is, of the direct effect, the profit per hectare increased by 53.02 lei or by 45.4 %. The reduction of the unit cost – of the complimentary effect conditioned the increase of the profit by 63.87 lei or by 54.6 %.

In our opinion, the greater share of the complimentary effect (the unit cost) in the increase of profit is due to the fact that the increase in productivity (that is, the direct effect) exerts a double influence, because on the one hand, the increase in productivity contributes to the reduction of the unit cost, and on the other hand – to the increase of the profit.

#### 4. CONCLUSIONS

As a result of the research carried out, it was argued the need to determine the break-even point in agricultural enterprises after the minimum productivity, because this indicator depends on the entity's own effort.

It was specified the methodology for calculating the profit elasticity at product level with the application of the break-even point taking into account the branch specificity of agricultural enterprises.

It was found that as the effective productivity is removed from the break-even point, the profit increase in the calculation per hectare and per unit of product takes place. It also attests to the increase of the profit per unit of product according to the increase of the coefficient of exceeding the break-even point. Thus, when this coefficient exceeds the break-even point of 4.0 times the profit for a sunflower quintal is increased by 492.7 lei.

The calculations made allowed us to delimit the areas of profit elasticity per product unit: high, moderate, low. The highest profit elasticity is attested in the low productivity area when corn yield is below 20 quintals per hectare.

The research carried out shows that on account of the increase in productivity of agricultural crops (of direct effect) the profit per hectare is increased by 45.4% and under the influence of the reduction of the unit cost (complementary effect) by 54.6%. We consider the preponderant share of the unit cost due to the productivity that exerts a double influence: on the one hand it contributes to the reduction of the unit cost; and on the other hand – to the increase of the profit.

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## Email marketing as a tool for customer retention of eCommerce stores with a special focus on the health and supplement industry.

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**Abstract:** Email marketing, although not a novel addition to the social media landscape, often takes a backseat when compared to platforms like Facebook, Instagram, or TikTok. However, when the focus shifts to fostering loyal customers, email marketing emerges as an exceptionally powerful tool.

This research sheds light on the pivotal role of email marketing and delves into the crucial factors contributing to a successful strategy: personalization and segmentation. To unravel the impact of these factors and provide insights into the survey questions, a collaborative effort was made with a health and supplements brand, involving various experiments and analyses.

In the A/B test analyses conducted, it was discovered that incorporating personalization, such as including the recipient's name in the subject line and integrating specific consumer information in the email body, significantly enhances the overall campaign performance.

While it's acknowledged that these tests lack the repetition necessary for statistical reliability, it cannot be definitively stated that the observed parameter improvements are solely attributed to personalization and segmentation. Nevertheless, a substantial role of personalization and segmentation in cultivating loyal customers is evident from the outcomes of these experiments.

**Keywords:** Email Marketing, customer, eCommerce, health, supplement industry.

### Introduction

Over four decades ago, the roots of ecommerce were laid with the emergence of early technologies such as Electronic Data Interchange (EDI) and teleshopping in the 1970s. These developments laid the foundation for the contemporary ecommerce stores that define the landscape today. The evolution of ecommerce is intricately connected with the evolution of the internet. The accessibility of online shopping became a reality when the internet was made available to the public in 1991 (Tian and Stewart, 2006). In 2021, approximately 27.2 percent of the global population engaged in online shopping, signifying that within a span of less than 27 years, ecommerce has become an integral aspect of daily life for many worldwide. Contrastingly, research by Invesp indicates that 44% of established companies prioritize acquisition over customer retention, with only 18% placing a greater emphasis on retention. Nonetheless, for businesses, concentrating on retaining customers proves to be a more practical approach in terms of costs and resources. When it comes to the expense of securing sales, 82% of businesses acknowledge that customer retention is a more cost-effective strategy than acquisition.

Moreover, following the onset of the Covid-19 pandemic, there was a significant rise in the number of eCommerce brands within the health and supplement sector, heightening the importance for brands to retain and cultivate customer loyalty. ECommerce establishments concentrate their promotional activities on social media platforms such as Facebook, Instagram, and TikTok. Despite their effectiveness in acquiring new customers, email marketing, which is both cost-effective and boasts a higher return on investment, tends to be overlooked for retention purposes. Email marketing strategies play a pivotal role in building robust customer and brand relationships, fostering loyalty, and instilling trust. If executed with high relevance, personalization, and, crucially, with the recipient's consent, email marketing emerges as one of the most potent channels for digital marketing communications (Mogos and Acatrinei, 2015; Zhang et al., 2017). Hence, this research delves into the role of email marketing as a tool for customer retention in eCommerce establishments and its capacity to engender customer loyalty. The dissertation will assess the impact of diverse retention strategies in email marketing within the health and supplement industry.

The paper seeks to accomplish the following aims:

1. To offer the theoretical foundation related to email marketing in eCommerce, with a particular emphasis on the health and supplement industry.
2. To conduct an external analysis of the customer lifecycle for a prominent eCommerce store, specifically in terms of revenue generation. This phase emphasizes the automated aspect of email marketing, guiding subscribers through various behavioural stages based on predefined criteria.
3. Conducting two A/B tests to assess the impact of personalization and implementing one test email campaign supported by detailed RFM analysis to understand the effects of segmentation. A/B testing, also known as bucket testing or split testing, involves comparing two versions of an email to determine performance. The recommended approach is to introduce a single difference and set only one key performance indicator (KPI) for measurement.

In the first A/B test, the focus is on examining personalization within the email content, whereas the second A/B test assesses personalization in the subject line and its influence on the open rate. Additionally, addressing segmentation, five distinct segments will be formed using RFM analysis. A test campaign will be directed to the segment identified as 'best customers,' and its performance will be compared with the averages of each metric from campaigns sent in the previous 90 days.

This research paper is presenting two hypotheses that we will use to address our research questions.

Hypothesis 1: Personalizing email communication positively affects creating a solid customer relationship.

Hypothesis 2: distinct customer segmentation will enhance the effectiveness of the campaign.

## Literature Review

Electronic commerce (eCommerce) refers to the electronic exchange between two parties, often conducted over the internet. Such exchanges commonly involve transactions, which can occur between companies and consumers (B2C), between two companies (B2B), or among individual consumers (C2C) (Electronic Commerce, n.d.). According to Statista, the global sales of retail e-commerce amounted to approximately 4.9 trillion U.S. dollars in 2021. Projections indicate a 50 percent growth over the next three years, with sales expected to reach around 7.4 trillion dollars by 2025. E-commerce has significantly transformed the way products and services are sold and how businesses operate in the contemporary world. Key advantages of eCommerce include the ability to access global markets, transparency, and the ability to engage with various suppliers regardless of their geographical location.

### Email Marketing for Health and Supplement stores

As stated by Michael Williams in 2011, email marketing is a form of direct digital marketing employed for the promotion of products and services through email. According to D.J. Waldo and J. Falls (2003), they define email marketing as a marketing channel enabling companies to communicate on a large scale with their customers, prospects, fans, and subscribers. In the context of eCommerce stores, email marketing involves communication between the brand or company and its subscribers with the aim of establishing, developing, and nurturing relationships. This approach not only attracts new customers but also fosters meaningful connections with existing customers and a community of loyal subscribers. Data indicates that consumers who exhibit greater loyalty to a brand are more inclined to receive and appreciate regular brand communication compared to those who are less loyal. The volume of daily emails sent and received was estimated at approximately 306.4 billion in 2020, and it is anticipated to surpass 376.4 billion daily emails by 2025, as per Raj's information (Raj A, 2021).

Nutraceuticals encompass any food product or its components that offer health benefits beyond basic nutritional value and can aid in the prevention or treatment of certain diseases. This category includes functional foods, dietary supplements, and herbal/natural products. The emergence of the health and supplement industry dates to the early 1990s, experiencing remarkable expansion. Between 1999 and 2002, the industry achieved an average annual growth rate of 7.3 percent. However, recent years have witnessed a substantial acceleration, with the growth rate reaching 14.7 percent. In 2020 alone, the global supplement market demonstrated a growth of 9.7%, reaching a record high of \$156 billion (Messerer et al., 2001). In the realm of marketing, the health and supplement industry encounters certain challenges, with authenticity emerging as a pivotal factor for effective communication. Establishing trust is paramount in building a strong customer-brand relationship (Meirissa et al., 2023). Once authenticity and trust are secured, brands have the

freedom to unleash their creativity in product placement and articulating benefits to customers (Cardoso et al., 2022).

Email marketing presents a distinctive avenue for reaching thousands of subscribers with personalized communication (Ridge, B.,2023). However, the communication must not only be personalized but also engaging. Given the inundation of daily emails, the key to standing out lies in crafting emails that capture and maintain the audience's attention.

### **External customer lifecycle analysis**

We'll provide a brief explanation of email automation, exploring the diverse strategies that companies use in automated email marketing to cultivate relationships with their customers.

Bodybuilding, a health and fitness retailer established in 1999, has been chosen for an external customer lifecycle analysis. With a strong online presence, the company specializes in selling products related to vitamins and dietary supplements. The selection is based on factors such as the substantial revenue generated through email marketing, the presence of loyal customers advocating for the brand, and the overall customer experience. The data collected over one month for this external lifecycle analysis aims to gain insights into Bodybuilding's email marketing strategy. The most vital retention lessons derived from the external analysis of Bodybuilding include:

-The membership program, that serves as a strategic initiative to cultivate loyalty and establish meaningful connections with new email subscribers. Bodybuilding's membership program, as evident from their emails, offers exclusive benefits such as attractive discounts reserved for members, early access to new products, personalized recommendations, and reward points merely for signing in. These perks not only enhance campaign engagement but also prompt subscribers to prioritize the brand in their purchasing decisions. The program encourages subscribers to become more competitive by accumulating points, advocate for the brand within their networks, and foster long-term loyalty.

- In addition, while excessive discounting is generally discouraged, providing an appealing incentive in exchange for an email address proves to be beneficial. Implementing a discount offer in a website pop-up enables brands to capture email addresses, initiating communication with visitors and ultimately converting them into loyal customers.

- Bodybuilding frequently shares complimentary educational content with its subscribers. This practice stems from the understanding that an informed subscriber is more likely to become a well-retained customer, recognizing the significance and value of the products offered.

- Browse and cart abandonment emails are effective for re-engaging interested subscribers and encouraging them to complete their purchase. Personalization and segmentation further enhance the impact of these reminders.

### **Research Methodology**

Secondary data is collected by analysing one of the industry's best eCommerce stores regarding retention, and insights from their email marketing strategy are gathered. The whole lifecycle journey of the customer is taken into consideration. Primary and secondary data were gathered to answer the research questions and hypothesis. For the third phase, secondary data was collected via the Klaviyo's and Google Analytics accounts of the HealthX store. To conduct the research stated, secondary data was collected from the company's campaign metrics sent in the last 90 days. This data is being used to compare the performance of the campaigns VS the test campaign sent to be segment created through the RFM analysis. Regarding primary data, two A/B tests and one test campaign are conducted to understand the power of personalization and segmentation.

### **Experiment design 1**

The First A/B test happened on Wednesday when the company shared the news with its subscribers. They have a new product announcement. The first experiment aimed to test the value of personalization by including the

recipient’s name, target weight, and current weight. The test was running for 24 hours. Furthermore, a total of 65,350 emails were randomly divided into the following two groups:

- The control group: randomly selected subscribers to receive emails in the typical template used by HealthX.
- The treatment group: randomly selected subscribers to receive emails with dynamic content that personalized their overall experience. Specifically, the recipient’s first name, target weight, and current weight were included. The only difference between the emails sent to the groups is the personalization in the copy. It was included in the treatment group and excluded from the control group.

The results of the A/B test were gathered after one week, and the results are as follows:

Table 1.: A/B test results from the experiment 1

Type of group	Click through rate	Conversion rate
The treatment group	3,3%	2%
The control group	4,9%	5,1%
% difference	48,5% increase	155% increase

The second column included the click-through rates detected from each variation of the A/B test, while the third column consisted of the conversion rate of both variations. The table shows that when personalizing the content of the email, the probability of the customers that have already opened the email clicking on the links included in the email increases by 48.5% with just one email sent. On the other side, the conversion rate increases drastically. Out of 65.350 customers to whom the first A/B test was conducted, 32,675 received the non-personalized content, and only 653 have purchased the weight loss product promoted in the email. But out of the 32,675 customers that have received the personalized content, 1666 have purchased the product. That leads to a significant return on the investment. In addition to the immediate returns from this campaign, the significant improvement of the KPIs suggests that the marketing efforts of the brand in terms of retaining its customers are drastically increased. The main reason behind this is psychological factors. The subscribers can see what that specific product can do for them and how it can help them to reach their own goals. When the recipient’s goal is to lose weight, receiving such an email that includes their current state (current weight) and their desired state (target weight), and offers a solution for it, the customers are more likely to get motivated and feel the need to order the product.

### Experiment design 2

To dive one step further, the second A/B test was conducted. This time only personalization occurred, including the first name in the subject line. This experiment aimed to test to what extent the subject line’s personalization increases the email’s open rate. The content of the email was primarily focused on checking how the customer feels after some time of consuming the supplement. The campaign was sent to customers only, and they were divided into the following groups:

- The control group: The subscribers randomly selected for this group received emails with the following subject line: How do you feel today?
- The treatment group: The subscribers randomly selected for this group received emails with dynamic content in the subject line that included their first name: How do you feel today [[first name]]? (E.g., How do you feel today, Blerta?)

The results are as follows:

Table 2.: A/B test results from the experiment 2

Type of group	Open rate
The treatment group	22,3%
The control group	28,7%
% difference	28,% increase

Table 2 shows the results from the second experiment. The second column gives an overview of the open rate for the control group and treatment variant. It can easily be seen that the probability of a recipient opening the email increases by 28,1% when their own name is included in the subject line.



On the economic side, the investment to include personalization in the email is close to zero, but the return is significant.

On the other side, for the second experiment conducted in the form of an A/B test, we can see that in the first group of 32,675 customers that received the email without their name in the subject line, only 7,286 opened the email, but the second group of 32,675 customers that have received the same email with their first name in the subject line, 9249 were triggered to open it. Including the first name in the subject line of the email increases the chance of the recipient opening the email by 28%, which further translates into a better click rate, as well as a redacted unsubscribe rate.

From the above-presented A/B test, we found that email personalization by adding specific information about the subscribers (first name, target weight, current weight) benefited the email campaigns. What we can conclude from the emails is the fact that personalization goes proportionally with email performance. The more one email is personalized, the better the campaign performance is.

### **Experiment design 3**

Segmentation can be defined as the process of separating customers into smaller, homogeneous groups based on specific features and behaviors. This experiment aims to test the importance of segmentation when it comes to retaining customers and making them loyal. Different customers are at different stages of engaging with the brand and have different needs. Therefore, communicating the same messages to all of them leads to lower key performance indicators of the campaign and an overall worse experience with the brand.

For investigating the third research question, the secondary data was collected by the email campaigns sent from HealthX company in the last 90 days. At the same time, the primary data was collected by sending a campaign to the 'Best customers' segment, which will be created with the help of the RFM segmentation model.

To drive conclusions for the above-mentioned analysis, the performance of both campaigns was compared while following the previously set KPI. These KPIs are going to be used in order to determine the performance of the email marketing campaign. While monitoring these measures closely, we can identify the impact of segmentation and provide further suggestions for HealthX's email marketing strategy. The most important KPIs for the research are: Open Rate, Click Rate, Conversion Rate, AOV, Revenue per recipient and Unsubscribe Rate.

### **Defining RFM**

The RFM model was first introduced to the marketing world by Hughes of the American Database Institute in 1994. It is a popular tool for analyzing customer value and has been widely used for measuring customer lifetime value, customer segmentation as well as behaviour analysis.

RFM stands for: the recency of the last purchase, purchase frequency, and monetary value of purchase, respectively. R (recency) represents the time interval between a customer's last purchase date and the end date of a statistical period. The shorter the interval, the bigger the value of R. F (frequency) indicates the number of purchases made by the customer during the statistical period. The larger the value of F, the higher the customer loyalty and the stronger intention to purchase again. M (monetary) represents the total amount the customer spends on purchases during the statistical period. Generally speaking, the higher the total purchase amount, the more loyal the customer is.

#### **RFM segmentation model**

RFM technique evaluates the subscribers based on their online behaviours. The scoring system contains all three variables and is mostly used to predict future patterns by analyzing the and present behavior. The score can range from 111 to 555 (2010, Haiying and Yu).

Each customer had three different scores assigned to it. One for recency, frequency, and monetary values. Scoring is done on a scale from 1 to 5. The highest quintile has a five score, the rest being assigned with 4, 3, 2, and 1. The scores have their own characteristics, as given in the table below. Depending on this RFM score, each customer is grouped into a different segment.

Table .3. - RFM Score Description

Score	Characteristics
5	Best Customers
4	Promising Customers
3	Average Customers
2	Customers at risk
1	Lost customers

Best customers are the ones that frequently purchase and spend the most money on the products, and their last purchase has been recent. These customers are active and the most beneficial for the company.

### RFM analysis for HealthX

While following the RFM segmentation technique, the HealthX customers are classified into five groups based on their previous behaviours. To define the parameters for each cohort of the HealthX, secondary data previously gathered by the company throughout user research was used.

HealthX has a list of a total of 65,350 opted-in customers. They have been sending campaigns to the total list of customers. By diving deeper into the custom properties and profiles database of the customers, the segments could be easily defined. The percentages of the total opted-in customers of HealthX who belong to each segment are included in the table below.

Table .4. – Opted-in customers per segment for HealthX

Segment	Number of customers	Percentage
Best customers	13070	20%
Promising customers	7189	11%
Average customers	22219	34%
At risk customers	7188	11%
Lost customers	15684	24%

On that basis, a test email campaign will be sent only to the selected segment (20% of the customers with the highest RFM score). This segment is chosen because this group of people is the most frequent buyers, that have placed the highest number of orders with the highest value, and those are the people that HealthX wants to engage with and create a meaningful connection and make loyal.

To obtain second-party data, information was collected from past campaigns sent by HealthX in the last 90 days. These campaigns were directed to a single segment—opted-in customers, totalling 65,350 individuals. The table below displays the average Key Performance Indicators (KPIs) for the specified period. To address the research question, the subsequent HealthX campaign targeted the most engaged segment identified through the RFM analysis conducted earlier. This promotional campaign, focused on health supplements for immune support, was dispatched on a Tuesday evening around 7 p.m. The audience for this email was narrowed down to 13,070 customers. The detailed performance of this test email campaign is outlined in the table below:

Table 5. – Test email campaign performance

KPI	Average in the last 90 days	Test campaign with RFM segmentation	Difference in %
Open Rate	23%	31%	50% increase
Click Rate	3%	4,6%	53,33% increase
Average order value	24\$	29\$	20,83% increase
Revenue per recipient	0.028	0.14	400% increase
Conversion Rate	0.19	0.43	126,31% increase
Unsubscribe rate	0.8%	0.3	62% decrease

### Measurement and Conclusion

The table results suggest that segmentation is pivotal in email marketing campaigns due to the diverse stages of the customer journey. Addressing customers with tailored communication based on their stage is crucial for nurturing strong relationships and increasing the number of customers with the highest RFM score. As noted

by Batt (2000), failing to define customer segments can lead to incorrect prioritization, communication errors, and substantial revenue losses. Segmenting customers streamlines decision-making, providing a clear overview of customers and guiding them toward loyalty. The objective of this test was to identify the correlation between key performance parameters and customer segments. The findings indicate that a higher RFM score corresponds to better email performance, reinforcing the importance of effective segmentation in achieving campaign success.

The results of the test campaign indicate a notable performance improvement compared to the average of previous campaigns. The superior performance in the test campaign underscores that the 'best segment' of customers, characterized by the highest RFM score, is more engaged and interested in the company's products. These customers require distinct and targeted communication. On the contrary, other segments display lower interest levels and should receive different forms of communication.

In summary, the test demonstrated highly promising outcomes, illustrating how subtle adjustments and increased attention to customer segmentation can lead to significant improvements in overall email performance and total revenue. Although time constraints hindered the repetition of the hypothesis, the substantial differences in performance offer clear guidance for further segmentation strategies at HealthX.

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## Analysis of the rules on acceptance and waiver of inheritance

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**Abstract:** Inheritance is the transmission of the estate of a deceased individual to one or more living persons, and acceptance consolidates the transmission of the inheritance made by operation of law at the date of death.

The fundamental pillar of the transmission of property mortis causa is the right of option of succession. The exercise of this right depends on who will become the heir of the deceased, how the estate will be divided, the share to be paid to each heir, who will be liable for the deceased's debts, etc.

A general rule for the acquisition of the estate is that, in order to acquire it, the heir, whether testamentary or legal, must accept it. Acceptance of succession is a unilateral legal act by which the heir expresses his will to receive the inheritance and to become the future owner of the inherited property. However, acceptance of the inheritance is not obligatory, it is the right of the person to accept or not, the legislator leaving it to the holder to express his legal interest.

**Key words:** inheritance, acquisition of succession, succession option, acceptance of inheritance, waiver of inheritance.

**Jel Classification:** K15 Civil Law

### INTRODUCTION

Inheritance is a fundamental concept in civil law, with significant implications for individuals and society as a whole. When a person dies, their estate is passed on to their survivors. However, with this transmission come important legal responsibilities and options for those who are designated as heirs.

Acceptance and refusal of inheritance are two key concepts that govern how an heir can manage their rights and obligations in relation to the estate left by the deceased. These decisions can have significant consequences for the financial and legal situation of the heirs, as well as for the assets and debts left behind by the deceased.

In this article, we aim to explore in depth the concepts of acceptance and refusal of inheritance and their implications for civil law. We will examine the conditions and legal effects of accepting and refusing an inheritance, as well as the reasons and considerations that may influence an heir's decision in this respect.

By analysing these issues, we aim to highlight the importance of correctly understanding the process of accepting and refusing an inheritance and to highlight the essential role these concepts play in ensuring fair justice and administration of the deceased's estate and debts.

### BASIC CONTENT

#### Acceptance of inheritance

Acceptance of the inheritance is the unilateral and irrevocable legal act or fact by which the successor definitively appropriates the inheritance provisionally transmitted since its opening, thereby unconditionally consolidating his or her title as heir.

In other words, acceptance definitively consolidates the transmission of the inheritance which was carried out by operation of law but with provisional title at the date of death.

The transmission of the inheritance operates by operation of law, through the effect of the death of the deceased and from that date. Acceptance merely has the effect of conferring a definitive character on this transmission which took place before it was expressed.

Acceptance of an inheritance is therefore the expression of the will to retain the title of heir conferred by the law; in other words, the renunciation of the right to renounce the inheritance. (Semel heres, semper heres - once an heir, always an heir).<sup>1</sup>

According to the Civil Code of the Republic of Moldova Article 2390 regulates:

(1) With the exceptions provided by law, the heir may no longer renounce the inheritance if he has implicitly accepted it, according to para. (2), or expressly, under para. (3).

(2) On expiry of the period for waiver, the inheritance shall be deemed to have been accepted by the heir. In this case, the provisions of Article 139 (2) shall apply. (1) (e) shall not apply in relation to the heir who is a protected person or a minor.

(3) The heir may file a declaration of acceptance of the inheritance in authentic form with the notary conducting the succession proceedings before the expiry of the period for waiver. The declaration may be authenticated with any notary or other person authorised to authenticate legal documents.

The acceptance takes effect retroactively from the day the inheritance is opened.

Acceptance of the inheritance may be voluntary or forced.

## **A. Voluntary acceptance**

Voluntary acceptance is acceptance resulting from a unilateral, consensual and revocable legal act or fact of the successor.

It is a unilateral legal act or fact because it is the result of a single will of the successor, and consensual because it is the expression of the will of the successor to assume the title of heir and to make use of the rights which his legal or testamentary vocation confers on him over the estate.

Voluntary acceptance may be express or tacit.

### **I. Express voluntary acceptance**

Voluntary acceptance is express when the successor explicitly assumes the title or status of heir by means of an authentic instrument or private signature.

The written form is designed both for evidentiary reasons and to give the successor more time to reflect before expressing a wish to accept the succession.

Express voluntary acceptance is therefore considered a formal, but not a solemn, act.

The document may be authentic or under private signature, but it is not necessary to use sacramental or special terms to express the will to accept the succession.

It is sufficient that the content and meaning of the document unambiguously show that the successor has assumed the title or capacity of heir.

It is therefore necessary for the successor to unequivocally accept title or the capacity of heir by the instrument, i.e. to declare that he accepts it and not merely to state that he is entitled to inherit.

If the acceptance is made by an authentic instrument, the declaration of acceptance will be entered in the national notarial register, kept in electronic format, in accordance with the law.

### **II. Tacit voluntary acceptance**

**Voluntary acceptance is tacit when the successor does an act or deed which he could only have done as heir and from which it is clear that he intends to accept the succession.**

The act or fact of the successor must necessarily and unequivocally imply an intention to accept the inheritance. Unambiguous acts cannot constitute a tacit expression of the will to accept the inheritance.

Tacit acceptance, like express acceptance, must be made personally by the successor or by a conventional trustee specially authorised by him (such as a trustee authorised to sell property of the estate).

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<sup>1</sup> Dumitru C. Florescu Dreptul Succesoral. București 2016, p.211

Incompetent successors or those with restricted capacity opt through their legal representative or with the consent of the legal guardian, and in both cases with the authorisation of the guardianship court.

Legal doctrine has accepted that tacit acceptance could also be made by a business manager, if the successor ratified the management within the term of the succession option, transforming it retroactively into a mandate. The solution was not shared by the courts because of the personal nature of the act of succession option.

Voluntary tacit acceptance is also allowed in the case of testamentary succession.

With regard to acts equivalent to tacit acceptance, a distinction must be made between acts relating to individual assets of the estate and acts relating to the estate as a whole.

Acts of legal disposition relating to part or all of the rights of the estate imply and signify tacit acceptance of the estate. These are such acts:

- (a) the alienation, free of charge or for consideration, by the successor of the rights in the estate;
- b) the renunciation of the inheritance, even free of charge, for the benefit of one or more specific heirs;
- (c) the waiver of succession by way of gift, even for the benefit of all the successors in title or subsequent heirs.

Acts of disposition, definitive administration or use of property of the estate may also be deemed to be tacit acceptance of the inheritance.

The bringing of an action for a declaration of unqualification (judicial unqualification) constitutes an act of tacit acceptance of the inheritance by the claimant successor.

A successor who intends to perform an act which may have the effect of accepting the inheritance, but who does not wish to be regarded as accepting it, must apply to the court of the place where the inheritance was opened for prior authorisation, in accordance with the rules applicable to non-contentious proceedings.

The acts of preservation, supervision and provisional administration shall not be deemed to constitute acceptance if it does not appear from the circumstances in which they were carried out that the successor has thereby acquired the status of heir.

Acts of preservation or provisional administration of the assets of a single estate do not constitute tacit acceptance of the succession, since they are of an urgent nature and are for the benefit of all the heirs, and it may be assumed from their nature that the successor has taken them as a business manager and not with the intention of acting as owner of the estate.

Acts of provisional administration are considered to be acts of an urgent nature, the performance of which is necessary for the normal, short-term use of the assets of the estate.

### **Waiver of inheritance**

The waiver of inheritance is a unilateral, express and solemn legal act made in authentic form. The waiver of inheritance must be made within the term of the inheritance option.

By renouncing the inheritance, the successor cancels with retroactive effect his or her right to inherit, and is deemed never to have been an heir [Article 1.121(1) of the Civil Code].

Article 2391 of the Civil Code of the Republic of Moldova is the Term of Renunciation of Inheritance:

- (1) Renunciation of inheritance may be made within 3 months.
- (2) The term shall begin to run from the date on which the heir learns of the devolution and the basis of his call to inheritance, being informed in accordance with the provisions of Article 2547 para. (2) or by any other means. If the heir is called upon to inherit by virtue of a testamentary disposition, the period shall not begin to run before the notary conducting the succession proceedings informs him of the testamentary disposition. The provisions of Article 398 para. (1) (a) and (d) concerning the limitation period shall apply accordingly.
- (3) On the basis of the heir's request, the notary conducting the succession proceedings may extend the time limit for the waiver or set a new time limit for the waiver if the heir has omitted the time limit for good reason and the other heirs do not object.

(4) If the conditions laid down in paragraph 1 are not met, the liquidator shall (3), the application for extension of the time limit shall be decided by the court.

**Article 2392 of the Civil Code of the Republic of Moldova regulates** the form of renunciation which determines:

(1) Renunciation of inheritance shall be made by an authentic declaration submitted to the notary conducting the inheritance procedure.

(2) The declaration may be authenticated by any notary or other person authorized to authenticate legal acts.

(3) After renunciation, the inheritance may no longer be accepted.

**Article 2400 of the Civil Code of the Republic of Moldova regulating** the effects of renunciation implies:

(1) A person who has renounced the inheritance shall be deemed never to have acquired the inheritance. The provisions of Art. 2401 para. (1) shall remain applicable.

(2) The right of inheritance shall pass to the person who would have inherited if the person who renounced had not been alive at the time of opening the inheritance. Devolution shall be deemed to have taken place at the date of opening of the inheritance.

(3) A person who, by virtue of paragraph 1, has (2), replaces the person who has renounced shall have the right to accept or renounce the inheritance within the period provided for in Article 2391. The period shall be calculated from the date when the person who replaces the person who has renounced has learned of the renunciation.

(4) The notary conducting the inheritance procedure shall be obliged to inform the person who acquires the inheritance as a result of the renunciation about the renunciation. The notary is obliged to allow any person who has a legitimate interest to become aware of the renunciation.

The waiver of inheritance must be express.

Renunciation of succession is not presumed, because no one is presumed to renounce his or her right.

The provision of Art. 1120 para. (1) of the Civil Code is a particular application to inheritance law of Article 13 of the Civil Code, which provides generally that the waiver of a right is not presumed.

The provision of Article 1120 para. (1) prohibits the simple, judicial presumption of waiver based on acts or facts of the successor, but not the legal presumptions of waiver provided for in Art. 1112 and 1113 Civil Code.

Article 1112 establishes a relative legal presumption of waiver of inheritance, providing that: "It is presumed, in the absence of proof to the contrary, that the successor has waived the inheritance if, although he knew of the opening of the inheritance and of his status as successor, he did not exercise his right of option by accepting the inheritance or expressly waiving the inheritance.

The presumption of waiver operates, after the expiry of a period of one year from the opening of the inheritance, if the successor, summoned in accordance with the law, does not prove that he has exercised the right of option of inheritance. The summons must contain, under penalty of nullity, in addition to the elements provided for in the Code of Civil Procedure, a statement to the effect that if the successor has not exercised his right to accept the inheritance within the period of forfeiture provided for in Article 1103, he is presumed to have waived the inheritance.

Article 1113 of the Civil Code establishes an absolute legal presumption of waiver of inheritance if, for good cause, at the request of any interested person, the successor has been obliged by a court order to exercise his right to opt for inheritance within a period set by the court, which is shorter than the one-year period provided for in Article 1103, and has not exercised this right within the period set.

The right to renounce belongs to all legal or testamentary heirs by universal title or by private title.

Normally, the successor renounces the inheritance if it is unquestionably insolvent or if, being bound by the report, he wishes to keep the gift.

The waiver can only be validly made after the opening of the succession, i.e. after the right of option to inherit has arisen.



The waiver of an unclaimed succession is absolutely null and void, like any act on a future succession. The waiver of inheritance is valid and effective only if the successor has not previously accepted the succession, since acceptance has irrevocable effect (*semel heres, semper heres*).<sup>2</sup>

Renunciation is indivisible. It is not permissible to renounce one part of the succession and accept the other part (*Nemo pro parte heres*).<sup>3</sup>

Renunciation of the inheritance must be purely abdicative, i.e. impersonal and gratuitous.

According to the Romanian Civil Code, waiver of succession must meet certain legal conditions of validity, both substantive and formal. The validity of the waiver of inheritance is subject to compliance with the legal conditions of substance and form. In order to produce legal effects, the waiver of inheritance must cumulatively meet the substantive conditions specific to any legal act and certain special conditions (capacity, universality, unity, etc.).

Special substantive conditions of the waiver of inheritance. The waiver of inheritance must cumulatively meet the following special substantive conditions:

(a) In principle, the waiver of inheritance is express and cannot, as a rule, be inferred from material facts or related legal acts, such as the acceptance of the inheritance. This character is enshrined in the provisions of Article 1120 para. (1) of the Romanian Civil Code, according to which "the waiver of inheritance is not presumed, except in the cases provided for in Art. 1112 and Art. 1113 para. (2)".

Therefore, in principle, the waiver of inheritance is express and, consequently, cannot be presumed. This view has been supported by most scholars' also in the light of the Romanian Civil Code of 1864, which did not contain an express provision to this effect. However, the contrary view was also expressed, according to which the renunciation of the inheritance could be tacit, resulting from the non-acceptance of the inheritance within the legal term.

However, Law 287/2009, by way of novelty, expressly provided for exceptions to the rule that waiver of inheritance is express, thus putting an end to the doctrinal controversy that arose under the old Civil Code on this subject. Thus, Article 1112 of the Romanian Civil Code regulates the presumption of waiver of inheritance. According to this text of law, "it is presumed, until proven otherwise, that the successor has renounced the inheritance who, although aware of the opening of the inheritance and his status as successor, following his summons under the law, does not accept the inheritance within the period provided for in Article 1103. The summons must contain, on pain of nullity, in addition to the elements provided for in the Code of Civil Procedure, the specification that if the successor does not exercise his right to accept the inheritance within the period provided for in Article 1103, he will be presumed to have renounced the inheritance. The presumption of waiver applies only if the summons was served on the successor at least 30 days before the expiry of the period for the option to inherit". The legislation of the Republic of Moldova does not provide for informing the successors of the opening of the succession by summons, but we consider this a very good way.

b) The waiver of inheritance produces legal effects only if the successor has not previously accepted the inheritance.

Therefore, it is ineffective to renounce the inheritance after acceptance of the inheritance, since the act of inheritance option is, in principle, irrevocable.

c) Like the acceptance of the inheritance, the waiver is an indivisible legal act, so that the successor cannot waive one part of the inheritance by accepting another part of it.

d) The renunciation must be purely abdicative, i.e. impersonal and gratuitous, whereas renunciation in favour of one or more specific heirs (renunciation gratuitously in favour of one or more specific heirs, or renunciation gratuitously in favour of one, more or all of the heirs or subsequent heirs).

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<sup>2</sup> Succesibilul care a acceptat moștenirea este considerată că a acceptat-o pentru totdeauna, conform principiului *semper heres, semper heres*. Prin urmare declarația de renunțare la succesiune după acceptarea ei este lipsită de orice efect juridic. T.M. București, Secția a IV-a civilă, dec. Nr. 1325/1992 în "Culegere de practică judiciară civilă" pe anul 1992, p. 165-166.

<sup>3</sup> Dumitru C. Florescu Dreptul Succesoral. București 2016, p.220.

## CONCLUSION

The call to inheritance, whether legal or testamentary, grants a right to inherit and not an obligation to inherit. No one can be forced to become an heir.

The person called upon to inherit has the right to accept the inheritance, acquiring the status of heir, or to renounce the inheritance.

In the complex legal and personal context of inheritance, the decision to accept or renounce an inheritance is one of the most significant choices an individual may have to make following the loss of a loved one. This often emotionally and financially charged decision involves a number of legal, tax, and personal considerations that must be carefully evaluated.

Accepting an inheritance may seem, at first glance, like a financial blessing, giving the beneficiary access to assets, cash, real estate, or other assets. However, this act also comes with potential liabilities and complications, including liability for existing debts of the decedent, possible litigation between heirs, and significant tax implications. In addition, managing and maintaining inherited assets may require time, resources, and expertise that the beneficiary does not always have.

On the other hand, disclaiming an inheritance, a decision often perceived as counter-intuitive, may be a strategic choice to avoid taking on debt or other financial liabilities that exceed the value of the inherited assets. Waiver may also be motivated by a desire to simplify legal processes, avoid conflicts between heirs, or redistribute assets in a way that better reflects the wishes of the deceased or the needs of the family.

In conclusion, the decision to accept or renounce an inheritance is deeply personal and should not be taken lightly. It requires a clear understanding of the benefits and responsibilities that come with inheritance, as well as a careful assessment of the long-term impact of that choice. In this process, professional support is not only valuable, but often vital, ensuring that heirs can make well-informed choices that reflect both their wishes and those of the deceased in a way that protects their interests and financial well-being.

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## Succession Reserve

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**Abstract:** In this article, we analyze the succession reserve, which is a legal limitation of the deceased's right to dispose of liberalities, whether it is liberalities mortis causa ordonations. If there are reserved heirs and the deceased disposed of his property by donations or by will, the estate is divided into two: the estate reserve and the available quota. At the same time, the reserve is a part of the inheritance that is unavailable, under the law, to the deceased, it cannot dispose of it, in favor of other persons and to the detriment of the reservists.

The reserve is calculated not on the inheritance that the deceased leaves but on the inheritance that he would have left, if he had not disposed through donations, and can be invoked only by the reserved heirs who have a useful (concrete) succession vocation, they did not give up in inheritance, they have succession capacity and are not unworthy.

Reserved heirs cannot accept it before the succession is opened, nor can they give up the succession reserve.

**Keywords:** Neglect, child maltreatment, consequences, emotional neglect, intervention, prevention.

### Introduction

With the death of a person, the problem of the legal status of the acquired assets arises and also the problem of how to pass them on to family members or close people, towards whom it is assumed that de cujus had a special affection. These persons, through the legal norms established by the legislative body of the state, become holders of the right to inheritance, a right that represents one of the fundamental institutions of civil law.

The transmission of the deceased's patrimony and, in a narrower sense, his goods, represents one of the main means of circulation of material goods that form the object of the right of ownership.

In principle, any person is free to dispose, during his lifetime, in accordance with the legal requirements, of the assets that form his patrimony, both by acts between the living (for a fee or free of charge) and by acts for the cause of death, by will. However, the attribute of the disposition, characteristic of the right of ownership, knows in the case of liberalities for the cause of death some limits established by law in favor of the reserved heirs of the testator. Therefore, the right of disposition by will is unlimited only if the testator does not have reserved heirs (class 1 successors unfit for work) at the time of his death.

The part of the inheritance, due to reserved heirs under the law, is called succession reserve. What exceeds the inheritance reserve represents the available share, i.e. the part of the patrimony over which the testator can dispose freely through deeds for the cause of death.

The inheritance reserve is the part of the assets of the inheritance to which the reserving heirs are entitled by virtue of the law, even against the will of the deceased, manifested through liberalities or disinheritance.

By establishing the reserve, the legislator did not constitute an incapacity of the person, but an unavailability of a part of the inheritance patrimony.

However, if the testator has no reserved heirs, he will be able to freely dispose of his patrimony either through documents with a free title or through documents with a onerous title.

By virtue of art. 46 paragraph (6) of the Constitution, the right to inherit private property is guaranteed. Book IV (Inheritance Law) of the current Civil Code of the Republic of Moldova constituted a first step towards a more coherent regulation of the institution of inheritance, starting from the model provided by the German Civil Code, and the 2009 Inheritance Law of Estonia.

Through the amendments made to the Civil Code of the Republic of Moldova in 2019, it was decided to keep the current status of the reservists, who become legal heirs to the minimum quota guaranteed by law (art.

2530-2540 Title IV, Book IV). This corresponds to the concept in several states of continental Europe, including France, Romania, the Russian Federation, etc. The solution according to which the reservists have the status of heirs better protects minor and incapacitated children, who, if the German system were to be adopted, would not always be able to exercise the right to reserve within the granted term.

## 1. The origin of the institution of succession reserve

The institution of succession reserve has its origin in Romanian law. The law of the XII Tables did not impose any limits on the freedom to test, so that the pater familias could dispose of the family property as he pleased, leaving nothing to his children, relatives not being protected by law against dispositions for the cause of death.

At the beginning of the empire, however, the will, which did not leave a reasonable part of the inheritance to the close relatives of the deceased, began to be considered as emanating from an unconscious person who did not respect the obligation of piety. Such a will was annulled, on the grounds that the testator was insane, therefore incapable in fact, when he drew up his will, because only an insane person can disinherit his close relatives. For this, the injured parties could challenge the will in court through a special action, called *querela inofficiosi testamenti*.

The institution of the inheritance reserve appeared when, in order to prevent so many cancellations of wills, it was decided that the heirs no longer had the right to file a lawsuit, if the disposer had left them 1/4 of the part that they would have received as heirs legal (*quarta legitimae partis*). In addition to this condition, the heirs had to prove that they were not unjustly deprived of the part of the inheritance that was due to them and also that they had no other action at hand to be able to take possession of the part of the inheritance that was due to them. came back because the action *querela inofficiosi testamenti*, having an injurious character for the memory of the deceased, was only admitted as a last resort.

For the privileged collaterals of *de cuius*, in addition to these three necessary conditions for filing the action, the condition that the testator had tested in favor of an unworthy person was also required.

Through amendment 18, Justinian increases the amount of the inheritance reserve to one third of the inheritance, if the deceased left three children, and to one half of the inheritance, if the deceased left four or more children. This system (of the inheritance reserve) has proven its effectiveness, it is the basis of the modern system of the available quota and the inheritance reserve not only in Romanian civil law, but also in the legal systems of other European countries of Romanian inspiration.

What is essential is that in the case of the Romans, the reserve was analyzed not as a succession right (*pars hereditatis*), since the heir of the deceased remained the one established by the will, but as a right of claim against the succession (*pars bonorum*), granting even if the reserved person waived the inheritance.

## 2. Results obtained and discussion

Over time, there have been various conceptions, starting from the total denial of this institution and up to its recognition in an amount that gives the owner of the heritage a rather limited possibility to dispose of his assets through liberalities. Thus, the inheritance reserve represents one of the most controversial institutions of civil law.

Any natural person can, according to the law, freely dispose of the goods that make up his patrimony. Thus, the patrimony that the person leaves at death can be totally insignificant in value.

Likewise, no one is obliged to leave an inheritance, even if they have close relatives or a surviving spouse. However, the right of disposition, an exclusive and absolute right, is exercised only within the limits and with the modifications regulated by law. The main limitations of the right of disposal in the matter favor the close relatives of the deceased (descendants and parents) and the surviving spouse [7, p.111]. This is because they have the capacity of reserved heirs. However, the limitations only concern the liberalities made by deeds between the living (donations) and for the cause of death (**will**), as well as bequests made by will. Such acts of disposition, although permitted by law, must comply with the legal limits favoring reserved heirs.

However, even when there are reserved heirs, deeds with onerous title and those with free title that are not liberalities, but only disinterested deeds (promissory note, interest-free loan, etc.) are not limited in succession matters. This is because the respective documents do not result in the reduction of the inheritance patrimony. Of course, it is forbidden that under the guise of these acts, for which the law does not provide for limitations,

other acts (disguised donation, etc.) for which the law regulates limitations in favor of reserved heirs are actually concluded [6, p. 312].

The right of disposition of the one who leaves the inheritance is unlimited in the absence of the reserved legal heirs. For example, if on the date of death he will only have collateral relatives (siblings, uncles, etc.), these relatives will not be able to attack the liberal acts of the deceased (donations or legacies made in favor of other people or for ex-inheritance) on the grounds that they would be excessive. The acts of disposition of the deceased (liberalities or ex-inheritances) produce effects without limitations if he has only unreserved heirs or if he has no relatives in succession.

Although the confrontation of ideas, on a global level, regarding the need to recognize the right to succession reserve was particularly heated, with multiple and solid arguments in one direction or another [3, p.108], most modern legislation enshrines the right to succession reserve, as one of the limits of the right to dispose, through legal acts, of the assets of the inheritance. So the reserved person is a creditor of the estate, with lower priority than the creditors of the deceased. The negative aspect of the reserve in the form of a right of claim is that the reserve is in a much better situation than the testamentary heir. He does not have to pay the creditors of the estate, execute the obligations of the estate, or find the best buyer of the assets of the estate to settle his obligations or obtain money to settle the reserves of the estate. Thus, in many cases, the settler with his "minimum share" is in a much more profitable position than the testamentary heir.

Therefore, the inheritance reserve limits the right of disposition of the one who leaves the inheritance only as far as liberalities are concerned, regardless of whether it is liberalities mortis causa (testamentary dispositions) or donations [8, p. 23].

Deeds with an onerous title and deeds with a free title that are not liberalities, but simple disinterested acts (such as, for example, the loan for use, the loan without interest), do not bear limitations in matters of inheritance, because they do not have as a consequence the reduction of the patrimony successor. A person can dispose of all his assets by deeds with onerous title, without the reserving heirs being able to avail themselves of the right to reserve, because no one is obliged to leave an inheritance. Only if it is proven that the documents with onerous title, concluded by the one leaving the inheritance (for example, a sale-purchase contract) disguise donations, the reserving heirs will be able to assert their right to the inheritance reservation.

### **3. The inheritance reserve has the following legal characteristics:**

- it is a part of the inheritance, namely the one that the law differentiates, imperatively, to reserved heirs, without taking into account the liberal will of the bequeather. The reserve, however, is not a part of the inheritance that the deceased actually leaves, but a portion of the inheritance that he would have left if he had not made donations.
- it is a part of the heritage hit by unavailability. This unavailability is relative, because the right to dispose of the one who leaves the inheritance is limited, to the extent provided by law, only in the presence of reserved heirs. In the absence of reserved heirs, the bequeather can dispose of his assets as he wishes, either through deeds with a free title or through deeds with a onerous title. The unavailability is also partial, because it concerns only a fraction of the inheritance and only the liberalities (donations and legacies) through which it would be achieved [5, 239 p.]

Another argument is that the "valuation" of the reservation can itself become litigious and a place for abuses against the needy reservationists.

In accordance with art. 2530 CCRM [1] reserved heirs retain the right to inherit, regardless of the content of the will, at least  $\frac{1}{2}$  of the inheritance share that would have been agreed to each in case of legal inheritance.

In art. Art. 2530 (2) CCRM [1], the legislator defining the inheritance reserve, provides that its heirs are the legal heirs of the first class (that is, the children or, in their absence, the grandchildren, etc.), the parents of the deceased, as well as the surviving spouse if, on the date of the opening of the inheritance, the deceased had a maintenance obligation directly towards the respective heir according to the Family Code of the Republic of Moldova. Thus, to determine whether an heir from those indicated is a reserved heir, the notary will verify the meeting of the conditions for the existence of the maintenance obligation from the following articles of the Family Code [2]:

1. Chapter 12 Maintenance obligation between parents and children: art. 74. "Parents' obligation to support

their children", art. 78. "The right of adult children unfit for work to maintenance pension" art. 80. "The obligation of adult children to support their parents".

2. Chapter 13 Maintenance obligation between spouses and ex-spouses: art. 82. "The obligation of spouses to maintain each other", art. 85 "Exemption of the husband (ex-husband) from the maintenance obligation or the limitation of this obligation".

3. Chapter 14 Maintenance obligation between other family members: art. 86.

"Maintenance obligation between brothers and sisters", art. 87. "Obligation of grandparents to support their grandchildren", art. 88. "The obligation of grandchildren to support their grandparents".

At the same time, it is not necessary that the deceased actually fulfilled the maintenance obligation during his lifetime, nor is it required that the obligation was established by a court decision or contract regarding the payment of the maintenance pension. It is sufficient to meet the legal conditions for the existence of the obligations on the date of the opening of the inheritance. If the law imposes the condition that the maintenance creditor "requires material support", considering that the creditor is in a precarious situation (he is a minor, has disabilities, is elderly), the meeting of this condition will be presumed. Since the reserve holder has the status of an heir, he is also required to report the donations received from the one who left an inheritance when he was alive under the conditions of art. 2537 CC RM [1]. Otherwise, the regime of succession reserve is to give the reserver a position of at least half of the succession quota that he would have had in the absence of the will, so that he cannot be disinherited from this half.

When determining the inheritance share for each reserve heir, all legal heirs called to inherit if there was no will are taken into account. Legal heirs who have renounced their inheritance are not taken into account. Testamentary heirs are not taken into account if they are not legal heirs (art. 2531 CC RM). If the reserve heir renounces his share of the succession reserve, the shares of the succession reserve of other reserve heirs are not increased. In this case, the reserved heir's share passes to the testamentary heirs in proportion to their probate share

If the reserving heir is also a legatee, he will be able to claim the reservation only if he renounces the legatee. Otherwise, he loses the right to the inheritance share as reserved heir in the amount of the value of the legacy.

It needs to be mentioned that if the will does not refer to the entire inheritance mass, the inheritance reserve primarily reduces the inheritance shares of the non-reserved legal heirs, and in case of insufficiency of these shares, the inheritance reserve reduces the inheritance shares of the testamentary heirs (art. 2534 CC RM) [1].

In accordance with art. 2535 CC RM [1], the reserving heir is not bound by testamentary bonds and burdens to the extent that they violate his right to successional reservation. In this case, legacies and testamentary duties will be borne by the other heirs, in proportion to the inheritance shares.

If the bequest or testamentary burden has been arranged so that it encumbers only the quota succession of the reserving heir, then the bequest and the burden are reduced to the part where they violate his right to succession reservation. If the testator has designated a subsequent heir, the reserving heir is bound to fulfill the obligations and respect the limitations imposed on him as a prior heir to the extent that this does not violate his right to the reservation of succession.

By exception, according to art. 2540 CC RM [1] it is allowed to limit the succession reserve regime with good intention. Therefore, if the descendant leads such a wasteful way of life or if he has so many debts that what he will later acquire is subject to considerable danger, the testator can limit the right of the descendant to the inheritance reserve by the testamentary provision stipulating that, after the death the descendant, his legal heirs will receive, as subsequent heirs or subsequent legatees, the inheritance share left to him or the inheritance reserve due to him, in accordance with their inheritance shares in case of legal inheritance. Thus, the reserved heir, in these specific cases, can be called prior heir, and his legal heirs – subsequent heirs. It is an exceptional measure, which must be expressly provided for in the will, to ensure that the descendants of the reserved heir will not suffer from his extravagance.

The heirs, even if they are reserved, cannot acquire any right over the successional patrimony until the moment of the opening of the inheritance by death, because the patrimony of a natural person can only be transmitted and acquired upon the death of the owner. In fact, before the opening of the inheritance, there can be no talk of heirs or succession reserve, the living person being the owner of his patrimony, and the heirs are to be determined only on the date of the opening of the inheritance.

Although the reserve is a part of the inheritance, the right to the reserve is a right of its own, born in the person of the reserve heirs on the date of the opening of the succession and not a right acquired from the deceased through succession. However, in the event that the reserving heir died before being able to accept the succession reserve, this right will be transmitted by inheritance to the legal successors of the holder of the right to the succession reserve. It is not necessary that his heirs meet the conditions for the quality of reserve heir.

The inheritance reserve is the part of the inheritance that is excluded from liberality and that is imperatively due to the reserving heirs [10, p.156].

The available quota, which is obtained by subtracting the reserve from the inheritance mass, constitutes the part of the inheritance that the bequeather can dispose of as he wishes, either through deeds with a free title, or through deeds with a onerous title.

For the calculation of the reserve and the available quota, it is necessary to determine, in advance, the calculation table (inheritance) on which the fractions of the reserve and the available quota will be applied. For these, the reconstitution of the deceased's patrimony is required through the calculation on paper, as he would have shown if the bequeather had not made donations. Such a solution is required because the institution of the succession reserve protects the reserved heir not only against legacies, but also against donations in situations where these liberalities exceed the limits of what is available.

The regulation of the reserve today creates two inconveniences for the weaver concerned with succession planning (Cazac, 2022):

- the reserved heir cannot renounce the right to reserve before the death of his de cujus, which means that an amicable arrangement of the reserve is not possible;
- the testator cannot disinherit the reservers even for valid reasons (murder or attempted murder).

## CONCLUSIONS

In this article, we set out to present, in the light of the latest changes, the succession rights of the deceased's relatives included in the succession reserve as descendants. We tried to carry out a comparative study regarding the current regulation of legal successional devolution and the one enshrined by the Civil Code of the Republic of Moldova. Succession rights of the relatives of the deceased must be seen in the perspective of the development of the institution of legal inheritance. We consider that the most important reserve heirs are the descendants who include, especially, the children of the deceased. We highlight, first of all, minor children who must have special protection, because they, in most cases, are unfit for work given their status as minors. They must have a special legal status and an express regulation within the Civil Code of the Republic of Moldova with reference to the inheritance reserve.

Any natural person can, according to the law, freely dispose of the goods that make up his patrimony. Thus, the patrimony that the person leaves at death can be totally insignificant.

Likewise, no one is obliged to leave an inheritance, even if they have close relatives or a surviving spouse.

However, the right of disposition, an exclusive and absolute right, is exercised only within the limits and with the modifications regulated by law.

The main limitations of the right of disposal in the matter favor the close relatives of the deceased (descendants and parents) and the surviving spouse. This is because they have the capacity of reserved heirs. However, the limitations only concern the liberalities made by deeds between the living (donations) and for the cause of death (bequests), as well as the ex-inheritances made by will. Such acts of disposition, although permitted by law, must comply with the legal limits favoring reserved heirs.

However, even when there are reserved heirs, deeds with a onerous title and those with a free title that are not liberalities, but only disinterested deeds (promissory note, interest-free loan, etc.) are not limited in matters of succession. This is because the respective documents do not result in the reduction of the inheritance patrimony. Of course, it is forbidden that under the guise of these acts, for which the law does not provide for limitations, other acts (disguised donation, etc.) for which the law regulates limitations in favor of reserved heirs, are actually concluded.

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## Corruption and Emigration in the Western Balkans: Key Facts and Statistics

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**Abstract:** This work is focused on the phenomena of corruption and emigration in the Western Balkans (WBs) over the years from 2012 to 2022. Corruption remains a serious problem for WB societies and authorities. The high levels of corruption in WB countries threaten economic growth, increase inequality, discourage investments, and cause stress and frustration among citizens. As a consequence, a relevant portion of the populations considers emigration as the only viable alternative.

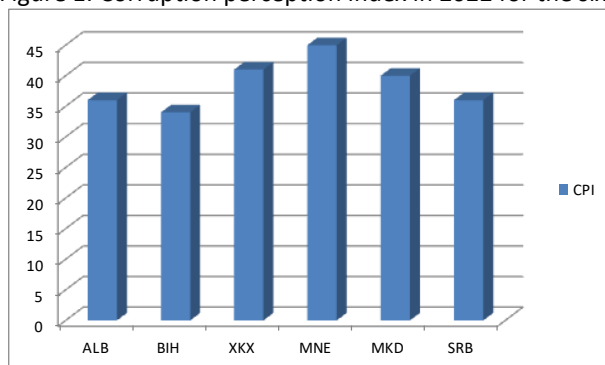
**Keywords:** emigration, corruption, Western Balkan countries.

### 1. INTRODUCTION

Corruption in WB countries continues to be widespread and serious efforts are needed in fighting the problem.<sup>1</sup> According to a Transparency International (TI) report, justice systems in WB countries often fail to effectively investigate and sanction high-level corruption cases; furthermore, those who are convicted often receive relatively light sentences.<sup>2</sup> According to Feruni, Hysa, Panait, Rădulescu and Brezoi (2020), the impact of corruption is more destructive in the WBs than in EU countries. The authors investigate the effect of corruption, urbanization, and economic freedom on the economic development of WB and EU countries over the period 2009–2018. The empirical analysis indicates that corruption has an adverse impact on economic development, whereas economic freedom and urbanization stimulate economic development in both groups of countries. According to Zeneli (2016), corruption is one of the main issues the WB is facing, challenging both domestic and foreign firms in doing business. Zeneli (2016) investigates the role of corruption in hindering foreign direct investment (FDI) in WB countries during 1992–2012. The empirical findings confirm the negative role of corruption in the attraction of FDIs to the WBs. Moreover, WB countries that suffer higher levels of corruption have lower incomes per capita.

Figure 1 shows the 2022 corruption perception index (CPI) in WB countries. The average CPI score was nearly 38,7; Montenegro obtained the highest score among WB countries in 2022 (CPI of 45), while Bosnia and Herzegovina recorded the worst performance (CPI of 34).

Figure 1: Corruption perception index in 2022 for the six Western Balkan countries.



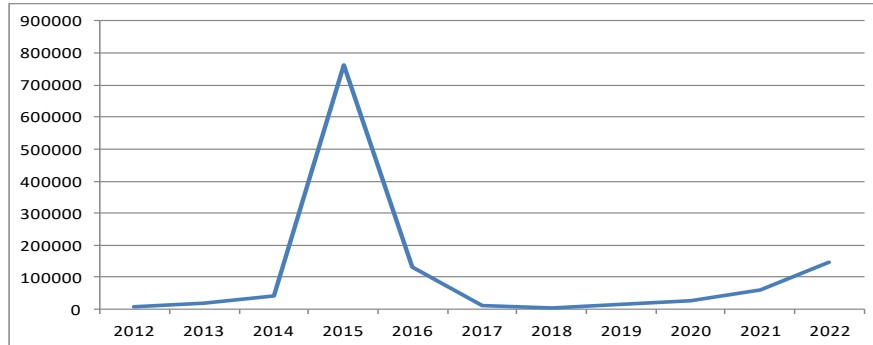
Source: Authors' elaboration on Transparency International data.

<sup>1</sup> See, for example, the 2021 European Commission Enlargement Package ([https://neighbourhood-enlargement.ec.europa.eu/news/2021-enlargement-package-european-commission-assesses-and-sets-out-reform-priorities-western-balkans-2021-10-19\\_en](https://neighbourhood-enlargement.ec.europa.eu/news/2021-enlargement-package-european-commission-assesses-and-sets-out-reform-priorities-western-balkans-2021-10-19_en)).

<sup>2</sup> <https://www.transparency.org/en/projects/cases-project>.

Corruption is often considered as one of the main factors of emigration from the WBs. The WB route is known as one of the main migratory paths into Europe. WB countries are both a migration source, and a popular route for Asian and African migrants. According to Frontex (The European Border and Coast Guard Agency) data, the number of irregular migrants that follow this route fell steadily for some years after 2015, and started to increase again from 2019. Figure 2 shows the number of illegal border crossings on the WB route from 2012 to 2022. The number of persons who followed illegally this route in 2022 was about 145 600, or 136% more than in 2021.<sup>3</sup>

Figure 2: Illegal border crossings on the Western Balkans route during 2012-2022.



Source: Authors' elaboration with data from Frontex.

## 2. CORRUPTION AND EMIGRATION

Only a limited number of authors have studied the effect of corruption and other closely related variables on migration flows. Dimant, Krieger and Meierrieks (2013) analyze the impact of corruption on migration for 111 countries between the years 1985-2000. According to the respective empirical evidence, corruption is one of the main push factors of migration, particularly fuelling skilled migration. The authors argue that corruption tends to reduce the returns to education, especially for the better educated persons. Cooray and Schneider (2016) investigate the relationship between emigration and corruption through the system generalized method of moments (GMM), fixed-effects, and instrumental variable estimations. Empirical results show that corruption increases with the emigration rate of high-skilled migrants. On the other hand, the emigration rate of individuals with low and medium levels of education increases at low levels of corruption and decreases beyond a specific threshold. Poprawe (2015) also investigates the relationship between corruption and migration. Empirical findings indicate that countries with high levels of corruption encourage emigration and discourage immigration, because they provide unpredictable economic conditions, a lower quality of life, and insecurity. The formulated model is estimated in a cross-sectional dataset of 230 countries. Furthermore, larger populations, a common language, and a common border stimulate migration flows, whereas bilateral distance discourages migration; other statistically significant variables include GDP per capita, education, inflation in host countries, and education in home countries. Begu, Davidescu, Apostu, and Enache (2019) investigate the relationship between corruption and migration, considering a sample of European countries over the period from 2008 to 2016. According to the empirical results, the level of corruption in a given European country is positively related to migration. According to Arif (2022), migrants generally select destinations with low levels of corruption. The author uses a panel dataset over the period from 1990 to 2000 and formulates a modified gravity model. Empirical results also show that migrants with a higher level of education are more likely to choose less corrupt destinations. Similarly, Malaj and de Rubertis (2017) study the main determinants of emigration from WB countries through the well-known gravity model. The authors consider three explanators, associated with typical concerns for the WBs: standard of living, unemployment and corruption. The authors confirm the statistically significant effects of the independent variables on emigration from WB countries.

## 3. Empirical analysis

The formulated model of this paper includes bilateral distance, CPIs of WB countries (sourced from TI), sum of total populations of the WBs (sourced from the World Bank) and of the selected European destinations, and

<sup>3</sup> <https://www.frontex.europa.eu/>.

the difference between GDPs per capita of host and home countries (World Bank). The considered response variable is the (annual) number of immigrants from each WB country residing in 25 European destinations; the respective observations were collected from Eurostat, the United Nations (UN), and the different national statistics offices. Table 1 shows the definitions and the expected signs for each of the considered parameters.

Table 1: Variables definition and expected sign.

Variable	Definiton	Expected sign
mig_odt	Number of immigrants from WB country (o) residing in the European destination (d) in year t	Dependent variable
cpi_ot	CPI in a WB country	-
gdp_diff	difference between GDPs per capita of host and home countries	+
dist_od	Bilateral distance	-
pop_odt	Sum of populations	+

Source: Own representation.

Table 3 reports a summary of the results of the estimated equation, where all variables are expressed in natural logarithm. Empirical tests showed that the random effect estimator is an appropriate technique for the considered model. It can be observed that both the “basic” variables and the new “experimental” explanators are statistically significant and follow the theoretical expectations.

Table 3: Estimation results

Independent variable	model I (mig_odt)	model II (mig_odt)
pop_odt	2,091***	1,938***
dist_od	-2,984***	-2,616***
cpi_ot		-0,921***
gdp_diff		2,503***
Adjusted R2	0,511	0,595
N	1650	1650

Source: Own representation.

#### 4. CONCLUSION

The main objective of this work was a preliminary investigation of the phenomena of corruption and emigration in WB countries over the period from 2012 to 2022. Corruption remains a serious problem for WB societies and governments. Furthermore, corruption represents one of the main push factors of emigration from WB countries. The estimated econometric model indicated the statistical significance of perceived corruption and other relevant factors in migrant stocks of the considered destinations.

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## Towards A Green Future: The Role Of Banking In Environmental Sustainability

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**Abstract:** The integration of the banking sector with a green world and the transformative role of green initiatives in the banking system are crucial for the sustainability of the environment. The aim of this article is to investigate the impact of the banking sector's activities on the environment and to improve the policy direction of financial institutions in this regard. The article analyzes current trends, regulatory frameworks, and case studies of leading institutions, and notes issues regarding the banking sector's adaptation to environmental sustainability as well as how it can actively contribute to this effort. This article calls for a global response to ensure sustainable economic development amidst escalating ecological problems.

The research is based on a comprehensive literature review, including quantitative and qualitative analyses of various scientific articles, industry reports, and case studies related to green banking practices. It employs econometric models to assess the effectiveness of green banking policies. Additionally, the study incorporates a comparative analysis of different banking institutions across various regions, offering a global perspective on the role of finance in promoting ecological sustainability. Moreover, the research includes interviews with key stakeholders in the banking industry and experts in sustainable development to gather pragmatic ideas for implementing green banking strategies.

Financial institutions focusing on sustainability show significantly reduced carbon footprints and increased investments in renewable (green) energy. The article analyzes green bonds, innovative financial products, and other financial tools contributing to environmental protection. The study concludes that the banking sector plays a crucial role as a key indicator in the global transition to ecological sustainability. Through the implementation of green banking practices, banks can significantly contribute to environmental conservation and set a precedent for other sectors. The article emphasizes the necessity of regulatory frameworks for developing green banking and suggests future research directions to explore the long-term effects of these initiatives.

**Keywords:** Green Banking; Central Banks; Sustainable Development; Financial Institutions; Environmental Sustainability.

### 1. INTRODUCTION

Ecology ensures the long-term sustainability of our planet by preserving its ecosystem, resources, and biodiversity. The intelligent management of natural resources contributes to the protection of ecology by preventing excessive exploitation and environmental degradation. Historically, financial institutions have primarily used their operations and investments to increase their profits and revenues without considering the environmental impact. The role and responsibility of the banking industry in ensuring environmental sustainability and long-term financial stability continue to grow. The banking industry, with assets measured in trillions, significantly impacts the global economy. The IMF expects the global economy to reach nearly \$104 trillion in nominal value by the end of 2022. According to the Federal Reserve System, the total assets of commercial banks in the U.S. alone amounted to approximately \$22.9 trillion in the first quarter of 2023. Globally, the volume of bank assets is even higher, with the world's strongest banks' assets exceeding \$100 trillion. This significant financial power enables banks to reassess their lending practices, investment strategies, and financial services to direct economies towards sustainability.

Countries around the world need to invest approximately \$90 trillion in sustainable infrastructure by 2030 to achieve climate goals and support economic growth (New Climate Economy Report, 2018). Therefore, central banks must significantly increase investments in green technologies, renewable energy, and sustainable infrastructure. In this context, the role of banks is instrumental, acting not only as financiers but also as key institutions in the transition period. The growing importance of sustainable finance leads to green banking initiatives. By 2023, over 60% of the world's largest banks had committed to sustainable finance goals under the United Nations Environment Programme Finance Initiative (UNEP FI) by aligning with the Principles for Responsible Banking. These banks pledge to align their lending and investment portfolios with the goals of the Paris Agreement and the Sustainable Development Goals (SDGs), marking a significant shift towards integrating environmental considerations into bank operations. The deeper exploration of the role of banking in environmental sustainability reveals that banks are not just passive players but active participants in shaping a green future. Their decisions can advance the global economy towards sustainability, mitigate the impacts of climate change, and promote a fairer and more sustainable world. However, the path to sustainability is fraught with challenges. The transition requires not only redirecting financial flows but also developing new

risk assessment models, innovative financial products, and enhanced transparency and accountability mechanisms.

This article investigates the integration of green initiatives in the banking sector, arguing that it is not only a moral imperative but also a strategic necessity. This movement involves a deeper, systematic transition towards embedding sustainability at the core of financial decision-making, beyond merely reducing the carbon footprint of financial operations. By examining current trends, regulatory frameworks, and the pioneering efforts of leading institutions, the article aims to highlight the significant role of the banking sector in reducing environmental degradation and advancing sustainable economic development. Through rigorous research, including a comprehensive literature review and empirical analysis, this study explores the effectiveness of green banking policies and practices. Utilizing econometric models and insights from various sources, including academic papers, reports, and case studies, this research offers a nuanced understanding of how financial institutions can contribute to environmental sustainability. Additionally, interviews with key industry stakeholders and sustainable development experts provide practical perspectives on effectively implementing green banking strategies. The green banking sector is crucial for ensuring long-term viability and relevance, especially as society increasingly demands corporate accountability for environmental protection.

## **2. Literature review**

### **2.1. Green banking**

Green banking is a banking system that considers environmental sustainability in its operations and financial services. It aims to support ecological projects and policies that contribute to sustainable development. Sustainable development meets the needs of future generations by balancing economic growth, ecological sustainability, and social equity according to modern standards. Green banking provides loans and other financial services for projects that positively impact the environment, such as rapidly renewable energy projects (solar, wind, hydroelectric power), increasing energy efficiency, and sustainable agriculture as part of sustainable development financing. Green banking incorporates ecological risks into risk management processes. This involves assessing and managing risks related to climate change, resource depletion, and environmental degradation. Through this, banks can avoid investments that may harm the environment and, therefore, be unsustainable in the long term. Green banking practices also play a crucial role in promoting environmental awareness. Through these practices, banks can significantly increase awareness of ecological issues among their clients. They can offer incentives for entrepreneurs to choose environmentally friendly options, such as green projects or eco-friendly products and services, through lower interest rates. Many countries are implementing regulations to combat climate change and promote sustainability.

The impact of green banking on the financial system is multifaceted and significant. Referring to banking activities that consider social, ecological, and other factors, green banking aims to support environmentally friendly practices and sustainable development. Green banking promotes the development of innovative financial products that support sustainable development. This includes green bonds used to finance projects with positive environmental and climate benefits, and sustainability-linked loans with terms directly related to achieving predefined sustainability performance targets. According to the Climate Bonds Initiative, global issuance of green bonds reached a record of over \$350 billion in 2020, highlighting the growing market for environmentally oriented investments (Climate Investment Opportunities: Climate-Aligned Bonds & Issuers, 2021).

### **2.2. Green Banking Practices: Analysis**

Green Banking Practices involve financial institutions' initiatives to promote ecological sustainability and environmentally friendly investments. By adopting green banking practices, banks aim to minimize their environmental impact through measures such as reducing paper usage, optimizing energy consumption, and promoting digital banking. These practices not only contribute to environmental protection but also support projects and businesses that aid in this cause. This includes financing renewable energy projects, green buildings, and sustainable agriculture. The significance of green banking is increasingly recognized in the global fight against climate change, making it a critical strategy for ensuring financial practices contribute positively to the planet's health and sustainability.

Figure 1: The factors influencing the financial system through green banking



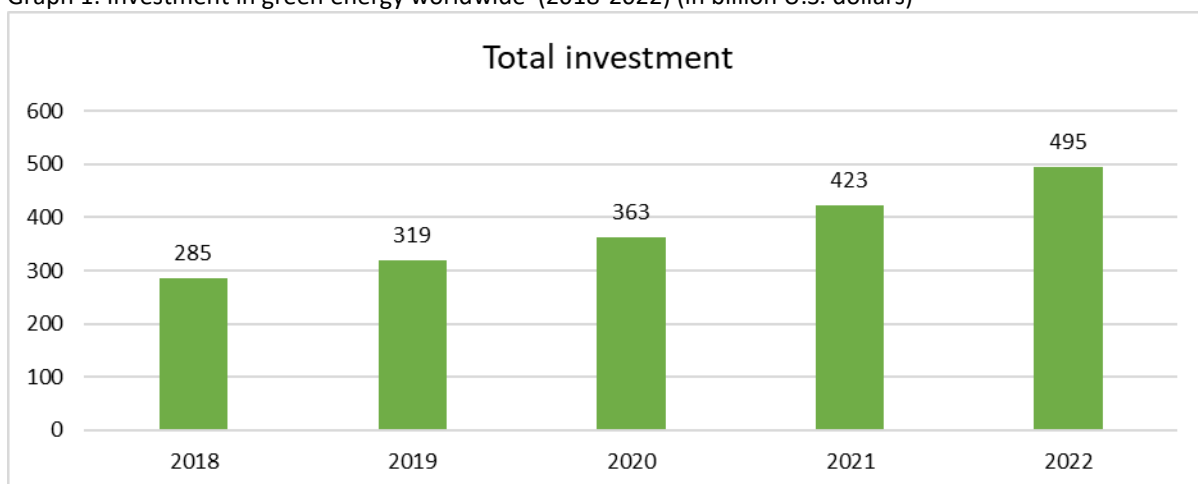
Source: Dombret and Kenadjian, 2021

In recent years, the financial sector has witnessed a significant increase in the issuance of green bonds, a notable example of green banking practices. These bonds are specifically designed to raise funds for projects with ecological benefits, such as renewable energy, sustainable resource use, and pollution prevention. The global issuance of green bonds surpassed \$1 trillion in total emissions by the end of 2020, marking a new milestone (The Global Risks Report, 2021). This growth reflects the financial institutions' increasing recognition of the importance of supporting sustainable development and the role of green finance in combating climate change. Through these efforts, banks contribute to ecological sustainability and meet the growing demand from investors for responsible and green investment opportunities.

Green banks demonstrate their commitment to social responsibility by paying attention to sustainable development. This approach not only contributes to environmental protection but also supports equitable development by financing projects that could have positive social impacts such as improving access to clean energy and creating green jobs. Banks that embrace green banking practices can enhance their influence as responsible institutions that care about the future. By attracting customers and investors who seek environmentally and socially responsible places to invest their funds, they can increase their competitiveness. According to the Global Sustainable Investment Alliance, global sustainable investment assets in the five major markets totaled \$35.3 trillion at the beginning of 2020, representing 36% of all professionally managed assets (GSIA, Trends Report, 2020). This approach not only reduces ecological risks but also contributes to the creation of opportunities for a transition to a sustainable economy.

Leading banks in the green banking sector are recognized for their ecological ratings, sustainability indices, and other metrics. According to recent studies, several banks are globally recognized for their leadership in green banking. These include Bank of America, DBS Bank, Triodos Bank, Nordea Bank, Barclays, Deutsche Bank, and others.

Graph 1: Investment in green energy worldwide (2018-2022) (in billion U.S. dollars)



Source: Bloomberg, Annual Report, 2022-2023

The graph displays Bloomberg's annual report, noting the investment funds allocated to green energy over a five-year period globally. From 2018 to 2022, this figure has approximately increased by 1.8 times, amounting to an additional \$210 billion. It is forecasted that global investment in green energy will significantly rise by 2030 and beyond, reflecting a shift towards renewable energy sources and efforts to combat climate change. By 2030, this investment is expected to reach \$1 trillion USD, according to the International Renewable Energy Agency (IRENA, Renewable Energy Statistics, 2022).

International regulations and guidelines play a crucial role in promoting green banking practices globally and serve as a framework for financial institutions to integrate sustainability into their operations. For example, the Paris Agreement sets the global agenda for reducing carbon emissions and mitigating climate change, encouraging banks to finance projects that support these goals. Meanwhile, the Sustainable Banking Network (SBN), an initiative of the International Finance Corporation (IFC), encompasses regulatory agencies and banking associations from emerging markets committed to developing sustainable finance. It provides a platform for the exchange of knowledge, the development of national guidelines, and the promotion of best practices in green banking. These international efforts are complemented by principles such as the Principles for Responsible Banking under the United Nations Environment Programme Finance Initiative (UNEP FI), which align banks' business strategies with public objectives. Collectively, these frameworks advocate for the management of environmental risks, transparent reporting, and the financing of projects contributing to ecological sustainability and social well-being, marking a significant transition towards a more sustainable global financial system.

### 2.3. Econometric Models Used to Assess the Effectiveness of Green Banking

The evaluation of the effectiveness of green banking initiatives encompasses the analysis of their impact on environmental sustainability, financial performance, and policy compliance. Econometric models play a crucial role in this analysis by offering a structured approach to measure the impact of green banking practices. Some commonly used econometric models and approaches for assessing the effectiveness of green banking include:

- **Difference-in-Differences (DiD) Analysis:** The DiD approach compares the outcomes of a control group (banks that have implemented green banking initiatives) with a treatment group before and after the implementation of a green banking policy. This method helps isolate the impact of green banking practices from other external factors.
- **Regression Discontinuity Design (RDD):** RDD can be applied when the assignment of a green bank initiative is based on a cutoff point within an assignment variable. This method compares the outcomes of banks just above and just below the cutoff to establish causal effects related to the impact of green banking.
- **Structural Equation Modeling (SEM):** SEM is useful for analyzing complex relationships between multiple variables, including latent variables. It can be used to assess the pathways through which green banking practices impact environmental outcomes, financial metrics, and customer satisfaction.
- **Cointegration and Error Correction Models (ECM):** These models are used to investigate the long-term relationships and short-term dynamics between green banking initiatives and their outcomes, such as reduced carbon emissions or improved financial metrics.

Each of these econometric models offers different insights into the efficiency of green banking, and the choice of model depends on the specific objectives of the analysis, the nature of the available data, and the theoretical framework guiding the research. It is also common to use a combination of these models to address various aspects of green banking efficiency and to corroborate results across different methodologies.

## 3. Challenges and Opportunities

### 3.1. Challenges: The difficulties banks face in transitioning to green banking

Given the significant impact of financial institutions on the economy and, additionally, on environmental policy and practices, the role of banking in environmental sustainability is a crucial topic. This influence can be leveraged in various ways, including through green financing, sustainable investments, and the management of environmental risks, to support the transition to a sustainable and green future. In this context, we will explore the challenges and opportunities associated with banking and environmental sustainability, paying attention to both academic concepts and key practical information. We will focus on the following factors:

- ❖ **Lack of Standardization:** The absence of universally accepted standards for what constitutes "green" or "sustainable" finance creates difficulties for banks. This lack of concrete rules can lead to greenwashing, where investments are portrayed as environmentally friendly without significant environmental benefit;
- ❖ **Risk Assessment:** Traditional bank risk models may not adequately capture the long-term risks and opportunities associated with environmental sustainability. This includes physical risks arising from climate change and transition risks as economies move away from fossil fuels;
- ❖ **Short-term Focus:** The banking sector often prioritizes short-term financial returns, which can conflict with the long-term investment required for significant ecological projects and sustainable development goals;
- ❖ **Regulatory Uncertainty:** The evolving nature of environmental regulation creates uncertainty for banks on how to effectively incorporate sustainability into their operations and investment strategies.

### 3.2. Opportunities: Green Finance and Sustainable Investment

Green financing enables banks to lead in providing financial support for renewable energy projects, increasing energy efficiency, and other green initiatives. This includes green bonds, green loans, and other financial instruments aimed at supporting environmentally sustainable projects. With the increase in Sustainable Investments, banks can impact the market by investing in companies and projects that meet high environmental sustainability standards. This not only supports the transition to a green economy but can also reduce risk and potentially offer competitive returns over the long term. The development of innovative financial products that support ecological sustainability, such as sustainability-linked loans and bonds, can motivate companies to achieve environmental goals. Integrating ecological considerations into risk management processes allows banks to identify and mitigate risks associated with climate change and environmental degradation.

## 4. CONCLUSION

The direction of the banking and finance sector towards a green future represents a transformative path in aligning economic development with the preservation of the environment. This article highlights and demonstrates the instrumental role of the banking sector in promoting ecological sustainability, showing that financial institutions are not only indicators of economic operations but also pivotal entities in the global transition towards sustainable practices. By integrating green banking initiatives, banks not only reduce carbon footprints and support renewable energy projects but also set an example for other sectors by enhancing sustainable development and demonstrating its benefits. The adoption of green banking practices not only ensures long-term financial stability but also emphasizes the sector's ability to positively impact the environment. Research shows that green investments not only yield returns comparable to traditional investments but also offer an advantage in sustainability against ecological risks, which are becoming increasingly relevant in today's market dynamics. Additionally, the adoption of Environmental, Social, and Governance (ESG) criteria by banks worldwide has demonstrated a positive trend, and it is expected that ESG assets will surpass \$53 trillion by 2025, constituting more than a third of the projected global assets of \$140.5 trillion (Bloomberg, Research and Analysis, 2021).

Looking to the future, the global response to ecological challenges underscores the necessity for banks to incorporate sustainability into the core of their operations. This requires the creation of a conducive environment for the flourishing of green banking practices and the collective effort of all stakeholders, including regulatory bodies, financial institutions, and the wider public. The development of innovative financial products and the adoption of strict regulatory frameworks are crucial steps towards this goal. Moreover, future research should focus on investigating the long-term effects of green banking initiatives, evaluating their impact on promoting ecological sustainability and economic growth. As the banking sector continues to evolve, its commitment to sustainability will play a significant role in shaping a sustainable and environmentally conscious global economy, ensuring that financial prosperity goes hand in hand with environmental protection. By prioritizing sustainability, we can protect the environment for future generations, ensuring they inherit a world where they can thrive with access to clean air, water, and fertile soil. The transition to a green future requires significant capital, and the banking sector is uniquely positioned to



facilitate this transition. By addressing challenges and leveraging opportunities, banks can play a crucial role in achieving ecological sustainability and supporting a sustainable economy.

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## Evaluation of the development stage of mussel usage in the Baltic Sea region

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**Abstract:** It is important to assess both developed opportunities and processing opportunities for the product to move into the market. In particular, niche product development opportunities need to be analysed not only from the farming site but also from mussel usage, and experts can provide their assessment, but a new area requires more detailed research and data analysis. Mussel farming is a new field in the Baltic Sea region and the possibilities for processing and usage these products might be assessed by experts.

**Aim of research:** evaluate mussel usage development stage by analysing views of public administrators, entrepreneurs, researchers in selected Baltic Sea region countries obtained in the survey.

**Research methods:** scientific publication studies on mussel usage, survey, experts' interviews. Data obtained in survey were analysed with indicators of descriptive statistics, cross-tabulation.

Experts were invited from different countries around the Baltic Sea. Experts were asked to estimate which development phase of mussel usage in the Baltic Sea region may be reached in certain period. The research results indicated that mussel usage in the development phase might reach within 10 years. The results indicated that in Germany the development phase of the mussel usage might reach in 5 years, but in Sweden the development phase of mussel usage might reach in a longer period – 6-10 years.

Those experts who evaluate development phase mussel usage in a longer period, e.g. 11-15 years, evaluate fishery importance in a national economy as higher, and mussel farming importance in national economy they evaluate lower. Mussel farming and mussel usage depends on several factors, such as financing, labour force, marketing aspects, legislation, stakeholder, and mussel farming and mussel usage site might play important role in further development.

**Keywords:** development stage; blue mussel; the Baltic Sea.

### 1. INTRODUCTION

Innovative use of marine products has been attracting the attention of researchers, regional representatives, and local entrepreneurs and stakeholders in the Baltic Sea region to analyse new products and new solutions for entering the market. Blue mussel farming solutions has been analysed for several years because mussel filter water and nutrient reduction measures.

Since the 1980s, the capture fishery has remained at the same level. Increasing demand of fishery has been covered by aquaculture however mussel production has not increased as fast as rest of aquaculture. And mussel grows in the Baltic Sea however the Baltic Sea mussel is smaller. Mussels might be an important product for humans, as well as it might be used feed and it is also good for the environment. A lot of mussels are imported from Chile, New Zealand, and Norway; however, the blue mussel lives in the Baltic Sea, and the possibilities to use them in different fields have been researched in the last decade. Some food and feed processing companies already use imported mussel products. Some experts think that Baltic mussel is too small for human consumption, but there might be a niche for products where size has a minor importance. Evaluation of product usage by experts might highlighted some aspects.

### 2. LITERATURE REVIEW

Several regional innovative approaches are under scientific investigations carried out by many researchers from different countries on blue mussel production and usage in order to find the best possible solutions for practical use and implementation of different approaches in blue mussel farming (Hjalager et al. 2015). Including innovative approaches and options by different approaches presented in academic research findings (Maar et al. 2015) with several possible developments of mussel farming based on specific models analysing several reasonable and research-based outcomes. Filippelli and his colleagues indicated that mussel farming as a nutrient reduction measure can be cost-effective and its suitability is dependent on environmental and market conditions, therefore indicating two aspects.

The trade of fish products has a great potential for promoting socio-economic development taking into account important factors between aquaculture and fisheries (Natale et al. 2013) with attention to new developments for mussel production.

Blue mussel farming is considered also a water transparency and water quality improvement factor (Schröder et al., 2014) in different regions on the Earth (Trottet et al., 2008) with special attention to specifics of mussel production and marketing of mussel products in those regions because the extensive environmental impact has been caused by ongoing consumption, marketing, processing (Saha and Darnton, 2005; Gordon, Carrigan, Hastings, 2011). Consumers do not understand the relationship between food consumption and climate change (Tekinbaş Özkaya et al., 2021). Mussel farming is an important activity in the coastal areas of Spain, and market intelligence may contribute to facing the impact of climate change as Rodríguez-Rodríguez and Ramudo in 2017 discuss it in the scientific community where significant attention is devoted to mussel farming development in the situation of climate change.

Evaluation of Mediterranean mussel producer’s knowledge about environmental factors, information about climatical and non-climatical pressures were analysed by Rodrigues and his colleagues in 2015 research where they also analysed the influence of climate change on blue mussel farming which is recently very topical (Giangrande et al. 2021; Bayraktarov et al. 2016) for researchers in many countries around the globe. Potential mussel farming development stages in the Baltic Sea region were analysed by Ozolina and Sloka in 2019. Economic performance and marine policy implications of mud spiny lobster mariculture was analysed by Divu et al. 2024. Researchers in Indonesia indicated that farmers have developed novel rotational and co-culture farming systems (Setyawan et al., 2022). Consumers have problems to understand product labels, however eco-labels are important to promote product into the market (Phan, 2024; Daugbjerg et al., 2014).

Many researchers from different countries are studying innovative regional approaches for blue mussel production. The goal of these approaches is to find practical applications to the different aspects of blue mussel farming and mussel usage (Hjalager et al., 2015) by conducting several experiments with good results in mussel production and getting high-quality blue mussel used for healthy food as well as feed for animals and perform research to identify areas suitable for mussel production (Maar et al., 2015; Maar et al., 2024). In addition, analyse the production amount of blue mussel production to set the economic value and to propose suggestions to find the optimal reasonable and research-based solutions for blue mussel farming. Failures are common in the development and introduction of new products, and test markets are one of the ways to avoid them (Klompaker et al., 1976).

The innovative use of marine products has been piqued the attention of researchers, regional representatives, and local entrepreneurs and stakeholders; therefore, they were selected experts in the Baltic Sea region.

## 2. EMPIRICAL RESEARCH

An expert’s survey was organized to analyse mussel usage and fishery impact on the national economy in the Baltic Sea region. Experts were invited from Denmark, Estonia, Finland, Germany, Latvia and Sweden.

Experts were invited to evaluate fishery’s importance in the national economy using evaluation scale of 1 – 10, where 1 – unimportant; 10 – very important. They were selected based on their working experience in the specific field.

Table 1: Main statistical indicators of evaluation by experts of fishery, marine aquaculture and mussel farming importance in the Baltic Sea region

		Fishery*	Marine aquaculture**	Mussel farming
N	Valid	48	48	48
	Missing	0	0	0
	Mean	6,750	3,563	2,604
	Std. Error of Mean	0,370	0,351	0,293
	Median	7	2,5	2
	Mode	8	2	1
	Std. Deviation	2,564	2,431	2,029
	Variance	6,574	5,911	4,117
	Range	9	8	8
	Minimum	1	1	1

Maximum	10	9	9
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\* A fishery is an entity engaged in raising or harvesting fish caught in capture or in aquaculture (Fletcher et al. 2022)

\*\* Aquaculture is farming of aquatic organisms, like fish, molluscs, crustaceans etc. (FAO, 1990-2017)

Source: Zaiga Ozoliņa conducted survey, evaluation scale 1 – 10, where 1- unimportant; 10 – very important, n = 44.

The results indicated that experts evaluated fishery importance in the Baltic Sea region with arithmetical mean - 6,75 and mode 8 (most often used evaluation), median - 7. Experts evaluated marine aquaculture importance in the Baltic Sea region with an arithmetical mean - 3,563 and mode 2, median 2. Experts evaluated mussel farming's importance in the Baltic Sea region with an arithmetical mean 2,604 and mode 1, median 2.

Some experts evaluated marine aquaculture and mussel farming with number 9 which they choose as the highest number on the evaluation scale.

Experts were invited to evaluate which development phase of mussel usage may be reached in a specific period.

Table 2: Distribution of experts' evaluations regarding mussel usage stage in a specified period in the Baltic Sea Region, experts survey results

	Introduction stage	Growth stage	Maturity stage	Decline stage	Not started / will not be launched
Today	28	3	1	-	29
In 5 years	16	16	3	-	4
In 6-10 years	17	22	16	3	2
In 11-15 years	2	14	21	10	1
In 16 years and over a longer time period	1	6	19	43	5
Total	64	61	60	56	41

Source: Zaiga Ozoliņa conducted survey, n = 41; 56; 60; 61; 64.

28 experts answered that mussel usage today is in the introduction stage, 4 experts answered that mussel farming is in the growth stage and 3 evaluated that mussel farming is in the maturity stage.

29 experts evaluated that mussel usage has not been started and won't be launched.

The main part of the experts answered that in 5 years mussel usage will get into the growth stage and only in 6-10 years, it will reach the growth stage.

Table 3: Distribution of experts' evaluation of mussel usage in a specified period in the Baltic Sea Region in the growth stage, by occupation, crosstabulation

	Professional, scientific and technical services	Regional government – municipalities, regional authorities	Public administration – government, ministries	Fisheries, incl. fishing, mussel farming or aquaculture	Total
Today	1	1	1	0	3
In 5 years	6	3	4	1	14
In 6-10 years	4	6	9	3	22
In 11-15 years	3	5	5	0	13
In 16 years and over a longer time period	0	1	3	1	5

Source: Zaiga Ozoliņa conducted survey, n = 57.

The experts' answers revealed that the growth stage of mussel farming might be reached in 6-10 years. Most of the fishermen, representatives of public administration, and regional municipalities answered that the growth stage of mussel usage might be reached in 6-10 years, but professionals, scientists, and technical service providers evaluated that mussel usage might be reached earlier.

Table 4: Distribution of experts' evaluation of mussel usage in a specified period in the Baltic Sea Region in growth stage, by age group, crosstabulation

	25-34 years old	35-44 years old	45-54 years old	55-64 years old	65-74 years old	Total
Today	1	2	0	0	0	3
In 5 years	2	4	8	2	0	16
In 6-10 years	6	5	7	3	1	22
In 11-15 years	1	5	6	2	0	14
In 16 years and over a longer time period	1	4	1	0	0	6
Total	11	20	22	8	1	61

Source: Zaiga Ozolina conducted survey, n=61

The experts' answers revealed that experts in the age group 25–34-years old mostly answered that the growth stage of mussel usage might be reached in 6-10 years. The experts aged 35-44 answers spread almost evenly in 5 years and over a longer period.

Table 5: Distribution of experts' evaluation of mussel usage in a specified period in the Baltic Sea Region in growth stage, by age group, crosstabulation

	Women	Men	Total
Today	2	1	3
In 5 years	10	6	16
In 6-10 years	14	8	22
In 11-15 years	11	3	14
In 16 years and over a longer time period	5	1	6
Total	42	19	61

Source: Zaiga Ozolina conducted survey, n=61

The expert answers did not revealed difference between gender.

The experts' answers were analysed by applying one-way ANOVA analysis of variance to determine statistical differences.

Table 6: Results of analysis of variance (ANOVA) on expert evaluations on mussel usage and field importance – the Baltic Sea Region expert survey results by experts' country

Analyzed aspect		Sum of Squares	df	Mean Square	F	Sig.
Fishery' importance	Between Groups	78,418	5	15,684	2,989	0,020
	Within Groups	241,332	46	5,246		
	Total	319,750	51			
Marine aquaculture' importance	Between Groups	51,008	5	10,202	1,909	0,111
	Within Groups	245,819	46	5,344		
	Total	296,827	51			
Mussel farming' importance	Between Groups	19,326	5	3,865	0,895	0,493
	Within Groups	198,732	46	4,320		
	Total	218,058	51			
Growth stage of mussel usage	Between Groups	12,863	5	2,573	2,511	0,043
	Within Groups	47,137	46	1,025		
	Total	60,000	51			

Source: Zaiga Ozolina conducted survey, n=51

The results have shown statistical differences by experts' countries in their evaluations on fishery and marine aquaculture importance and growth stage of mussel usage.

Most of the experts from Denmark and Germany evaluated fishery' importance with 4 and 5, and experts from Sweden and Latvia evaluated fishery' importance higher (7; 8; 9; 10) in the Baltic Sea region.

The majority of experts from Latvia and Sweden evaluated mussel usage in a longer period than experts from Germany and Denmark which confirms the actual situation in Germany and Denmark where mussel farms and mussel usage already exist.

Table 7: Results of correlation analysis based on expert on mussel usage and marine field importance – the Baltic Sea Region expert survey results

Analyzed aspect		Fishery' importance	Marine aquaculture' importance	Mussel farming' importance	Growth stage of mussel usage
Fishery' importance	Pearson Correlation	1	0,504**	0,432**	0,351*
	Sig. (2-tailed)		0.000	0.001	0.010
	N	53	53	53	53
Marine aquaculture' importance	Pearson Correlation	0,504**	1	0,803**	0.111
	Sig. (2-tailed)	0.000		0.000	0.428
	N	53	53	53	53
Mussel farming' importance	Pearson Correlation	0,432**	0,803**	1	-0.087
	Sig. (2-tailed)	0.001	0.000		0.536
	N	53	53	53	53
Growth stage of mussel usage	Pearson Correlation	0,351*	0.111	-0.087	1
	Sig. (2-tailed)	0.010	0.428	0.536	
	N	53	53	53	53

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

Source: Zaiga Ozolina conducted survey, n=53

Correlation analysis revealed statistically significance several aspects and one of them is on fishery importance and growth stage of mussel usage.

Experts who evaluate development stage mussel usage in a longer period, e.g. 11-15 years, evaluate higher fishery importance in a national economy, and mussel farming importance in national economy they evaluate lower.

#### 4. CONCLUSION

Based on experts' evaluation fishery importance in the Baltic Sea region was evaluated with an arithmetical mean 6,75, and marine aquaculture and mussel farming were evaluated as less important fields in the Baltic Sea region. The experts indicated the growth stage of mussel usage might be achieved in 6-10 years and scientists evaluated the growth stage earlier than regional and governmental representatives and fishermen.

Most of the experts from Denmark and Germany evaluated fishery' importance with 4 and 5, and experts from Sweden and Latvia evaluated fishery's importance higher (7; 8; 9; 10) in the Baltic Sea region.

The majority of experts from Latvia and Sweden evaluated mussel usage for a longer period than experts from Germany and Denmark which confirms the actual situation in Germany and Denmark where mussel farms and mussel usage already exist. The results indicated that in Germany the development phase of the mussel usage might reach in 5 years, but in Sweden, the development phase of mussel usage might reach in a longer period – 6-10 years.

Those experts who evaluate the development phase of mussel usage in a longer period, e.g. 11-15 years, evaluate fishery importance in a national economy as higher, and mussel farming importance in the national economy they evaluate lower.

Mussel farming and mussel usage might be developed on environmental and market conditions and researchers have evaluated the potential of mussel usage earlier than other experts. Discussions with other stakeholders should be continued to increase knowledge about mussel farming and usage. In addition, climate and environmental impact analysis should be continued to assess marine products and marine product usage.

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## Continuing education and its role in strengthening education in Albania

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**Abstract:** From 1990 onwards, the Albanian education system has faced great challenges that have come as a result of complex changes after the fall of the dictatorial system. Teachers are the most important link to catch and cope with the pace of changes. Change management is a constant challenge. Depending on the capacity to understand change, manage it and turn it into inspiration for the future, societies also differ. Of course, education and training cannot be seen outside the Albanian cultural reality. In this statement, I will aim to present arguments on how this change cannot be realized without involving teachers and principals in a continuous process. Continuing education is one of the key concepts that gives the opportunity for all teachers to return to the knowledge of innovations, teaching models, strategies, new methods and to include them in the teaching process. The question I raise is related to the concern of whether teachers are able and have the capacity to effect change. Referring to M. Fullan, the question is: how capable are teachers to turn into “agents of change”? Using experience, direct contacts with teachers and leaders in the system, through field ethnography, as well as analyzing the data through a questionnaire related to the continuing education of teachers, I will try to answer the questions raised.

**Keywords:** culture, dictatorship, change, teacher, change agent, continuing education.

### 1. Introduction

The reforms undertaken in Albania after the fall of the dictatorship in the field of education were very deep and dynamic. Initially, the ideological separation of the curriculum content was intended. Then there were efforts to change the teaching method that directly affects student learning. The transition from formal learning, influenced by the Eastern model of Russia, to learning with objectives was undoubtedly a big turning point in the Albanian curriculum system. While in the western world since 2000 learning with competences had started to be implemented, in Albania this legal change happened only in 2014. All these changes had a formal attempt to prepare teachers to become "agents of change", as people self-aware of the nature of change and the process of change (Fullan 2010). Law 69/2012 in article 56 point 2/c specifies that "The teacher has the right to be created opportunities for professional development" and in point 3/ç of this article it is specified that "The teacher has the duty to update professional competences" (Law 69 /2012).

At the legal level, an attention is felt to continuously qualify teachers not only as a need for personal professional development but as an efficient opportunity to cope with changes in the curriculum. In this paper, several research questions are posed: How able were the Albanian teachers trained in the dictatorship to cope with the curricular changes? What were the instruments that were used to practically implement the changes? How can teachers become "agents of change" through continuing education? In the conditions of Albania, the transition from dictatorship to democracy and at the same time experiencing rapid changes at the global level makes the confrontation even more difficult. The transition from the use of chalk to applied technology methods exemplifies the vital need for lifelong qualified teachers.

### 2. Literature review

The teaching profession was included in the law "On regulated professions in the Republic of Albania" in 2010, recognizing it in the list of professions subject to certification and registration in the Professional Order (Law No. 10 357, 2010). In this way, every teacher candidate must develop professional practice after his education and undergo the exam to obtain the license. This development has set a new standard for those who want to get involved in the system. Those teachers who were part of the system before the entry into force of this law are exempt from this obligation. With the legal changes for retirement, the working age was extended to 65 years for men and the aim is for women to go towards this age as well (currently in 2024 they retire at the age of 61 years and 8 months). These legal acts increased the tenure of teachers in the system, making it necessary to intervene for their continued qualification. This is the only way to cope with change.

The teacher's competence for inclusiveness must include a pluralistic pedagogy that affirms the fact that informed teaching decisions must take into account the individual characteristics of children, the learning that takes place outside the school environment, the student's prior knowledge, experiences and interests. individual and cultural (Florian & Rouse, 2009). The continuing qualification and development of teachers refers



to the education and training activities in which primary and secondary school teachers engage, after having obtained a professional certificate of initial education, intended mainly or exclusively to improve knowledge, attitudes and skills their professional in order to educate children more effectively in the contexts of social and cultural diversity. Everything is developed in accordance with the "Standardized general basis for the teacher" (IZHA, 2010) and the curriculum framework.

## 2.1. The current teacher qualification system in Albania

It has long been established that the most important factor in determining student success or failure is well-trained teachers in a coherent education system (Darling-Hammond, 2006b). Sarason (1993) in *The Case for Change: Rethinking the Preparation of Educators* explains this simple primary prevention dialectic; identify and nurture great teachers in a dynamic and supportive environment who, in turn, can foster self-actualized and successful learners in adulthood. Changes in teacher education and training over the past two and a half decades have driven valuable teachers out of the field, while younger generations are leaving the profession altogether (Jackson & Lewis 2010). Countries with high performance have joint strategies for the professional development of teachers. These countries not only train individual educators well, but they intentionally organize the sharing of expertise between teachers and administrators within and across schools so that the system as a whole becomes more and more effective. Their success comes because they have properly understood the political and social context and have evaluated these components: Teacher recruitment, teacher preparation, mentoring, professional learning, teacher feedback and evaluation, career and leadership development. They not only cultivate innovative practices but also incorporate them into the system as a whole, not allowing them to exist as exceptions (Darling-Hammond 2017). These countries established policies for continuing education that helped teachers identify areas for growth, learn from each other, and improve their teaching practices.

In Albania, teachers are qualified at the Universities of Tirana, Elbasan, Korça, Vlora, Shkodra, Durrës and Gjirokastra and at the Sports Academy. The Law on Higher Education recognizes five types of higher education institutions: universities, academies, professional colleges, higher schools and inter-university centers. University faculties and teacher training departments are responsible for organizing and designing the programs. The main activity of these institutions is the theoretical and practical preparation of students with professional teaching skills. Scientific research is a secondary activity and usually has little financial support and systematic application. Currently, the university system of teacher education and qualification is 3+2 years according to the Bologna system. This system currently does not produce teachers for children aged 0 to 3 years (except for the 2-year programs that take place at the University of Durrës and Elbasan), nor does it offer psycho-pedagogical education for teachers of professional subjects at the higher professional levels of the system of education. Pre-school educators and lower cycle teachers (grades 1-5 of primary school) are qualified within the same department in each of the universities in Elbasan, Korce, Vlorë, Durrës and Gjirokastër, collectively known as the "Primary Cycle" department ". Teachers for the level above the primary cycle (grades 6-9) and secondary schools (grades 10-12 according to the recently changed system) are qualified in the universities of Elbasan, Korça, Vlora, Gjirokastra and Shkodra (SCIENTER 2009).

According to instruction number 8, dated 26.03.2020, "On the criteria and procedures for the qualification of teachers", the qualification of teachers is carried out through an exam, which is guided by the principle of transparency, meritocracy and equal treatment. According to this instruction, all teachers who meet the condition of seniority are subject to the qualification exam:

- At least 5 (five) years of work for the "Qualified Teacher" qualification classification;
- At least 10 (ten) years of work for the "Specialist Teacher" qualification category and at least 5 (five) years of work after receiving the "Qualified Teacher" category;
- At least 20 (twenty) years of work for the "Master Teacher" qualification category and at least 10 (ten) years of work after obtaining the "Specialist Teacher" category (MAS Instruction No. 8, 2020).

All teachers who have completed at least 3 (three) days of training per calendar year, which are equivalent to 18 hours of training reflected with 1 (one) credit, have the right to undergo the qualification exam. The exam has the weight of 70% of the overall assessment and the "Candidate's Portfolio" constitutes 30% of the assessment. The evaluation is done with 5 (five) scales: "Excellent", "Very good", "Good", "Sufficient" and "Poor" (with the last evaluation the candidate "does not qualify").

As noted, the qualification of teachers is based on the criterion of "longevity". This practice is inherited and almost the same structure has remained. Continuing qualification does not lead to a salary increase and is not formally obligatory, although teachers attend seminars and workshops even when they are not interested, usually either because of the content related to their work, or because of specialist knowledge or the coach. Many teachers are reluctant to report that they often attend seminars because they are 'required' to do so by their superior. The state system of teacher qualification provides continuous qualification for teachers to help staff to: apply changes in curricula for different subjects; introduce new subjects at school; to improve the teaching process through methods and strategies; to develop cross-curricular and extra-curricular knowledge; and deal with other issues. While many of the training activities, organized by government agencies, have been supported by domestic and foreign NGOs, teachers have been trained in topics such as critical thinking, human rights, democratic education, global and European civilization, gender equality and disability issues, health care and environmental protection.

The salary system for public servants is financed from the national budget, and salaries in the education system are determined by the Decision of the Council of Ministers. Under this system, salaries consist of a basic component that is the same for everyone and of the allowances on top of the basic salary. The level of the basic salary is set in accordance with the qualification levels (high school or university) of the employee. Seniority and additional qualifications are considered for higher remuneration levels. Other allowances are based on a hierarchy that takes into account the level of the workplace and the sector in the "cycle" of education where the teacher works (primary, lower secondary, upper secondary). Studies have shown that: "Teaching is chosen more as an easy career, for reasons of salary, free time and job security, and less for reasons of having the skills for this profession, of wanting to work with it young people, to invest for society [...] the new generation will have as teachers persons who are oriented more by pragmatics than by values" (Tamo & Tamo 2013).

### 3. Results

As a result of this study, a Google Forms<sup>1</sup> questionnaire was created through which the teachers were asked about issues related to the continued qualification of teachers and the role it plays in facing the challenges of change. 207 teachers participated in the questionnaire. The Likert scale was used to measure the agreement of the respondents in relation to the qualification system and its role in strengthening education in Albania. Sixty direct interviews were also conducted.

Question / Statement	5 Totally agree	4 Agreed	3 Neutral	2 Somewhat agree	1 Not at all agree
The qualification system in Albania is in accordance with the teachers' requirements.	28 14.4%	100 51.3%	13 6.7%	38 19.5%	16 8.2
The trainings that are currently conducted by licensed private and public agencies is the right way to develop teachers professionally.	18 9.4%	84 43.8%	22 11.5%	44 22.9%	24 12.5%
The teacher qualification system in Albania responds to the curriculum requirements.	17 8.8%	114 58.8%	19 9.8%	37 19.1%	7 3.6%
This system serves teachers to develop professionally.	30 15.5%	96 49.5%	24 12.4%	36 18.6%	8 4.1%
The current qualification system allows teachers to become "agents of change" in education.	14 7.2%	80 41.2%	32 16.5%	47 24.2%	21 10.8%
Continuous training and qualification of teachers and leaders is the key to cope with the changes in education.	48 26.4%	100 51.3%	12 6.2%	23 11.8%	12 6.2%
The qualification exam is transparent, guarantees meritocracy and treats teachers equally for the same objective situations.	31 15.9%	97 49.7%	17 8.7%	39 20%	11 5.6%
The criterion of "seniority in work" is appropriate for the qualification of teachers.	56 28.9%	98 50.5%	10 5.2%	14 7.2%	16 8.2%
The qualification exam is appropriate as it checks the scientific and pedagogical knowledge of the teacher.	32 16.4%	99 50.8%	16 8.2%	36 18.5%	12 6.2%

<sup>1</sup> <https://docs.google.com/forms/d/1673k8pH-rY-UK9QPRG5fvLH1-370xLvQw8v1xV2qBqg/edit#responses>

The qualification exam helps teachers improve their scientific and pedagogical knowledge and learn new teaching strategies and methods.	23 11.9%	102 52.6%	18 9.3%	40 20.6%	11 5.7%
The continuing education of the teacher helps to overcome the challenges of teaching and learning.	45 23.1%	118 60.5%	11 5.6%	17 8.7%	4 2.1%
Reforms are realized if teachers are trained and qualified.	46 23.7%	103 53.1%	18 9.3%	19 9.8%	8 4.1%

As can be seen from the questionnaire, the teachers affirm to a significant degree, 65.7%, that the qualification system is in accordance with the teachers' requirements. A little more than half of the respondents, 53.2%, support the current training system for professional development. The questionnaire shows that 67.6% think that the qualification system meets the requirements of the curriculum and 65.1% think that this system helps teachers to develop professionally. Only 48.4% of respondents fully agreed with the statement that "the current qualification system allows teachers to become agents of change in education". This data is very important to understand the relationship with the reforms undertaken in the Albanian education system and the way teachers approached the changes. Although 78% of them see continuing training and qualification, their continuing education, as the key to successfully cope with the reforms and overcome the challenges of teaching and learning.

During the conducted interviews, among others, several issues are highlighted:

- ✚ The qualification system must be changed as it is unfair and does not respond to needs;
- ✚ The role of the teacher is underestimated;
- ✚ Continuing education helps teachers overcome difficulties;
- ✚ Teacher training should be adapted to the newest teaching methods;
- ✚ The qualification should become specialized for the relevant subjects;
- ✚ Trainings are necessary for teachers, but they must be free and inclusive.

The international indicators of educational that measure quality that emphasize the kinds of higher-order skills needed in contemporary societies, such as OECD's Program for International Student Assessment (PISA). PISA tests go beyond recall and recognition of information, emphasizing students' ability to apply knowledge in new circumstances—the type of competence that is increasingly important for 21st century learners. Albania was ranked 70th (PISA Score 2022) and one of the factors for this result has to do with the ability of teachers to adapt to the reforms undertaken in the curriculum system.

Some of the reasons why quality teachers are lacking: lack of lifelong career satisfaction, large numbers of graduate teachers who do not get teaching jobs, beginners who get jobs in urban schools but fail or leave, lack of specialties, opportunities the largest outside of education. Teachers pay their own expenses for continuing education, training, participation in conferences, publications, various professional activities. (Meanwhile in developed countries it is either free or heavily subsidized. While training as a teacher they may receive a full salary.)

#### 4. CONCLUSIONS

- It is worth noting that successful countries in the reforms undertaken in education such as Finland, Singapore, Shanghai, etc. have applied policies that attach special importance to the teacher and his qualification;
- The data show that there is a variable relationship between the continuous qualification of teachers, coping with changes and the success of teaching and learning;
- The teacher qualification system in Albania turns out to be rigid and does not motivate teachers to develop professionally.
- Teachers fail to become "agents of change" as the conditions for their continuing education have not been created.

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## Mapping The Globalization Financial Network

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**Abstract:** This study explores the evolution of global financial cooperation through Fintech Technologies, highlighting their efficiency, cross-border applications, and potential for economic diversification, but also addressing regulatory challenges. The methodology is a theoretical presentation of the analysis of how Fintech is facilitating better access, transparency, and financial service provision, hence revolutionizing the public sector. Public authorities worldwide are increasingly promoting fintech sectors and solutions, to explore the potential and challenges of digital money. To encourage innovation for public authorities, fintech integration into government services presents not only significant opportunities as well as challenges for privacy, data security, ensuring equal access to digital devices. Blockchain technology offers a secure and open solution reducing tax evasion and fraud, streamlining tax collection process, attracting foreign investment, and reducing administrative overhead.

At the end this study concludes that for successful e-governance, financial network is a key point of globalization intertwined with the future of government services.

**Keywords:** Fintech, globalization, public sector, e-governance, foreign investment.

### Introduction

Public authorities can enhance financial networks' innovation through strategic steps, enhancing efficiency, accessibility, and resilience in service delivery to citizens and businesses. To foster a culture of innovation in financial networks, organizations should foster a culture of experimentation, risk-taking, and learning from failure. This can be achieved by fostering open communication, providing resources and support for innovation projects, promoting collaboration and partnerships, investing in digital infrastructure, prioritizing user-centric design, promoting regulatory agility, and monitoring and evaluating the impact of innovation initiatives. This can be achieved by establishing regulatory sandboxes, collaborating with regulatory bodies, and developing clear guidelines for emerging technologies and business models. Knowledge sharing and learning platforms should also be established, promoting continuous learning and professional development among staff. Globalization significantly influences public financial networks, increasing interconnectedness, regulatory challenges, and capital flows, necessitating effective management for financial stability, economic development, and addressing global challenges. Globalization has led to increased interconnectedness among financial markets, institutions, and economies worldwide. This has increased access to capital for governments, allowing them to fund operations, infrastructure projects, and social programs. However, it also exposes public financial networks to greater financial volatility, leading to financial crises spreading to others. Fintech technologies, such as peer-to-peer lending platforms and digital wallets, have made financial inclusion more accessible, enabling more people and companies to engage in the global economy more actively. Fintech solutions help businesses and financial institutions cut expenses, making cross-border transactions easier and faster. Fintech platforms provide entrepreneurs with alternative sources of finance, democratizing capital and spurring innovation. However, regulatory challenges arise due to the fintech industry's high innovation speed. Cybersecurity risks are also increasing due to increased interconnection in financial systems. Globalization promotes global economic integration, but it also poses regulatory challenges for public financial networks. It facilitates cross-border capital flows, requiring effective management to ensure economic stability. Globalization influences fiscal policies, necessitating greater international cooperation and governance mechanisms to address common financial challenges. Public financial networks play a role in addressing income inequality and social impact and are increasingly focusing on environmental and climate finance to meet international commitments. Globalization has significantly impacted public financial networks by increasing interconnectedness, access to global capital, financial integration, and technological innovation. It has led to a highly interconnected global economy, allowing governments to raise funds through international bond markets and foreign direct investment. Globalization promotes financial integration among countries, facilitating cross-border transactions and attracting investment. Multinational institutions like the IMF and

World Bank play a significant role in shaping public financial networks, providing financial assistance and technical support. Technological advancements in financial services and infrastructure are transforming public financial networks, and cross-border capital flows are facilitated. However, globalization exposes networks to increased volatility and risk, necessitating greater international cooperation to address common financial challenges. It also influences governments' fiscal policies and incorporates environmental, social, and governance considerations into their operations.

## **Methodology**

This article explores the innovation of financial networks, highlighting the importance of open communication, resources, collaboration, digital infrastructure, user-centric design, regulatory agility, and monitoring the impact of innovation initiatives. It also highlights the role of public financial networks in addressing income inequality, social impact, and environmental and climate finance.

## **Literature review**

Financial networks' innovation by fostering a culture of experimentation, risk-taking, and learning from failure. This can be achieved through open communication, resources, collaboration, digital infrastructure, user-centric design, regulatory agility, and monitoring the impact of innovation initiatives. Globalization has increased interconnectedness among financial markets, institutions, and economies, allowing governments to fund operations and social programs. Fintech technologies have made financial inclusion more accessible, but regulatory challenges arise due to their high innovation speed. Globalization also influences fiscal policies, necessitating greater international cooperation and governance mechanisms to address common financial challenges. Public financial networks play a role in addressing income inequality and social impact and are increasingly focusing on environmental and climate finance to meet international commitments.

## **Materials and methods**

Development refers to the process of rising from low to high levels, while economic development encompasses excelling in all spheres of human existence, including financial aspects, making it challenging to distinguish between developed and developing nations.

Economic development is defined by policies and mentality adopted by a state, and its global level determines its economic status. The definition varies based on countries' policies and investment in economic objectives. Wage indicators, such as health and environment, also play a role in determining economic development. States are responsible for defining this development.

Differential analysis is easy, but global economic policies determine economic growth and development. Economic growth refers to the quantitative aspect of a sector's production or service, measured by national product and incomes per capita, affecting microeconomic and macroeconomic policies.

Economic growth and development differ conceptually and substantively in terms of time, economic parameters, and content. Growth refers to yearly economic parameters, while development is a long-term process. Both are essential elements of the contemporary economy, but they help each other by indicating economic development through income per capita.

Economically developed countries offer good living conditions, social well-being, functional health, high professional conditions, and technical education. They provide equal access to all academic levels, meet market requirements, and meet global development standards.

Globalization has significantly impacted the Albanian economy, allowing for increased international trade, technological innovation, and workforce training. Exporting products to foreign markets and increasing exports has led to economic growth and job creation. Investments in the technology sector have diversified the economy, creating income and job opportunities. Additionally, improving the education system has prepared young people for market changes, increasing their skills and competitiveness in international markets.

Fintech technologies have revolutionized global financial cooperation by automating services, streamlining operations, and promoting economic diversification. However, concerns about consumer protection, data privacy, cybersecurity, and financial stability persist. Regulators need to adopt flexible approaches and establish clear guidelines for Fintech companies to fully harness their potential. Globalization has increased

interconnectedness in financial markets, enabling governments to access capital for infrastructure projects and social programs. Fintech technologies have made financial inclusion more accessible, but regulatory challenges and cybersecurity risks persist. Globalization promotes economic integration but also poses regulatory challenges for public financial networks. Effective management is crucial for economic stability, and fiscal policies must be adapted to address common financial challenges. Public financial networks are increasingly focusing on environmental and climate finance.

## Conclusion

Globalization diversifies funding sources, enabling Albania to attract foreign direct investment and support infrastructure projects. This boosts economic growth and capacity. However, careful management is crucial to ensure fair benefits and successful societal challenges are addressed.

The advantages of globalization - The economies of developed countries are constantly changing, often reflected in household budgets and spending on goods and services. Governments often avoid using fiscal policy tools to mitigate uncertainty. Globalization, a trade-led process involving international investment and information technology, has both advantages and disadvantages. The success of globalization depends on a country's ability to adapt to the globalizing system and its ability to interact with other countries.

Globalization connects us with the world, allowing us to interact and learn from different cultures, technologies, and systems. It also benefits countries through Free Trade Agreements, reducing barriers and taxes, leading to lower prices and increased competition. This benefits consumers by lowering living costs and offering a wider range of products. Developing countries attract foreign investment, reducing costs and boosting their economy. Technology development is also facilitated by acquiring technology from developed countries. People can move freely, learning from different cultures and working with top companies, reducing labor force gaps in some countries.

Globalization cons - Globalization creates global diversity, with dominant countries dominating various fields and others under powerful influence. However, it also leads to issues such as inequality in developed countries and environmental exploitation. Advances in communication, travel, and information services have made globalism inevitable, making the rich richer and the poor poorer. The free movement of labor power reduces qualified workers in countries without a secure labor market, and countries lose cultural identity due to immigration. Globalization must be carefully managed to benefit individuals and societies, ensuring fair sharing of advantages and successful treatment of challenges. Countries face challenges in economic diversification due to foreign companies' extractive activities and multinational companies' bargaining power over local governments, hindering their competitiveness.

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## Tüketicilerin Yaş Meyve ve Sebze İsrافی Üzerine Bir Araştırma (Ankara İli Etimesgut İlçesi Örneđi)

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**Özet:** Bu çalışma, Ankara İli Etimesgut İlçesi'nde ikamet eden hane halklarının yaş meyve sebze tüketimi ve tüketilen yaş meyve sebzelerin israfını tespit etmek amacıyla yapılmıştır. Çalışmanın ana materyali, Ankara İli Etimesgut İlçesi'nde ikamet eden 72 hane halkından oluşmaktadır. Çeşitli kaynaklar taranarak sosyo-demografik bilgiler ve meyve sebze tüketim durumu ve israfını sorgulayan toplam 27 soruluk veri toplama aracı hazırlanmıştır. Anket yapılan hane halkı temsilcilerinin 47'si kadın, 25'i erkektir. Araştırma bulgularına göre, Ankara İli Etimesgut İlçesi'nde ikamet eden tüketicilerin, yaş meyve ve sebze israfı hususunda, %97,23'ünün dikkat ettiđini, %2,77'sinin dikkat etmediđini belirtmişlerdir. Araştırma sonucunda, eğitim düzeylerinin bilinçlilik seviyesine etki etmediđi ve edindikleri bilginin, israfı önlemeye yetecek kadar ikna edici olmadığı sonucuna varılmıştır.

**Anahtar kelimeler:** Yaş meyve ve sebze, İsraf, Etimesgut, Ankara

**Abstract:** This study was conducted to determine the consumption of fresh fruits and vegetables and the waste of fresh fruits and vegetables consumed by households residing in Etimesgut District of Ankara Province. The main material of the study consists of 72 households residing in Etimesgut District of Ankara Province. By scanning various sources, a data collection tool with a total of 27 questions was prepared, questioning socio-demographic information and fruit and vegetable consumption status and waste. 47 of the household representatives surveyed were women and 25 were men. According to the research findings, 97.22% of the consumers residing in Etimesgut District of Ankara Province stated that they paid attention to the waste of fresh fruits and vegetables, while 2.77% did not pay attention. As a result of the research, it was concluded that their education level did not affect the level of awareness and the knowledge they acquired was not convincing enough to prevent waste.

**Keywords:** Fresh fruit and vegetables, Waste, Etimesgut, Ankara

### 1. GİRİŞ

Sanayi devriminden sonra, insanların yaşam biçimleri ciddi manada deđişmiştir. Bu deđişim, üretim odađından tüketim odađına geçiş şeklinde olmuş ve kaynakların aşırı kullanımı ile kontrolsüz tüketime doğru kaymıştır. (Aksoy ve Solunođlu, 2015: 165).

Artan dünya nüfusunun ihtiyacı olan gıda maddelerinin üretimi artmakla birlikte, insanlar yaşamaları için ihtiyaç duyacaklarının üzerinde tüketim yapmaktadırlar. İhtiyaç fazlası tüketim ise israfı beraberinde getirmektedir.

Gıda israfının önlenmesi kaynakların daha etkin kullanılması açısından önemlidir. Gıda israfı sorunu tüm dünyada bugün olduđu gibi gelecekte de en önemli sorunlardan biri olmaya devam edecektir (Demirbaş vd., 2017).

İmamođlu (2018), "Ankara'da Bir Bakanlıkta Çalışanların Meyve Sebze Tüketimleri Üzerine Bir Araştırma" adlı çalışmasında meyve tüketim şekli olarak en fazla çiđ tüketim ve meyve suyu olarak tüketiminin tercih edildiđi belirlenmiştir.

Özdal (2019) "Türkiye'de Tüketicilerin Gıda İsrafını Engellemeye Yönelik Tutumlarının Analizi Ve Mobil Uygulama Tasarımı" konusunda yapılan çalışmada, halen tüketilebilir durumda olan gıda ürünlerinin israfını önlemek amacıyla, gıda tedarikçilerine, tüketici davranışlarıyla ilgili analiz verisinin sağlanması üzerinde durulmuştur.

Okumuş (2018); "Aydın İlinde Yaş Meyve-Sebze Pazarlaması Ve Tüketicilerin Satın Alma Davranışları" adlı çalışmada, Aydın ilinde yaşayan tüketicileri üç farklı gelir grubuna ayırarak genel olarak gıda, özel olarak yaş meyve-sebze alışverişlerinde tercih ettikleri yer, alışveriş sıklığı, ödeme şekli, harcama tutarı gibi satın alma davranışlarını ortaya koymak ve alışveriş tercihlerinde dikkat ettikleri özelliklerin ortaya konması amaçlanmaktadır.

Bu çalışmada, Ankara İli Etimesgut İlçesinde yaşayan hane halklarının yaş meyve ve sebze israfı üzerine tutum ve davranışlarını inceleyen bu çalışmada, israfı önlemek adına tüketicilerin adlıği tedbirler ve yaş meyve ve sebze israfının kaynağının tespit edilmesi amaçlanmıştır.

## 2. MATERYAL ve YÖNTEM

Bu araştırmada Ankara İli Etimesgut İlçesinde ikamet eden tüketicilerin yaş meyve sebze israfı yapmasına sebep olan etkenlerin belirlenebilmesi için yapılan anketler, SPSS programı kullanılarak kategorize edilmiş olup, anket verileri 2023 yılında ilçede ikamet eden 72 tüketiciyle birebir görüşme yapılarak elde edilmiştir. Anketlerden elde edilen bilgiler çalışmanın birincil verilerini oluştururken, internet verileri, yerli ve yabancı kaynaklar, daha önceden yapılan çalışmalar ve ilgili makalelerden derlenen genel bilgiler, konu ile alakalı ikincil verileri oluşturmuştur. Uygulanan anket araştırmasından elde edilen SPSS 21 programı incelenmiş ve sonuçlar özet tablo şeklinde sunulmuştur. İncelenen veriler sonucunda elde edilen özet tabloda cinsiyet, yaş, eğitim durumu, meslek, medeni durum, hane halkı sayısı, meyve sebze tüketimi, meyve sebze israfı ve gelir değişkenlerine ait dağılımların frekans ve yüzde oranları verilmiştir. Ayrıca çalışmada, meyve sebze israfını etkilediği düşünülen değişkenler arasında F-testi uygulanarak istatistiksel açıdan bir farklılık olup olmadığı analiz edilmiştir.

## 3. ARAŞTIRMA BULGULARI

### 3.1. Tüketicilerin Bazı Sosyo-Ekonomik Değişkenlere İlişkin Bilgiler

Tablo 1: Tüketicilerin Sosyo-Ekonomik Değişkenlere İlişkin Sonuçlar

	Frekans	Yüzde(%)		Frekans	Yüzde(%)		
<b>Cinsiyet</b>	Erkek	25	34,7	<b>Hane</b>	1 Kişi	3	4,2
	Kadın	47	65,3	<b>Halkı</b>	2 Kişi	35	48,6
<b>Yaş</b>	26-35 Yaş	28	38,9	<b>Sayısı</b>	3 Kişi	17	23,6
	36-45 Yaş	28	38,9		4 Kişi	17	23,6
	46 Yaş	16	22,2	<b>Meyve</b>	Bazen	6	8,3
<b>Eğitim Durumu</b>	İlköğretim	12	16,7	<b>Sebze</b>	Genellikle	39	54,2
	Lise	19	26,4	<b>Tüketimi</b>	Sürekli	27	37,5
	Üniversite	41	56,9		Hiç	6	8,3
<b>Meslek</b>	Serbest	2	2,8	<b>Meyve</b>	Nadiren	43	59,7
	Memur	15	20,8	<b>Sebze</b>	Bazen	21	29,2
	İşçi	20	27,8	<b>İsrafı</b>	Genellikle	2	2,8
	Emekli	7	9,7		10.000-20.000 TL	8	11,1
	Öğrenci	8	11,1	<b>Gelir</b>	20.001-30.000 TL	13	18,1
<b>Medeni Durum</b>	Diğer	20	27,8		30.001-40.000 TL	0	0,0
	Evli	68	94,4		40.001 TL ve Üzeri	51	70,8
	Bekar	8	11,1				

Gönüllü olarak araştırmaya katılan bireylerin cinsiyet dağılımı incelendiğinde 47 kişinin (%65,3) kadın ve 25 kişinin (%34,7) erkek olduğu gözlenmiştir. Ayrıca 28 kişinin (%38,9) 26-35 yaş arasında, 28 kişinin (%38,9) 36-45 yaş ve 16 kişinin (%22,2) de 46 yaş üzerinde olduğu görülmektedir. Eğitim durumu dağılımları incelendiğinde katılımcılardan 12 kişinin (%16,7) ilköğretim, 19 kişinin (%26,4) lise ve 41 kişinin (%56,9) ise üniversite düzeyinde eğitim aldığı saptanmıştır. Katılımcıların meslek grupları incelendiğinde 2 kişinin (%2,8) serbest meslek, 15 kişinin (%20,8) memur, 20 kişinin (%27,8) işçi, 7 kişinin (%9,7) emekli, 8 kişinin (%11,1) öğrenci, 20 kişinin (%27,8) de diğer meslek gruplarında çalıştığı gözlenmiştir. Ayrıca medeni durum dağılımına bakıldığında katılımcılardan 68 kişinin (%94,4) evli ve 8 kişinin (%11,1) bekar olduğu saptanmıştır. Katılımcılara ait hane halkı sayısı incelendiğinde 3 kişinin (%4,2) hane halkı sayısının 1 kişi, 35 kişinin (%48,6) hane halkı sayısının 2 kişi, 17 kişinin (%23,6) hane halkı sayısının 3 kişi ve 17 kişinin (%23,6) hane halkı sayısının 4 kişi olduğu görülmektedir.

Katılımcıların gelirleri incelendiğinde 8 kişinin (%11,1) 10.000-20.000 TL arasında, 13 kişinin (%18,1) 20.001-30.000 TL arasında, 51 kişinin (%70,8) 40.000 TL üzerinde gelirinin olduğu görülmektedir.

Katılımcıların meyve sebze tüketimleri incelendiğinde 6 kişi bazen, 39 kişi genellikle ve 27 kişi ise sürekli olarak meyve sebze tükettikleri görülmektedir. Katılımcılara meyve sebze israf etme durumları sorulduğunda 6 kişi hiç israf etmediklerini, 43 kişi nadiren israf ettiklerini, 21 kişi bazen israf ettiklerini ve 2 kişi ise genellikle israf ettiklerini bildirmiştir.

### 3.2. Meyve Sebze İsrafına Etkili Olan Bazı Değişkenlere İlişkin Analiz Sonuçları

“H1: Meyve sebze israfı değişkenine göre araştırma boyutları istatistiksel açıdan farklılık gösterir.” hipoteziyle ilgili f- testi sonuçları verilmiştir.

Tablo 2: Araştırma Boyutlarının meyve sebze israfına göre gösterdiği farklılıklar için t-Testi Tablosu

Düzeyleyler	Sebze İsrafı	N	Ort.	f Değeri	p Değeri	Hipotez
Eylem Olarak Ürün Dönüştürmeye Açıklık	Hiç	6	3,6333	1,845	,147	H0 Kabul
	Nadiren	43	3,3814			
	Bazen	21	3,1905			
	Genellikle	2	2,3000			
Farklı Önlem Düşüncelerini Uygulamaya Açıklık	Hiç	6	4,3889	29,808	,000	H0 Red
	Nadiren	43	4,0620			
	Bazen	21	3,0476			
	Genellikle	2	3,0000			
Fikir Olarak Ürün Dönüştürmeye Açıklık	Hiç	6	3,5000	1,034	,383	H0 Kabul
	Nadiren	43	3,7442			
	Bazen	21	3,0794			
	Genellikle	2	3,1667			

Araştırma boyutlarının meyve sebze israfına göre gösterdiği farklılıklar f-testi ile incelenmiştir. Yapılan test sonucunda eylem olarak ürün dönüştürmeye açıklık ( $p=0,147$ ) ve fikir olarak ürün dönüştürmeye açıklık ( $p=0,383$ ) etkenlerinin meyve sebze israfına göre farklılık göstermediği tespit edilmiştir ( $p>0,05$ ). Ancak farklı önlem düşüncelerini uygulamaya açıklık değişkeninin meyve sebze israfına göre farklılık gösterdiği gözlenmiştir ( $p<0,05$ ).

Ortalamalar incelendiğinde hiç meyve sebze israf etmeyen veya nadiren israf eden bireylerin farklı önlem düşüncelerini uygulamaya açıklık ortalamalarının bazen veya genellikle israf eden bireylere oranla daha yüksek olduğu görülmektedir.

“H1: Yaş değişkenine göre Meyve sebze israfı istatistiksel açıdan farklılık gösterir.” hipoteziyle ilgili f- testi sonuçları verilmiştir.

Tablo 3: Yaş değişkenine göre meyve sebze israfının gösterdiği farklılıklar için f-Testi Tablosu

Düzeyleyler	Yaş	N	Ort.	f Değeri	p Değeri	Hipotez
Yaş Meyve ve Sebze İsrafı	26-35 Yaş	28	2,3571	10,743	,000	H1 Kabul
	36-45 Yaş	28	2,5000			
	46 Yaş Üzeri	16	1,6875			

Yaş meyve ve sebze israfının yaşa göre gösterdiği farklılıklar f-testi ile incelenmiştir. Yapılan test sonucunda yaş meyve ve sebze israfının ( $p=0,000$ ) yaşa göre farklılık gösterdiği tespit edilmiştir ( $p<0,05$ ).

Ortalamalar incelendiğinde 46 yaş ve üzerinde olan bireylerin yaş meyve ve sebze israfı etme düzeyinin daha genç yaştaki bireylere göre daha az düzeyde olduğu görülmektedir.

“H1: Eğitim durumu değişkenine göre Meyve sebze israfı istatistiksel açıdan farklılık gösterir.” hipoteziyle ilgili f-testi sonuçları verilmiştir.

Tablo 4: Eğitim Durumu değişkenine göre meyve sebze israfının gösterdiği farklılıklar için f-Test Tablosu

Düzeyleyler	Eğitim Durumu	N	Ort.	f Değeri	p Değeri	Hipotez
Yaş Meyve ve Sebze İsrافی	İlköğretim	12	1,5833	10,157	,000	H1 Kabul
	Lise	19	2,4737			
	Üniversite	41	2,3659			

Yaş meyve ve sebze israfının eğitim durumuna göre gösterdiği farklılıklar f-testi ile incelenmiştir. Yapılan test sonucunda yaş meyve ve sebze israfının ( $p=0,000$ ) eğitim durumuna göre farklılık gösterdiği tespit edilmiştir ( $p<0,05$ ).

Ortalamalar incelendiğinde ilköğretim düzeyinde eğitim almış olan bireylerin yaş meyve ve sebze israfı etme düzeyinin daha yüksek düzeyde eğitim almış bireylere oranla daha az olduğu görülmektedir.

“H1: Gelir değişkenine göre Meyve sebze israfı istatistiksel açıdan farklılık gösterir.” hipoteziyle ilgili f- testi sonuçları aşağıda yer almaktadır.

Tablo 5: Gelir değişkenine göre meyve sebze israfının gösterdiği farklılıklar için f-Testi Tablosu

Düzeyleyler	Gelir	N	Ort.	f Değeri	p Değeri	Hipotez
Yaş Meyve ve Sebze İsrافی	10.000-20.000 TL	8	2,3750	5,130	,008	H1 Kabul
	20.001-30.000 TL	13	1,7692			
	40.000 TL ve Üzeri	51	2,3725			

Yaş meyve ve sebze israfının gelire göre gösterdiği farklılıklar f-testi ile incelenmiştir. Yapılan test sonucunda yaş meyve ve sebze israfının ( $p=0,000$ ) gelire göre farklılık gösterdiği tespit edilmiştir ( $p<0,05$ ).

Ortalamalar incelendiğinde gelir düzeyi 20.001-30.000 TL arasında olan bireylerin yaş meyve ve sebze israfı etme düzeyinin diğer gelir gruplarına oranla daha az olduğu görülmektedir.

#### 4. SONUÇ VE ÖNERİLER

Bu araştırma, Ankara İli Etimesgut İlçesinde ikamet eden 72 tüketici ile yapılmış olup, yaş meyve ve sebze israfı konusundaki, bilgi düzeyleri ile tutum ve davranışları incelenmiştir.

Yapılan çalışmaya göre, tüketicilerin yaş meyve ve sebze israfı konusunda belli seviyede bilgi sahibi olduğu, buna rağmen israf konusunda tam başarılı olmadıkları tespit edilmiştir. Bu başarısızlığın temel sebebi olarak duyarsızlık olarak nitelendirilmiştir.

Analiz sonuçlarına bakıldığında, yaş meyve ve sebze israfının genellikle ihtiyaç fazlası ürün alımından ve uygun şartlarda muhafaza edilemediğinden meydana geldiği tespit edilmiş olup, hanelerde en çok israf edilen yaş meyve ve sebzelerin uzun ömürlü olmayan, geri dönüşümde kullanılmayan ve posası kullanılmayan ürünler olduğu belirlenmiştir.

Tüketimi özendiren reklamları sınırlamak ve/veya tüketimi konu almaktan ziyade tasarrufu öncelik olarak anlatan kamu spotlarının reklamlarda dönmesi sağlanmalıdır.

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## Self Servis Teknolojilerine İlişkin Bibliyometrik Analiz

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**Özet:** Bilgi ve iletişim teknolojilerinde yaşanan gelişmeler, işletmelerin her geçen gün iş yapma şekillerini değiştirmekte ve daha iyi mal ve hizmetler geliştirmesine olanak sağlamaktadır. İşletmeler tarafından yaygın olarak kullanılan bu teknolojilerden biri de Self servis teknolojisidir. Bu teknolojiler, hem kamu sektöründe hem de özel sektörde kullanılmaktadır. Self-servis teknolojileri, sadece işletmelerin iş yüklerini azaltmıyor aynı zamanda işlemlerin daha hızlı gerçekleştirilmesine katkı sağlamaktadır. Ayrıca bu teknolojiler yardımıyla mal ve/veya hizmet alımını gerçekleştirenler daha fazla katılım ve kontrol imkânına sahip olmaktadır. Bu teknolojilerin taraflara sağladığı avantajlar, kullanımının artmasına neden olmaktadır. Bu durum, araştırmacıların konu üzerine ilgisini artırmaktadır. Bu çalışma, self servis teknolojisi üzerine yapılmış araştırmaların geçmişini, mevcut durumunu ve gelecekteki tematik eğilimlerini belirlemeyi amaçlamaktadır. Bu amaçla, self servis teknolojisine ilişkin yapılmış olan makalelerin, ülkelerin, yazarların, kurumların, anahtar sözcüklerin ve metinlerin ana eğilimleri ortaya çıkarılmaktadır. Çalışmada bibliyometrik analiz tekniği kullanılmıştır. Bu yolla konu üzerine yapılmış olan çalışmaların, daha sistematik olarak ele alınmasıyla, araştırma boşluklarının belirlenmesi ve gelecek araştırmacılara ışık tutulması beklenmektedir.

**Anahtar Kelimeler:** Bibliyometrik Analiz, Müşteri Tatmini, Self Servis Teknolojisi, Servis Kalitesi, Tematik analiz

### Bibliometric Analysis of Self-Service Technologies

**Abstract:** Developments in information and communication technologies change the way businesses do business every day and enable them to develop better goods and services. Self-service technology is one of these technologies widely used by businesses. These technologies are used both in the public and private sectors. These technologies not only reduce the workload of businesses but also contribute to faster transactions. In addition, with the help of these technologies, those who purchase goods and/or services have more participation and control opportunities. The use of these technologies has increased due to the advantages they provide to the parties involved. As a result, researchers have become more interested in the subject. This study aims to identify the history, current status and future thematic trends of research on self-service technology. In this way, it is expected to identify research gaps and shed light on future researchers by addressing the studies on the subject more systematically.

**Keywords:** Bibliometric Analysis, Customer Satisfaction, Self-Service Technology, Service Quality, Thematic analysis

### 1. GİRİŞ

Günümüzde hızla değişen teknolojiler, bireylerin günlük yaşamlarını değiştirirken, işletmelerin de iş süreçlerini dönüştürmektedir. Bu değişimde, bilgi ve iletişim teknolojilerinin (Information and Communications Technology / ICT) etkisi kaçınılmaz hale gelmiştir. Bu bağlamda özellikle “Self Servis Teknolojisi” (Self Service Technology /SST), hem bireylerin hem de kuruluşların daha önce benzeri görülmemiş bir özgürlük ve bağımsızlık düzeyine ulaşmasını sağlayan önemli bir gelişmedir (Kim, Kim ve Lee, 2023). İşletmelerin ve tüketicilerin günlük yaşamlarını dönüştüren bir unsur olarak karşımıza çıkan bu teknoloji, büyük bir ilgi ve evrimleşme sürecine tanıklık etmektedir (Dabholkar ve Bagozzi 2002; Wu ve Wu, 2019).

Self servis, temelde kullanıcıların çeşitli hizmetleri almak, bilgiye erişmek veya işlemleri gerçekleştirmek için kendi başlarına teknolojik araçları kullanabilmelerini ifade etmektedir. Bu kapsamda, otomatik makineler, internet tabanlı platformlar ve uygulamalar, bireylerin ve işletmelerin ihtiyaçlarına yönelik hizmet sunumunu kolaylaştırmaktadır (Robertson vd., 2016). Self servis teknolojisi, geleneksel hizmet modelini dönüştürerek, kullanıcıların daha fazla kontrol ve katılım sağlayan bir ortamda hizmet almasına olanak tanımaktadır (Xie vd., 2011). Geleneksel hizmet modellerini dönüştüren bu teknoloji, kullanıcıların daha fazla kontrol ve katılım sağlayan bir ortamda hizmet almasına olanak tanımaktadır. Bu, hem bireylerin hem de kuruluşların daha önce benzeri görülmemiş bir özgürlük ve bağımsızlık düzeyine ulaşmasını sağlamaktadır. İşletmeler için ise self-servis teknolojisinin benimsenmesi ve geliştirilmesi, müşteri tatminini artırmak, iş süreçlerini optimize etmek ve rekabet avantajı elde etmek için kritik bir öneme sahiptir (Kılıç ve Karaosmanoğlu, 2019). Bu çalışmada, self-

servis teknolojisine ilişkin yapılan araştırmaların bibliyometrik analizi gerçekleştirilmiştir. Konu üzerine yapılan çalışmaların bir özetini sunularak, gelecek araştırmacılar için rehberlik etmek amaçlanmıştır.

## 2. TEORİK ÇERÇEVE

Self-servis teknolojileri, müşterinin hizmet veren ile ilişkiye girmeden hizmet almalarına imkân sağlayan teknolojilerdir (Meuter, 2000). Hizmet verene ihtiyaç duymayan bu teknolojiler bugün hizmet alınan çeşitli noktalarda, hastanelerden süpermarketlere kadar, kullanılmaktadır. Müşteri bu teknolojiyi cep telefonlarından ya da hizmet aldığı noktalarda bulunan kiosk'lardan yararlanarak kullanmaktadır. Langedard ve meslektaşları (1981) ile Bateson (1985) tarafından yapılan çalışmalarda self servis teknolojileri iki kategoriye ayrılmıştır. Bunlar; i) emek merkezli self servis teknolojileri (örneğin; müşteri ihtiyacına göre ürün üreten kafeteryalar) ii) teknoloji merkezli self servis teknolojileri (örneğin; ATM).

Self-servis teknolojileri hizmet verme ve hizmet alma süreçlerinde önemli değişiklikler sağlamaktadır. Bu değişiklikler her iki taraf için de farklı avantaj ve dezavantajlara sahiptir (Hsieh, 2005). Hizmet veren için önemli ölçüde maliyet ve zaman tasarrufu sağlayan bir sistem olmasının yanında (Lee vd., 2009) müşteri için de zaman tasarrufu (Kokkinou ve Caranage, 2013) ve deneyim imkânı sağlamaktadır (Lee ve Allaways, 2002). Ancak müşterinin olumsuz bir deneyim yaşaması durumunda kendisine yardımcı olacak bir hizmet veren bulunmaması (Beatson vd., 2006) ya da müşterinin konuyla ilgili bilgisiz olması (Abdelaziz vd., 2010) self-servis teknolojilerinin müşteri tarafındaki olumsuz yönlerdir. Self-servis teknolojileri aynı zamanda tüm müşterilere standart hizmet sunmaktadır (Morrell, 1998). Bu sayede hizmet veren-müşteri iletişimi sonucunda yaşanabilecek olumsuzlukların da önüne geçilmektedir. Ayrıca hizmet veren şirket tarafından bu teknolojilerin bazı avantajları vardır. Bu avantajlardan biri hizmet verme saatlerinin genişlemesi ve değişen personele karşılık müşteriye standart hizmet sağlanmasıdır (Xie vd., 2011). Self-servis teknolojilerinin kullanıldığı alanlarda sorumluluk müşteriye aittir. Müşteri hizmet aldığı süreç içerisinde aldığı hizmetteki ihtiyacını kendisi belirler ve değişim gerekiyorsa bu değişimi kendisi gerçekleştirir (Oyedele, 2007). Hizmet alma süreci içerisinde müşterinin self-servis teknolojilerinden yararlanmasını etkileyen durumlar da mevcuttur. Kişinin teknolojiyi kullanmayı bilmesi ya da teknolojinin kendisine faydasını bilmesi bu durumlardan bazılarıdır (Meuter vd., 2003). Bununla beraber müşterinin yaşadığı olumlu deneyim self servis teknolojilerini kullanmayı tercih etmelerinde önemli bir etkidir. Buna karşılık yaşanan olumsuz deneyimler de müşterilerin bu teknolojileri kullanmamalarına neden olmaktadır (Xie vd., 2011).

Resim 1: Self Servis Teknolojileri



Kaynak: Freepik (2024).

### 3. YÖNTEM

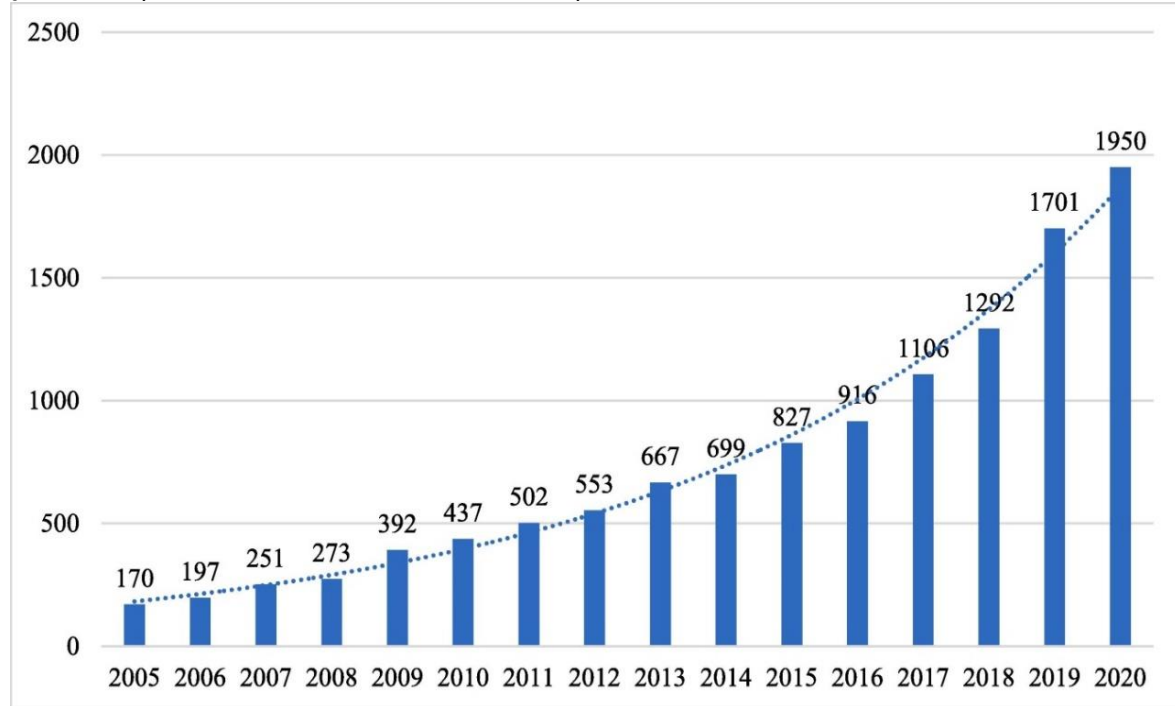
Bu bölümde, araştırmanın temel hedefleri, gerçekleştirilen analizler ve elde edilen bulgular detaylı bir şekilde ele alınmaktadır.

#### 3.1. Bibliyometrik Analiz

Bibliyometrik analiz, geniş havuza sahip bilimsel verilerin incelenmesini ve analiz edilmesini sağlayan, belirli alanlarda önemli konuların ortaya çıkarılmasına olanak veren bir yöntemdir (Donthu vd., 2022). Bibliyometrik analiz konusunda tartışmalar 1950'li yıllarda başlamış olsa da (Wallin, 2005), kullanımın yaygınlaşması yenidir (Donthu vd., 2022). Nispeten yeni olan bu yöntem yaygın olarak kullanılmaktadır. Gephi, Leximancer, VOSviewer gibi bibliyometrik yazılımların, Scopus ve Web of Science gibi bilimsel veri tabanlarının ulaşılabilirliği ve kullanılabilirliğinin artışı ile bibliyometrik analizin bilimsel araştırmalardan iş araştırmalarına kadar pek çok alanda yaygın olarak kullanılmasına neden olmaktadır (Donthu vd., 2020).

Bibliyometrik analiz, dergi ve makale performansı hakkında bilgi sahibi olmak, iş birliği modellerini görebilmek, yazar ve ülke performanslarını değerlendirmek gibi pek çok nedene bağlı olarak kullanılmaktadır (Verma ve Gustafsson, 2020). Bunun yanında bibliyometrik analiz sayesinde çok büyük verilerin değerlendirilmesinin yanı sıra aynı zamanda bu analizin yapısı sayesinde objektif olarak araştırmalar gerçekleştirilmektedir. Sağladığı haritalandırma yöntemi sayesinde, çalışma alanlarındaki bilgi eksikliğinin olduğu noktaların belirlenmesi ve yeni bilgi edinme sürecini kolaylaşmasını sağlamaktadır (Donthu vd., 2021). Bu gelişmeler, bibliyometrik analiz karşısında diğer literatür tarama yöntemlerinin giderek işlevsiz hale gelmesine neden olmuştur (Ramos-Rodríguez ve Ruiz-Nevara, 2004) Şekil 1'de bibliyometrik analizin yıllar içinde kullanım sayılarına ait grafik verilmiştir (Donthu vd., 2021).

Şekil 1: Bibliyometrik Analiz Kullanan Makalelerin Sayısı



Kaynak: Donthu vd., (2021: 286)

#### 3.2. Tematik Analiz

Tematik analiz, nitel verilerin temalarını tanımlama, analiz etme ve yorumlamada kullanılan yöntemdir. Genel olarak tematik analiz kodlar ve temalar oluşturularak erişilebilir ve sistematik bir ilerleyiş ortaya koyar (Clarke ve Braun, 2013). Bu doğrultuda kodlar, araştırma sorusuna dair ilginç özellikleri yakalayan en küçük analiz birimidir. Temalar ise araştırmacının analitik gözlemlerini düzenlemesini ve raporlamasını sağlar (Braun ve



Clarke 2006). Tematik analizden diğer yöntemlerden en temel farkı araştırmayla ilgili olarak araştırma sorusu, veri toplama ve anlam üretme gibi alanlarda sağladığı esnekliktir (Clarke ve Braun, 2017).

### 3.3 SPAR-4 SLR Protokolü

Sistemik Literatür İncelemeleri Gereçekleri (SPAR-4 SLR) protokolünün amacı, araştırmacıların sistemik literatür incelemelerinde kararlarını yönlendirmelerini ve gerekçelendirmelerini sağlamak amacıyla oluşturulmuş bir protokoldür. Bu doğrultuda araştırmacılar literatür taramalarına “ne, neden, ne zaman, nasıl, kim” sorularını sorarak başlarlar (Paul vd., 2021). SPAR-4 SLR Protokolü, araştırmacıların nesnel ve şeffaf bir çalışma sürdürmelerini sağlar (Khan vd., 2023). Bu faydaları sağlayan şey ise, SPAR-4 SLR’in sahip olduğu protokollerdir. Bu protokoller araştırmacıların öngörülü davranmasını sağlar ve araştırma için bütünlüğün oluşturulmasına destek verir (Paul vd., 2021). Bu protokol, diğer protokollerde yer alan birtakım sınırlılıkların kaldırılmasını sağlamak amacıyla oluşturulmuştur. Protokol üç aşamadan ve bu üç aşamaya bağlı toplam altı aşamadan meydana gelmektedir (Paul vd., 2021). Protokole ait aşama detayları Şekil 2’de yer almaktadır.

#### SPAR-4 PROTOKOLÜ

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##### Kimlik Saptama/Tanımlama

- İlgili Alan: Self Servis Teknolojisi
- Araştırma Soruları: Self servis teknolojisinin gelişimi hakkında analizler ve araştırılan makalelerin eğilimi nedir?
- Kaynak Türü: Makale
- Kaynak Kalitesi: WoS

##### Edinme

- Arama Mekanizması ve Materyal Edinimi: WoS
- Arama Dönemi: 1992-2024
- Aranılan Anahtar Kelimeler: “Self Service Technology” anahtar sözcük ve “başlık”
- Arama Sonuçlarından Elde Edilen Toplam Bilimsel Çalışma Sayısı: 462

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##### Organizasyon

- Düzenleme/Organizasyon Kodları: Makale Performansı, Ülke Performansı, H-indexlerine SST Hakkında Katkı Sağlayan Etkili Yazarlar, Kurumların Atıf Analizi, Anahtar Sözcük Analizi, Yazarların Ortak Atıf Analizi, Metinlerin Bibliyografik Eşleşme Analizi, Yazarların Bibliyografik Eşleşme Analizi
- Organizasyon Çerçevesi: Geçerli değil

##### Aritma / Arındırma

- Hariç Tutulan Bilimsel Çalışma Türü (ve Her Biri Hariç Tutma Türü İçin Toplam Sayı): 11
- Dahil Edilen Bilimsel Çalışma Türü (ve Dahil Edilen Toplam Bilimsel Çalışma Sayısı): 451

#### Değerlendirme/ Değer Tahmini

- Analiz Yöntemi: Bibliyometrik  
Gündem (araştırma) Önerme Yöntemi: Scopus, İçerik Analizi

#### Raporlama

- Raporlama Kural(lar)ı: Ağ şekilleri, tablolar
- Sınırlama(lar): WoS veritabanı sadece kullanıldı, bibliyometrik analiz
- Destek Kaynağı/Kaynakları: Kullanılmadı

Kaynak: Paul vd., (2021: 6)

#### 4. ARAŞTIRMANIN AMACI

Nicel veriler ve sayısal ölçümler kullanılarak yapılan bibliyometrik analiz, self servis teknolojisi konusundaki çalışmaların geniş bir bakış açısıyla değerlendirilmesini ve araştırmacılara sunulmasını amaçlamaktadır.

#### 5. VERİ VE ANALİZ

Birçok akademik çalışmada farklı bibliyometrik analiz araçları kullanılmaktadır ve bu araçlar arasında VOSviewer, işlevselliği açısından öne çıkan bir programdır. Bu çalışmada da VOSviewer programının tercih edilme nedeni, literatürdeki evrimleri, ilişkileri ve yeni kavramları keşfetmek isteyen araştırmacılara sunduğu kolaylıklardır. Programın görselleştirme, haritalama ve çok boyutlu analiz imkânları, veri setlerinin derinlemesine incelenmesine olanak sağlamaktadır (Wong, 2018). Bu çalışmada, Web of Science veri tabanı tercih edilmiştir ve bu tercih, araştırmaların güvenilirliği açısından kritik bir faktördür. Web of Science veri tabanı, ileri düzey veri analizi için gelişmiş arama göstergelerine sahip olmanın yanı sıra çeşitli kontrol mekanizmalarını da içermektedir. Bu durum, yayın etiği açısından nitelikli ve güvenilir çalışmaların kapsanmasını sağlamaktadır. Ek olarak, farklı disiplinlerden geniş kapsamlı bir veri koleksiyonuna erişim imkânı sunmaktadır (Birkle vd., 2020).

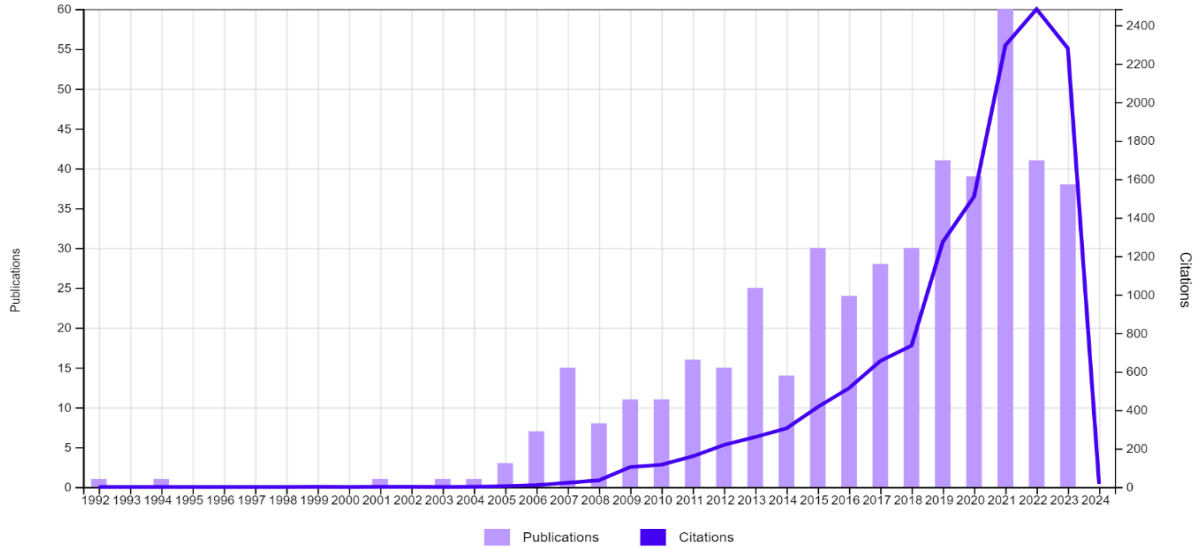
19.01.2024 tarihinde, “self service technology” anahtar sözcüğüyle Web of Science’da “başlık” seçilerek yapılan aramada 462 sonuca ulaşıldı. Disiplinler açısından çalışmaların büyük çoğunluğu yönetim (389) olmak üzere, robotik (10), konaklama, eğlence, spor ve turizm (9), tedarik zinciri ve lojistik (5), sosyal psikoloji (5), iletişim (4), insan bilgisayar etkileşimi (3), ekonomi (3), sağlık okuryazarlığı ve teletıp (2), yürüyüş ve duruş (2), bilgisayarla görme ve görüntüleme grafik (2), eğitim ve eğitimsel araştırma (2), iktisat teorisi (2), viroloji genel (1), palyatif bakım (1), sırt ağrısı (1), beslenme ve diyetetik (1), modern tarih (1), güç sistemleri ve elektrikli araçlar (1), ulaşım (1), tasarım ve imalat (1), hukuk (1), sürdürülebilirlik bilimi (1), psikiyatri ve psikoloji (1), beşeri coğrafya (1) ve çevre bilimleri (1) alanlarına yönelik olup 11 kayıt analiz edilen alanda veri içermediği için dahil edilmemiştir. Ulaşılan veri, yazar-atıf-dergi ülke-kurum ve anahtar sözcük analizleri üzerinden incelenmiştir.

#### 5.1. Corpus Performansı

Corpus performansı, bilimsel araştırmaların yayınlanma ve alıntılanma süreçlerindeki etkinliği ve etkileşimi incelemektedir (Jones, 2022). 1992'den 2024'e kadar olan zaman diliminde yayınlanan makale sayısı ve alıntı sayısındaki değişimleri incelediğimizde önemli trendler ortaya çıktığı görülmektedir. Bu veriler, bilimsel araştırmaların evrimini ve bu alandaki etkinliğin dinamiklerini anlamaya yardımcı olmaktadır. Makale sayısı, özellikle 2007 ve 2013 yıllarında belirgin bir artış göstermiştir. 2021'de en fazla çalışmanın yapıldığı ve daha sonra çalışmalarda bir azalma olduğu görülmektedir. Bu dönemde, araştırmacılar ve akademisyenler tarafından yapılan çalışmaların sayısındaki artış, alanda gerçekleşen yoğun faaliyeti göstermektedir. Diğer yandan, alıntı sayısındaki değişim daha dinamik bir tabloyu yansıtmaktadır. 2018'den itibaren alıntı sayısında gözlemlenen

çarpıcı bir şekilde artış, yayınlanan makalelerin dikkate değer bir şekilde etkileşime girdiğini ve alıntılındığını göstermektedir. 2022 yılında alıntı sayısının zirveye ulaşması, bu dönemde yapılan araştırmaların geniş bir akademik kitle tarafından önemsendiğini ve referans alındığını göstermektedir.

Şekil 3: Yıllara Göre Makale ve Alıntı Sayısı



Kaynak: Web of Science (2024)

## 5.2. Makale Performansı

SST alanında en çok alıntılanan 10 makale Tablo 1’de verilmiştir.

Tablo 1: Makale Performansı

Sayı.	Makaleler	Atıflar	Kaynaklar	Başlık
1	Dong, B., Evans, KR., & Zou, S. (2018)	458	39	The effects of customer participation in co-created service recovery
2	Chung, N., Han H., & Joun, Y. (2015)	267	82	Tourists' intention to visit a destination: The role of augmented reality (AR) application for a heritage site
3	Liljander, V., Gillberg, F., & Van Riel, A. (2006)	249	61	Technology readiness and the evaluation and adoption of self-service technologies
4	Weijters, B., Rangarajan, Falk., D. & Schillewaert, N. (2007)	215	81	Determinants and outcomes of customers' use of self-service technology in a retail setting
5	Alalwan, AA., Dwivedi, YK., Rana, NP., & Algharabat, R. (2018)	201	139	Examining factors influencing Jordanian customers' intentions and adoption of internet banking: Extending UTAUT2 with risk
6	Van Pinxteren, MME., Wetzels RWH., Rüger, J., Pliymaekers, M., & Wetzels M. (2019)	182	106	Trust in humanoid robots: implications for services marketing
7	Sheehan, B., Jin, HS., & Gottlieb, U. (2020)	175	68	Customer service chatbots: Anthropomorphism and adoption
8	Lin, JSC., & Hsieh, PL. (2011)	167	73	Assessing the Self-service Technology Encounters: Development and Validation of SSTQUAL Scale
9	Lin, JSC., & Chang, HC. (2011)	161	92	The role of technology readiness in self-service technology acceptance
10	Giebelhausen, M.,	160	60	

Robinson, SG., Sirianni, NJ.,  
& Brady, MK. (2014)

Touch Versus Tech: When Technology  
Functions as a Barrier or a Benefit to  
Service Encounters

Dong, Evans ve Zou'nun (2008) çalışması, en çok atıf alan self servis teknolojisi çalışması olarak dikkat çekmektedir. Çalışmasında, müşteri ilişkilerini iyileştirmede self servis teknolojisinin yüksek düzeyde rol oynadığı görülmüştür. Chung, Han ve Joun'un (2015) yılında ki çalışmalarında birçok turizm organizasyonu tarafından akıllı turizmin bir parçası olan self servis teknolojilerine değinilmektedir. SST'ler arasında artırılmış gerçeklik (AR), destinasyon ve cazibe merkezleri hakkında bilgi sağlamak için geliştirilmiştir. Liljander, Gillberg, Van Riel 'in (2006) çalışması, şirketlerin müşterilerini yeni self servis teknolojilerini benimsemeye ikna etmekte zorlandığı ve SST'lere yönelik müşteri tutumlarını ve benimseme davranışlarını etkileyen faktörleri anlamının giderek daha önemli hale geldiği vurgulanmaktadır. Ayrıca teknolojik hazırlığının (TR) müşterilerin havayolu check-in işlemi için, SST kullanmaya yönelik tutumları üzerindeki etkileri self-servis check-in benimseme davranışlarını ve yeni bir self-servis check-in'in İnternet üzerinden değerlendirmelerini, algılanan hizmet kalitesi, tatmini ve sadakat açısından araştırmaktadır. Weijters, Rangarajan, Falk ve Schillewaert (2007) çalışmasında perakendecilerin üretkenliği artırma, hizmet kalitesini iyileştirme ve maliyetleri düşürmeyi amaçlayan SST'ne giderek daha fazla yönelmeye başladığını belirtmiştir. SST kullanımının müşteri tutumlarına, teknoloji kullanımına, mağazada geçirilen zaman ve müşteri tatminine olan etkileri üzerinde durulmaktadır. Alalwan, Dwivedi, Rana ve Algharabat (2018) İnternet bankacılığının Ürdünlü müşteriler tarafından benimsenmesine yönelik faktörleri anlamak ve bu faktörleri açıklayan bir model geliştirmek amaçlanmıştır. SST olarak İnternet bankacılığının benimsenmesini etkileyen performans beklentisi, çaba beklentisi, hedonik motivasyon, fiyat değeri ve algılanan risk gibi faktörlere değinilmiştir. Van Pinxteren, Wetzels, Rüger, Pluymaekers ve Wetzels (2019) çalışması, antropomorfizm ve güvenin sürdürülebilir teknoloji benimsemesi üzerindeki etkilerini anlamak için görünüm ve sosyal işlevsellik özellikleri arasındaki farkı inceleyerek SST'nin benimsenmesi üzerine araştırmalara katkı sağlamaktadır. Sheehan, Jin ve Gottlieb (2020) çalışması, müşteri hizmetlerini otomatize etmek amacıyla kullanılan chatbotların, insanlarla etkileşimde sıkça yaşanan iletişim hatalarını incelemektedir. Ayrıca, bu iletişim hataları ile chatbotların kullanılma düzeyi arasındaki ilişkiyi araştırmaktadır. Lin ve Hsieh'in (2011) çalışması, SST'nin müşterilerin firmalarla etkileşimlerinde teknolojinin oynadığı rolü artırdığı ancak müşteri perspektifinden SST'lerin hizmet kalitesini sistematik olarak ölçen araçların yeterince geliştirilmediği vurgulanmaktadır. Bu nedenle çalışmada müşteri perspektifinden SST hizmet kalitesini ölçmeye yönelik 20 ögeli yedi boyutlu bir SSTQUAL ölçeği geliştirilmiştir. Lin ve Chang'ın (2011) çalışması, Teknoloji Kabul Modeli (TAM) üzerine önemli miktarda literatür olmasına rağmen, geçmiş araştırmaların tüketicilerin teknolojik hazırlığın SST'nin benimsenmesindeki rolünü göz ardı ettiği bir araştırma boşluğunu doldurmaktır. Giebelhausen, Robinson, Sirianni ve Brandy'in (2014) çalışması SST'nin müşteri ile çalışan arasındaki ilişkisini etkilediğine değinilerek yönetici açısından önemi vurgulanmıştır.

### 5.3. Ülke Performansı

Yapılan araştırmada, WoS platformunda 69 ülkenin katkısı olduğu belirlenmiştir. Tablo 2'de, konuya en fazla makaleyle katkı sağlayan ilk 10 ülke, yayın sayısı temelinde raporlanmıştır.

Tablo 2: Ülke Performansı

No	Ülke	Makale Sayısı	Yüzde
1	ABD	117	%25,490
2	ÇİN	64	%13,943
3	TAYVAN	51	%11,111
4	AVUSTRALYA	44	%9,586
5	GÜNEY KORE	39	%8,497
6	İNGİLTERE	30	%6,536
7	HİNDİSTAN	19	%4,139
8	MALEZYA	13	%2,832
9	FRANSA	12	%2,614

10	KANADA	11	%2,397
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SST konusunda yayınlanan makalelerin yaklaşık %26'si ABD kaynaklıdır. Çin, yaklaşık %14'lük oranla ABD'yi takip ederken, Tayvan %11 ile 3. sırada yer almaktadır. Avustralya %10 ve Güney Kore ise yaklaşık %9'luk oranla, SST hakkında makale yayınlayan ilk 5 ülke arasında yer almaktadır.

#### 5.4. H-indexlerine SST Hakkında Katkı Sağlayan En Etkili Yazarlar

SST konusunda katkı sağlayan en etkili yazarlar Tablo 3'te gösterilmiştir. Tablo 3 incelendiğinde, araştırmacıların yayınlarının alıntı sayılarına göre performanslarını açısından, h-indeksine dayalı olarak en etkili beş yazar şunlardır: Anna S Mattila, Rahman Zillur, David C. Yen, Wong Yiik Diew ve Kum Fai Yuen. Anna S Mattila'nın 229 çalışması toplamda 9,920 atıf almıştır. Rahman Zillur'un 113 çalışması bulunmakta ve 5,148 atıf almıştır. David C. Yen, 198 çalışmasına 7,263 atıf almıştır. Wong Yikk Diew, 211 çalışmasına 4,390 atıf almıştır. Kum Fai Yuen ise alana 201 çalışma sağlamış ve 4,202 atıf almıştır.

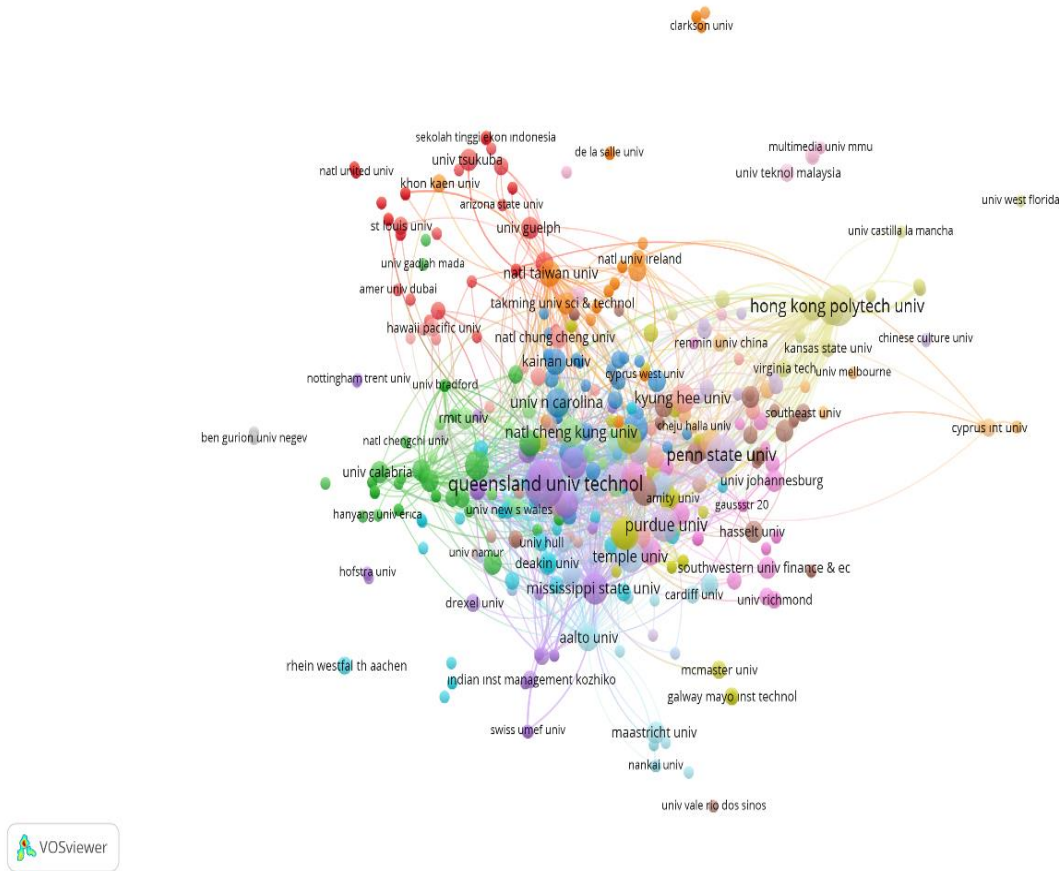
Tablo 3: SST Konusuna Katkı Sağlayan En Etkili Yazarlar

Sıra	Yazar	H-İndeks	Alıntı Sayısı	Yayın Sayısı
1	Anna S Mattila	51	9,920	229
2	Rahman Zillur	44	5,148	113
3	David C. Yen	43	7,263	198
4	Wong Yiik Diew	38	4,390	211
5	Kum Fai Yuen	34	4,202	201
6	Balaji Makam	31	2,944	68
7	Xueqin Wang	28	2,186	69
8	Sanjit Kumar Roy	28	2,378	86
9	Lee Hyun Joo	27	2,265	79
10	Kam Hung	26	2,270	69
11	Tor Wallin	20	2,625	37
12	Jungsun Kim	18	1,167	37
13	Collier Joel E.	18	1,557	24
14	Eleonora Pantano	15	932	28
15	Amanda Beatson	14	740	50
16	Jiun Sheng Chris	13	1,084	22
17	Yen-Ting Helena Chiu	13	786	8
18	Pei Ling Hsieh	12	792	20
19	Arun Kumar Kaushik	12	609	25
20	Kate Letheren	9	271	22
21	Allyn White	8	250	10
22	Cheng Wang	7	789	8
23	Chun Liu	7	172	12
24	Jennifer Harris	6	412	9
25	Nikolaos Kyrezis	5	163	5

## 5.5. Kurumların Atıf Analizi

Self servis teknolojisi konusunda yayın veren ve bu konuda önde gelen kurumların ağ haritası Şekil 4'te verilmiştir. En az bir eseri yayınlanmış ve en az bir atıf almış kurumları kapsamaktadır. 581 kurumun 501 tanesi bu eşik değerlerini karşılamaktadır. Bu bağlamda, Queensland University Technol (14 eser), Hong Kong Polytech University (10 eser) ve Penn State University (9 eser) gibi kurumlar, temsil ettikleri eser sayıları ile öne çıkmaktadır. En fazla atıf alan yayınların bağlı olduğu kurumlar arasında ise Mississippi State University (345 atıf), Penn State University (244 atıf) ve Hong Kong Polytech University (228 atıf) öne çıkmaktadır. Bu kurumlar, eserlerine yönelik yüksek atıf almış ve bu sayede dikkat çekmişlerdir. Analiz sonuçlarına göre, toplamda 19 küme ve 6276 bağlantı tespit edilmiştir. Bu durumda 501 kurum arasında toplam bağlantı gücü 7741 olarak belirlenmiştir. Bu veriler, kurumlar arası akademik etkileşimleri ve atıf ilişkilerini görselleştirmek adına önemli bir kaynak sağlamaktadır.

Şekil 4: Kurumların Atıf Ağı

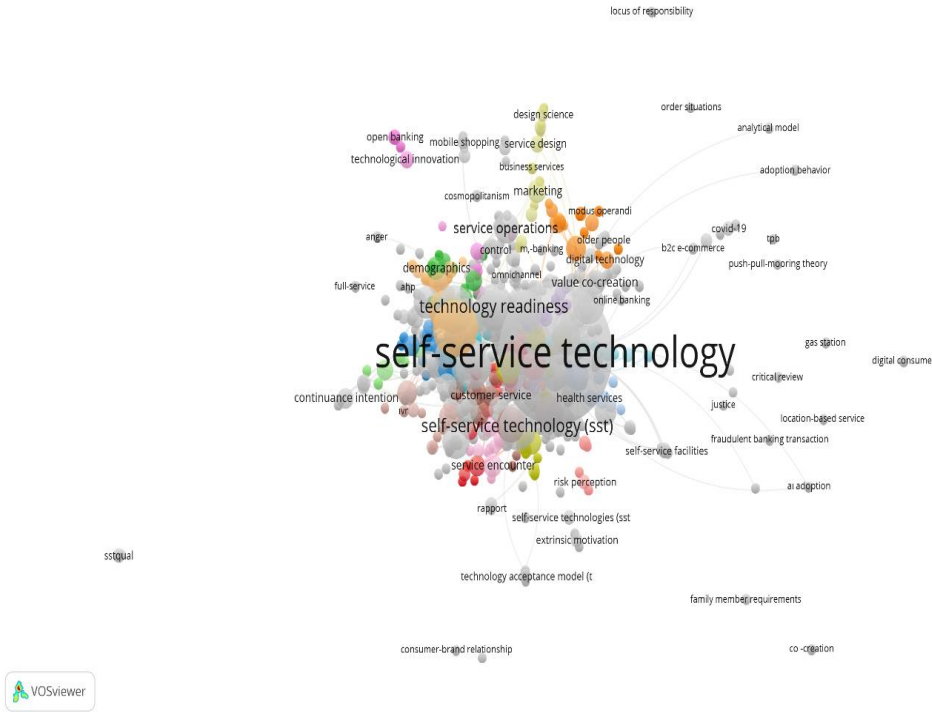


## 5.6. Anahtar Sözcük Analizi

Self-service technology ile ilgili yayınlarda en sık kullanılan anahtar sözcükler incelendiğinde, 192 kez tekrarlanan "self-service technology" (self servis teknolojisi), 30 kez tekrarlanan "self-service" (self servis), 24 kez tekrarlanan "customer satisfaction" (müşteri tatmini), 22 kez tekrarlanan "self-service technologies" (self servis teknolojileri) ve 21 kez tekrarlanan "self-service technology (sst)" (self-servis teknolojisi) ifadeleri öne çıkmaktadır. Toplam bağlantı gücü açısından en etkili ifadeler "self-service technology", "self service", "self-service technologies" ve "customer satisfaction" olarak belirlenmiştir. En az bir defa görülen ve aralarında ilişki bulunan gözlemler incelenmiş ve verinin tamamı bu eşik değeri karşılamaktadır. 1311 verinin analiz sonuçlarına göre, toplam 79 küme, 5008 bağlantı ve 5390 toplam bağlantı gücü tespit edilmiştir. Burada en yüksek sayıda bağlantıya sahip kavram self-service technology (863) olarak tespit edilerek sırasıyla self-service (139), self-

service technologies (107), customer satisfaction (103) ve self-service technology (sst) (95) olarak karşımıza çıkmaktadır.

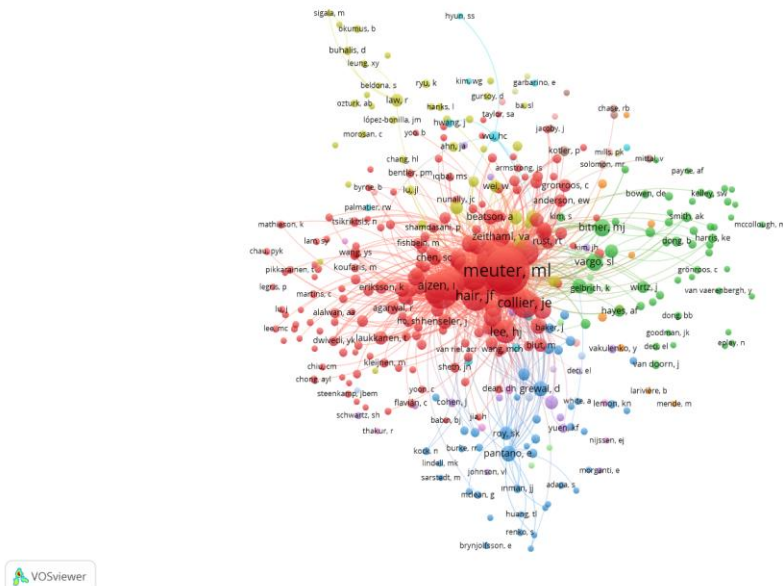
Şekil 5: Anahtar Sözcük Ağı



### 5.7. Yazarların Ortak Atıf Analizi

Farklı kaynaklara aynı yayında atıfta bulunan durum, co-citation (ortak atıf) olarak adlandırılır. Bu analizi oluşturulurken, bir yazarın minimum atıf sayısı "10" eşik değeri seçilmiştir. 12157 yazarın 388 tanesi bu eşik değeri karşılamaktadır. Çalışma sonucunda toplamda 14 küme, 40453 bağlantı ve 185810 toplam bağlantı gücü belirlenmiştir. Bu bağlamda, en fazla ortak atıf yapılan yazarlar sırasıyla Meuter (511), Venkatesh (406) ve Parasuraman (330) olarak belirlenmiştir.

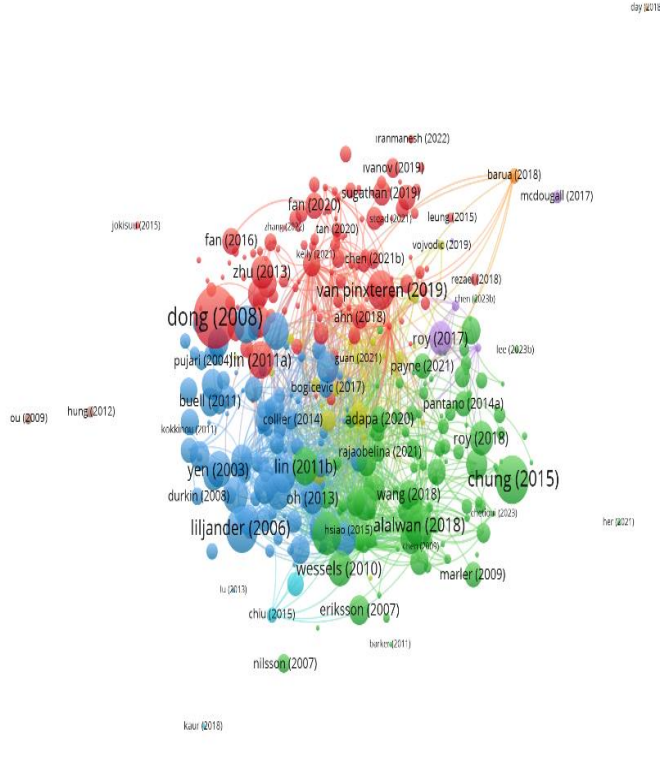
Şekil 6: Yazarların Ortak Atıf Analiz Ağı



## 5.8. Metinlerin Bibliyografik Eşleşme Analizi

Bibliyografik eşleşme, en az bir atıf almış olan eserler arasında yapılan analizle belirlenmiştir. Bu eşik değerini 379'u karşılamaktadır. Bu analiz sonucunda, 8 küme, 48804 bağlantı ve toplamda 151299 bağlantı gücü tespit edilmiştir. En yüksek bibliyografik eşleşmeye sahip yayınlar sırasıyla, 458 alıntı ile Dong (2008), 272 alıntı ile Chung (2015) ve 250 alıntı ile Liljander (2006) olarak belirlenmiştir. Toplam bağlantı gücünün en yüksek olduğu eserler ise Iqbal (2018), Alalwan (2016) ve Demoulin (2016) olmuştur.

Şekil 7: Metinlerin Bibliyografik Eşleşme Ağı



## 5.9. Yazarların Bibliyografik Eşleşme Analizi

En az bir eser yayınlamış ve en az bir atıf almış olma kriteri üzerinden seçilen 1094 veriden 917'si bu eşik değerini karşılamaktadır. Analiz sonucunda, 32 farklı küme belirlenmiş ve toplamda 286899 bağlantı ile 1345843 toplam bağlantı gücü elde edilmiştir. Bu analizin öne çıkan yazarları ise, 558 alıntı ile Cheng Wang (26372 bağlantı gücü), 515 alıntı ile Joel E. Collier (21154 bağlantı gücü) ve 269 alıntı ile Hyun-Joo Lee (20546 bağlantı gücü) olmuştur.



Şekil 8: Yazarların Bibliyografik Eşleşme Ağı



## 6. SONUÇ

Bu çalışma, self servis teknolojileri alanındaki literatürü ve yapılan araştırmaların genel eğilimlerini değerlendirmekte, gelecekteki araştırmacılara ve uygulayıcılara yol gösterici bilgiler sunmaktadır. Bu alandaki bilgi temelinin incelemek amacıyla yapılan bibliyometrik analiz, self-servis teknolojilerinin giderek artan bir öneme sahip olduğunu ortaya koymaktadır. Analiz sonuçlarına göre, self-servis teknolojileri üzerine yapılan makale sayısının artış eğiliminde olduğu görülmektedir. 1992 yılından bu yana yayınlanan makale sayısında sürekli bir artış yaşanmıştır. Bu durum, araştırmacıların ve endüstri profesyonellerinin self-servis teknolojilerine olan ilgisini ve bu alanda gerçekleşen gelişmeleri göstermektedir.

Çalışmanın analizi, self-servis teknolojileri alanında öne çıkan yazarları, ülkeleri, kurumları, anahtar sözcükleri, metinleri ve makale performansını belirlemiştir. En üretken yazarlar olarak göze çarpan isimler arasında Anna S Mattila, Rahman Zillur, David C. Yen, Wong Yiik Diew, Kum Fai Yuen, yer almaktadır. Ülkeler bazında incelendiğinde ise ABD, Çin, Tayvan, Avustralya, Güney Kore gibi öncü ülkelerin olduğu görülmektedir. Makale performanslarına bakıldığında ise işletme, teknoloji ve hizmet sektörlerine odaklanan dergilerin öne çıktığı görülmektedir. Bibliyometrik analiz aynı zamanda self-servis teknolojileri alanındaki anahtar kelimeleri de ortaya koymuştur. Bu anahtar kelimeler; "self-service technology" (self servis teknolojisi), "self-service" (self servis), "customer satisfaction" (müşteri tatmini), "self-service technologies" (self servis teknolojileri) ve "self-service Technology (sst)" (self-servis teknolojisi). Çalışmanın sonuçlarına dayanarak, self-servis teknolojileri alanında yapılan mevcut akademik çalışmaların, bu teknolojilerin işletmeler, müşteriler ve endüstri üzerindeki olumlu etkilerini vurguladığı görülmektedir. Ancak, bu alanda hala keşfedilmemiş birçok konu bulunmaktadır. Örneğin, self-servis teknolojilerinin sürdürülebilirlik üzerindeki etkileri, farklı sektörlerdeki adaptasyon stratejileri gibi konular gelecekteki araştırmalar için potansiyel alanlar olabilir. Bu çalışma, self-servis teknolojileri konusunda yapılan araştırmaların genel bir bakışını sunarak, bu alandaki bilgi üretiminin daha da geliştirilmesine ve gelecekteki araştırmalar için rehberlik etmeye yönelik önemli bir kaynak oluşturmaktadır.

Çalışmada, "self-service technology" anahtar kavramı üzerinden Web of Science (WoS) platformunda yapılan sorgulama sonucunda listelenen İngilizce, Çince ve Hırvatça dilindeki makaleler değerlendirmeye alınmıştır. Gelecekteki araştırmalar, farklı platformlardan ve dillerden yapılan çalışmalarını da analizlere dahil ederek bu alandaki kapsamlı bakış açısını genişletebilirler. Ayrıca, bu çalışma yalnızca "self-service technology" anahtar terimi üzerinden gerçekleştirilen bir arama sorgusuna odaklanmıştır. İleriki çalışmalar, örneğin kavramı, belirli bir sektörle birleştirerek, daha spesifik bir araştırma yaparak alana yönelik daha derinlemesine ve özelleştirilmiş bir perspektif sunabilir.

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## Vergi Gelirlerinin Kamu Harcamalarını Karşılabilme Durumu: Türkiye’de Seçilmiş İller Özelinde Bir Araştırma

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**Özet:** Günümüzde kamu gelirlerinin büyük bir bölümü vergi gelirlerinden sağlanmaktadır. Maliye politikasının önemli bir aracı olan vergiler, maliye politikasının başlıca amaçlarından birisi olan bölgesel gelir eşitsizliğini azaltma görevinde önemli bir finansman kaynağı olarak karşımıza çıkmaktadır. Bu çalışma, vergi gelirlerinin kamu harcamalarını karşılama oranlarını seçilmiş iller bazında araştırmayı konu edinmektedir. Seçilmiş iller temelinde, 2004-2023 dönemleri için öncelikle il bazında toplanan vergiler ve daha sonra bu illere yapılan kamu harcamaları araştırılmıştır. Vergi gelirlerinin, kamu harcamalarını karşılama oranı hesaplanmıştır. Vergi gelirleri açısından İstanbul ve İzmir illerinde bir yoğunlaşma; kamu harcamaları açısından ise ülke genelinde dengeli bir dağılım gözlenmiştir. Özellikle İstanbul ve İzmir illeri vergi gelirleri ile kendisine yapılan kamu harcamalarını finanse etmektedir. Hatta İstanbul ilinin kamu harcamalarını karşılama katsayısının yüksekliği İstanbul ilinin kamu harcamaları bakımından diğer illeri finanse ettiğini göstermektedir. Diğer illerde ise il bazında toplanan vergilerin o ile yapılan kamu harcamalarını karşılamadığı görülmektedir. Bu durum, kamu gelirlerinin yüksek olduğu bölgelerden düşük olduğu bölgelere doğru bir kaynak transferinin yapıldığını göstermektedir

**Anahtar Kelimeler:** Vergi Gelirleri, Kamu Harcamaları, Bölgesel Kalkınma

### 1. GİRİŞ

Maliye politikası, makroekonomik dengenin sağlanmasında ve sürdürülmesinde büyük önem arz etmektedir. Maliye politikasının devamlılığı için mali yapının sürdürülebilir olması gerekmektedir ki bu durumda borç yönetiminin uygun politikalarla yönetilmesini içerir. Böylelikle, vergi politikaları ve kamu harcamalarının planlanması büyük önem arz eder. Kamu harcamaları, makroekonomik dengenin sağlanması için kullanılırken (potansiyel çıktı düzeyine ulaşmak, ekonomik büyümeyi sağlamak, finansal piyasalarda dengeyi sağlamak vb..) aynı zamanda ülkenin kalkınması için de önemli bir araç haline gelmektedir. Bölgeler arası eşitsizliklerin giderilmesi, bölgelerin itici gücünü oluşturan sektörlerin teşvik edilmesi de önemli hedefler arasında bulunmaktadır.

Her ülkede, coğrafik, siyasal ya da ekonomik sebepler nedeniyle bölgelerin gelişmişlik düzeyleri farklılıklar göstermektedir. Bu farklılıklar nedeniyle bazı bölgeler dezavantajlı durumda olurken, bazı bölgelerin de avantajlı hale geldiği görülmektedir. Sosyal devletin de önemli unsurlarından birisi olan, bölgeler arası eşitsizlikleri gidermek, kamu politikasının önemli bir amacını oluşturmaktadır. Türkiye’de bölgesel dengesizlikleri gidermeye yönelik politikalar “Kalkınma Planları” çerçevesinde ele alınmış, bölge ve iller arasındaki eşitsizliklerin giderilmesi esas hedef olarak belirlenmiştir (Dökmen ve Tekbaş: 2011).

Bu kapsamda bu çalışmanın amacı, Türkiye’de coğrafi bölgeleri temsilen belirlenen iller bazında yapılan kamu harcamalarını ve tahsil edilen vergileri değerlendirmek ve bölgeler arasındaki farklılıkları betimsel olarak ortaya koymaktır. Bu amaçla, çalışmanın 2. bölümünde öncelikle, Türkiye literatüründe bu alanda yer alan sınırlı sayıda çalışmaya yer verilecek ve daha sonra toplam kamu gelirlerinin, vergi gelirlerinin ve kamu harcamalarının yıllar içerisindeki seyri incelenecektir. Çalışmanın 3. bölümünde, Türkiye’de seçilmiş iller kapsamında vergi gelirleri ve kamu harcamaları karşılaştırılacak ve vergi gelirlerinin kamu harcamalarını karşılayabilme katsayıları yorumlanacaktır.

### 2. TÜRKİYE’DE KAMU GELİR ve HARCAMALARININ YILLAR İTİBARIYLA SEYRİ

Türkiye’de kamu harcamaları ve kamu gelirlerinin bölgesel niteliğini inceleyen ilk öncü çalışma Kaya (2009) çalışmasıdır. Kaya (2009), il bazında ödenen vergiler ile o ile yapılan kamu harcamalarını karşılaştırmış ve Batı illerinden daha fazla vergi geliri elde edildiği buna karşılık ise harcamaların İç Anadolu, Doğu ve Güney Doğu Anadolu bölgelerinde daha yoğun olduğu sonucuna ulaşmıştır. Dökmen ve Tekbaş (2011), Düzey 1 bölgelerini inceledikleri çalışmalarında, kamu harcamalarının ihtiyaca yönelik dağıtıldığını ve dezavantajlı olan bölgelerde eşitsizliği gidermek amacıyla daha fazla kamu harcaması yapıldığı sonucuna ulaşmıştır. Ertekin ve Hayat (2022), kamu gelirleri ve harcamalarını iller arasında kümelenme analizi ile incelemiştir. Çalışmalarında, kamu bütçesi

yoluyla iller arasındaki eşitsizliği gidermek için yerel ihtiyaçlara uygun kaynak transferi yapıldığı sonucuna ulaşmışlardır. Türkiye bağlamında, literatürde yer alan çalışmaların sınırlı sayıda olduğu görülmektedir.

Çalışmanın bu bölümünde, öncelikle kamu gelirlerini oluşturan kalemlerin yıllar içerisindeki seyri sunulmuştur. 2003 yılında çıkarılan 5018 Sayılı Kamu Mali Yönetimi ve Kontrol Kanunu (KMYKK) ile bütçe usul kurallarında köklü değişikliğe gidilmiştir bu sebeple 2004 yılı ve sonrası dönemlerine tabloda yer verilmiştir. Türkiye'nin son dönemlerde yaşadığı yüksek enflasyon nedeniyle, kalemlerdeki değişikliklerin daha net takip edilebilmesi için Tablolarda oransal büyüklükler verilmiştir. Tablo 1'den takip edilebileceği gibi; kamunun yıllar içerisindeki en büyük gelir kaynağını (ort. % 85) vergi gelirleri oluşturmaktadır. Bununla beraber, zaman içerisinde vergi gelirleri artarken, kamu sermayeli bankalar ve diğer kuruluşlardan elde edilen vergi dışı normal gelirlerin azalma eğiliminde olduğu görülmektedir.

Tablo 1: Kamu Gelirlerini Oluşturan Temel Başlıklar (2004-2022)

Bin TL, %	2004	2010	2015	2020	2021	2022
<b>GenelBütçe</b>	120.678.255	246.869.333	466.679.075	1.005.017.931	1.370.732.059	2.747.757.752
<b>Gelirleri</b>	(%100)	(%100)	(%100)	(%100)	(%100)	(%100)
I. Vergi Gelirleri	% 83.17	% 85.29	% 87.38	%82.90	% 85	% 85.65
II. Teşebbüs ve Mülk. Gelirleri	% 5.12	% 3.97	% 4.21	% 6	%4.05	%3.81
III.Bağışlar ve Yardımlar	% 0.91	% 0.39	% 0.25	%0.83	%0.82	%1.01
IV.Faizler, Paylar ve Cezalar	% 10.65	% 8.88	% 6.22	% 9.40	%9.40	%8.98
V.Sermaye Gelirleri	% 0.13	% 1.36	% 1.70	% 0.75	% 0.64	%0.44

Kaynak: <https://muhasebat.hmb.gov.tr/merkezi-yonetim-butce-istatistikleri> sitesinden veriler alınmış, yazarın kendi hesaplamaları kullanılmıştır.

Türkiye'de kamu harcamalarının seyri (2004-2022) Tablo 2'de gösterilmektedir. Harcama kalemlerinin genel kamu bütçesindeki dağılımı incelendiğinde; 2010 yılına kadar toplam harcama içindeki en yüksek payın faiz ödemeleri ve cari transfer ödemeleri olduğu görülmektedir. 2010 yılı ve sonrasında faiz ödemeleri azalmış, cari transferler artmıştır. Personel harcamaları, Sosyal Güvenlik Kurumu primleri, Mal ve hizmet satın alımı, sermaye giderleri kalemlerinde çok büyük değişiklikler olmamıştır.

Tablo 2: Kamu Harcamaları (2004-2022)

Bin TL, %	2004	2010	2015	2020	2021	2022
<b>Harcamalar</b>	151.121.280	288.191.564	491.864.455	1.183.163.137	1.576.863.008	2.888.034.290
	(%100)	(%100)	(%100)	(%100)	(%100)	(%100)
<b>I.Personel Harcamaları</b>	%16.81	%19.22	% 21.91	%21.19	%19.07	% 18.55
<b>II.Sosyal Güven. Prim</b>	%2.31	%3.40	%3.71	%3.56	% 3.15	% 2.91
<b>III.Mal ve Hizmet Alım.</b>	% 7.89	%8.93	%7.41	%7.14	%7.44	%7.63
<b>IV.Faiz Gid.</b>	% 37.38	% 16.75	%10.77	%11.32	%11.47	%10.76
<b>V.Cari Trans.</b>	%28.15	%38.04	%41.92	%45.51	%42.93	%42.42
<b>VI.Sermaye Giderleri</b>	% 4.54	%7.76	%3.80	%3.92	%4.09	%4.42
<b>VII.Sermaye Transferleri</b>	% 1.10	%3.33	%8.96	%4.85	%5.44	%6.35
<b>VIII.Borç Verme</b>	% 1.76	%2.53	%1.50	%2.48	%6.38	%6.93

Kaynak: <https://muhasebat.hmb.gov.tr/merkezi-yonetim-butce-istatistikleri> sitesinden veriler alınmış, yazarın kendi hesaplamaları kullanılmıştır.

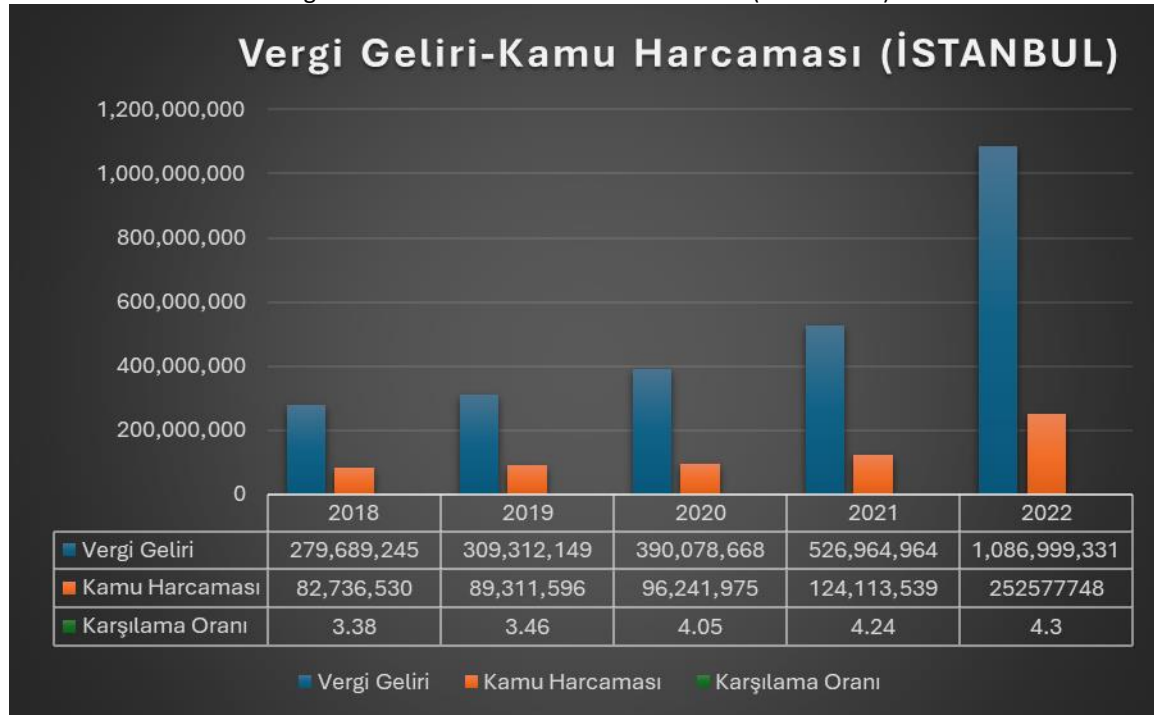
### 3. TÜRKİYE’DE SEÇİLMİŞ İLLER ÖZELİNDE VERGİLERİN KAMU HARCAMALARINI KARŞILAYABİLME ORANI

Çalışmada, Türkiye’de yer alan yedi bölgeyi temsilen, o bölgenin en yüksek Gayrisafi Yurt içi Hasılasına (GSYİH) sahip iller seçilmiştir. 2022 TÜİK verilerine göre Marmara Bölgesini İstanbul, Ege Bölgesini İzmir, Akdeniz Bölgesini Antalya, İç Anadolu Bölgesini Ankara, Karadeniz Bölgesini Samsun, Doğu Anadolu Bölgesini Malatya ve Güney Doğu Anadolu Bölgesini de Gaziantep illeri temsil etmektedir. Çalışmada, 2018- 2022 dönemleri için, belirtilen illere ait yıllık tahsil edilen vergi geliri verileri ile kamu harcamaları verileri kullanılmış ve veriler Muhasebat Genel Müdürlüğünden temin edilmiştir. İllere ait yıllık vergi geliri rakamının kamu harcamasına bölünmesiyle elde edilen gelir-gider karşılama oranları karşılaştırılmış ve aşağıda yer alan grafiklerde sunulmuştur.

Gelir-gider karşılama oranı 1’in üzerinde olan iller, kendi kendine yetebilen ve diğer illere de kaynak transferi gerçekleştirebilen illeri gösterirken, karşılama oranı 1’in altında olan iller diğer illerden kaynak transferi almaktadır.

İstanbul ilinde 2018-2022 yılları arasında tahsil edilen vergi gelirleri, İstanbul iline yapılan kamu harcamaları ve gelir- gider karşılama oranları Grafik 1’de sunulmuştur. Her iki değişkenin de yıldan yıla artış gösterdiği tabloda, enflasyonist sürecin hızlandığı ve Tüketici fiyat endeksinin %36,08 arttığı 2021 ve %64,27 arttığı 2022 yılında vergi geliri ve kamu harcaması artış hızının normale oranla daha yüksek seyrettiği gözlenmektedir. 2018 yılında vergi gelirlerinin kamu harcamalarını karşılama oranı 3.38 iken bu oran her yıl artmış ve 2022 yılında 4.3 katsayısına ulaşmıştır. Karşılama oranının bu kadar yüksek olmasının sebebi, İstanbul’un yarattığı GSYİH oranının yüksek olmasından ve önemli bir ticaret şehri olmasından kaynaklanmaktadır. İstanbul’un kendine kendine yetebilen bir olmasının yanısıra, diğer illere de kaynak transferinde bulunduğu söylenebilir.

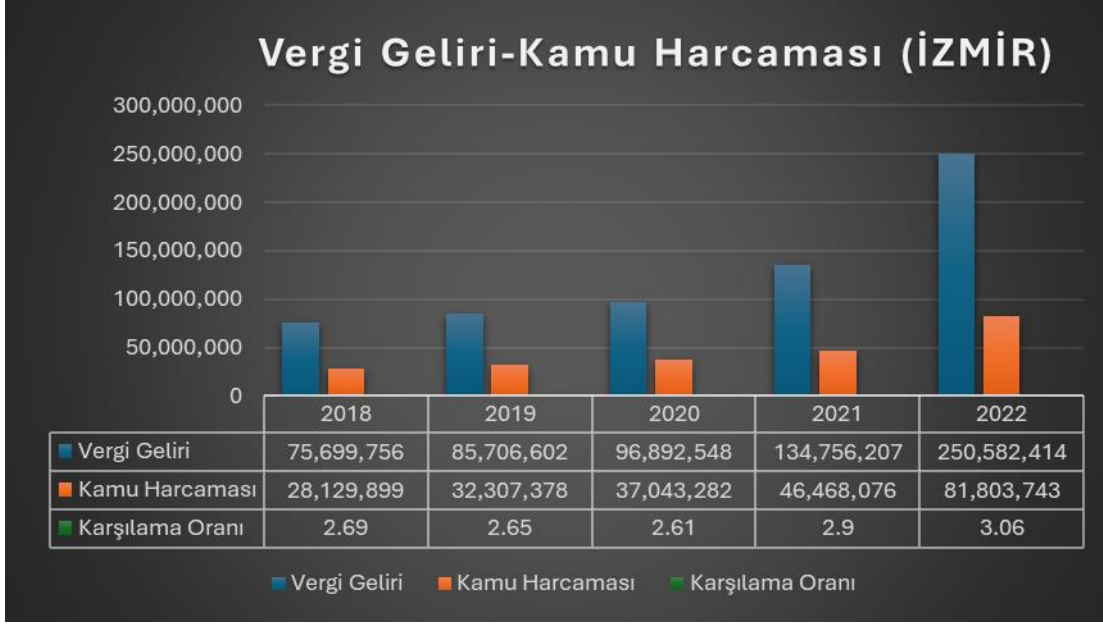
Grafik 1: İstanbul İlinde Vergi Gelirleri ve Kamu Harcamaları Oranları (2018- 2022)



Kaynak: <https://muhasebat.hmb.gov.tr/merkezi-yonetim-butce-istatistikleri> sitesinden veriler alınmış, yazarın kendi hesaplamaları kullanılmıştır.

Ege Bölgesini temsil eden İzmir iline ait tahsil edilen vergi gelirleri, İzmir iline yapılan kamu harcamaları ve karşılama oranları Grafik 2’de yer almaktadır. İzmir ilinde de enflasyonist süreçte her iki kalemin de hızla arttığı gözlenmektedir. Araştırılan dönemde, İzmir ilinde de tahsil edilen vergi gelirleri, İzmir iline yapılan kamu harcamalarının çok üzerindedir. 2018 yılında 2.69 olan karşılama oranı, 2022 döneminde 3.06’ya çıkmıştır. İstanbul ili gibi İzmir’in de diğer illere kaynak transferi yapan bir il olduğu söylenebilir. Bu sonuç Kaya (2009) çalışması ile de uyumludur. İzmir’de liman olması, Ege Bölgesi ihracatının büyük bir bölümünün buradan çıkması İzmir’in gelirlerini artırmaktadır.

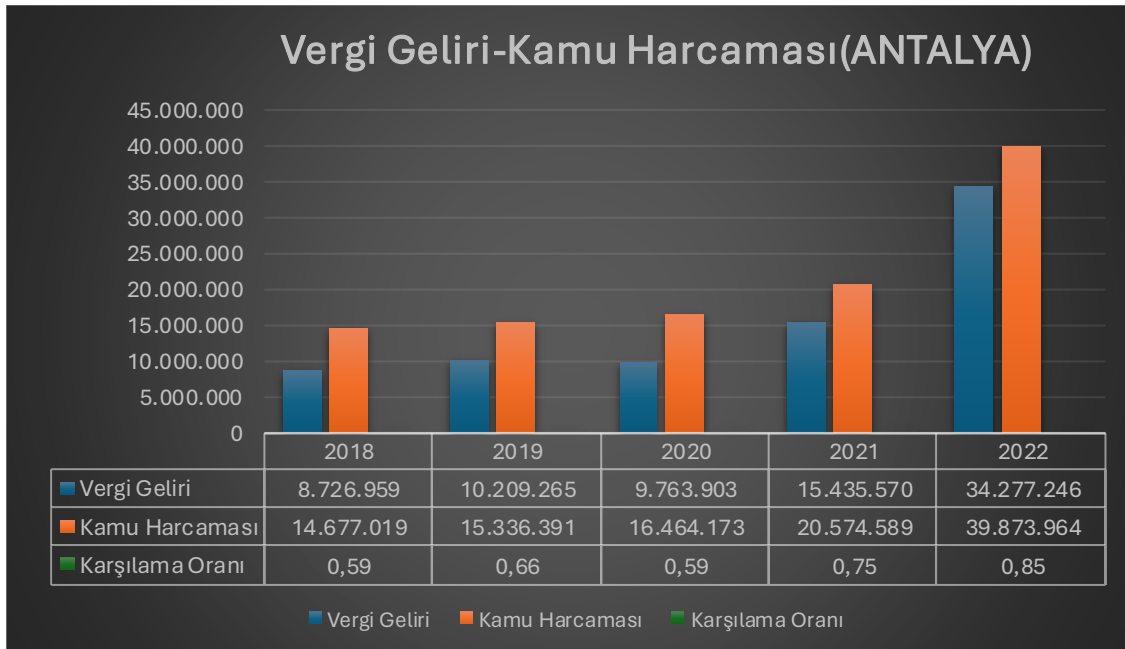
Grafik 2: İzmir İlinde Vergi Gelirleri ve Kamu Harcamaları Oranları (2018- 2022)



Kaynak: <https://muhasabat.hmb.gov.tr/merkezi-yonetim-butce-istatistikleri> sitesinden veriler alınmış, yazarın kendi hesaplamaları kullanılmıştır.

Grafik 3'te Antalya ilinde 2018-2022 yılları arasında tahsil edilen vergi gelirleri ve Antalya iline yapılan kamu harcamalarının miktarları gösterilmektedir. 2020 yılında toplanan vergi gelirleri hariç her iki değişkenin de yıldan yıla artış gösterdiği tabloda, enflasyonist dönemlerde vergi geliri ve kamu harcaması artış hızının normale oranla daha yüksek seyrettiği gözlenmektedir. Vergi gelirlerindeki artış hızının, Antalya iline yapılan kamu harcamalarındaki artış hızından daha hızlı artması sonucu karşılama oranı 2018 yılında 1'in altındayken (0.59), 2022 yılına gelindiğinde 1'e yaklaştı (0.85). Antalya ilinin son yıllarda önemli bir turizm merkezi olması, Antalya'dan tahsil edilen vergi gelirlerinin artmasını sağlamıştır.

Grafik 3: Antalya İlinde Vergi Gelirleri ve Kamu Harcamaları Oranları (2018- 2022)

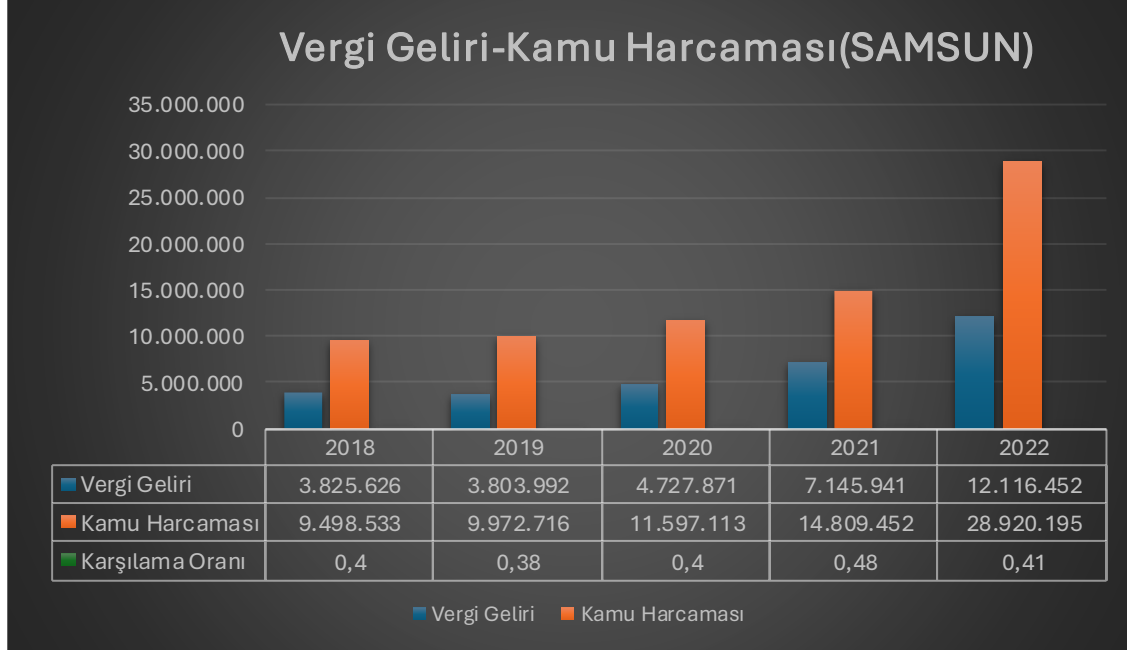


Kaynak: <https://muhasabat.hmb.gov.tr/merkezi-yonetim-butce-istatistikleri> sitesinden veriler alınmış, yazarın kendi hesaplamaları kullanılmıştır.

Grafik 4'te Samsun ilinde 2018-2022 yılları arasında tahsil edilen vergiler, yapılan kamu harcamalarının miktarları ve gelir-gider karşılama oranları yer almaktadır. Samsun ilinde karşılama oranı yıllar itibari ile çok

fazla değişkenlik göstermemiş ve 1'in altında seyretmiştir. Bu durum, Samsun ilinin kamu kaynakları açısından kendi kendini finanse edemediğini ve diğer illerden kaynak transferi sağladığını göstermektedir.

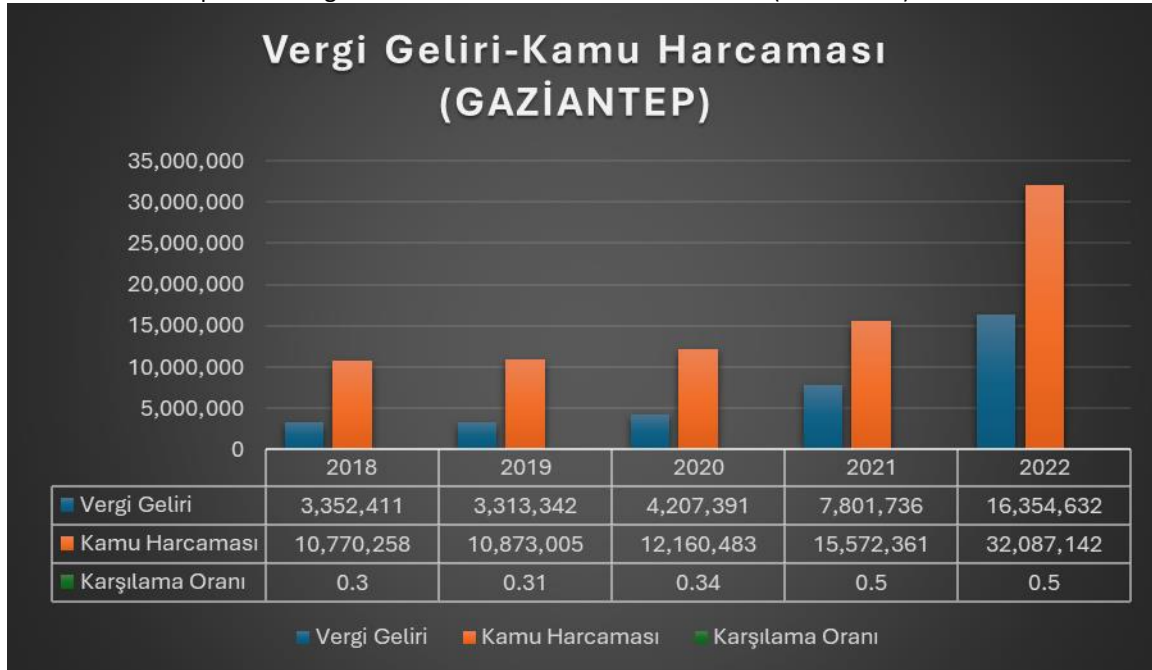
Grafik 4: Samsun İlinde Vergi Gelirleri ve Kamu Harcamaları Oranları (2018- 2022)



Kaynak: <https://muhasibat.hmb.gov.tr/merkezi-yonetim-butce-istatistikleri> sitesinden veriler alınmış, yazarın kendi hesaplamaları kullanılmıştır.

Gaziantep ilinde 2018-2022 yılları arasında tahsil edilen vergi gelirleri, yapılan kamu harcamalarının miktarları ve gelir gider karşılama oranları Grafik 5'te yer almaktadır. Gaziantep ilinin karşılama oranı yıllar içerisinde göreceli olarak artmakla beraber 1'in üzerine çıkmamıştır. Bölgeler arası eşitsizliği dengelemek adına, Gaziantep iline kaynak transferi yapılmaktadır.

Grafik 5: Gaziantep İlinde Vergi Gelirleri ve Kamu Harcamaları Oranları (2018- 2022)



Kaynak: <https://muhasibat.hmb.gov.tr/merkezi-yonetim-butce-istatistikleri> sitesinden veriler alınmış, yazarın kendi hesaplamaları kullanılmıştır.



Doğu Anadolu Bölgesi'ni temsilen GSYİH'sı en yüksek olan Malatya ili seçilmiştir. Malatya ilini diğer iller ile karşılaştırdığımızda en düşük vergi gelirlerinin kamu harcamalarını karşılama oranını sergilediği il olarak görülmektedir. Karşılama oranı yıllar içerisinde çok küçük bir oranda artış göstermiştir.

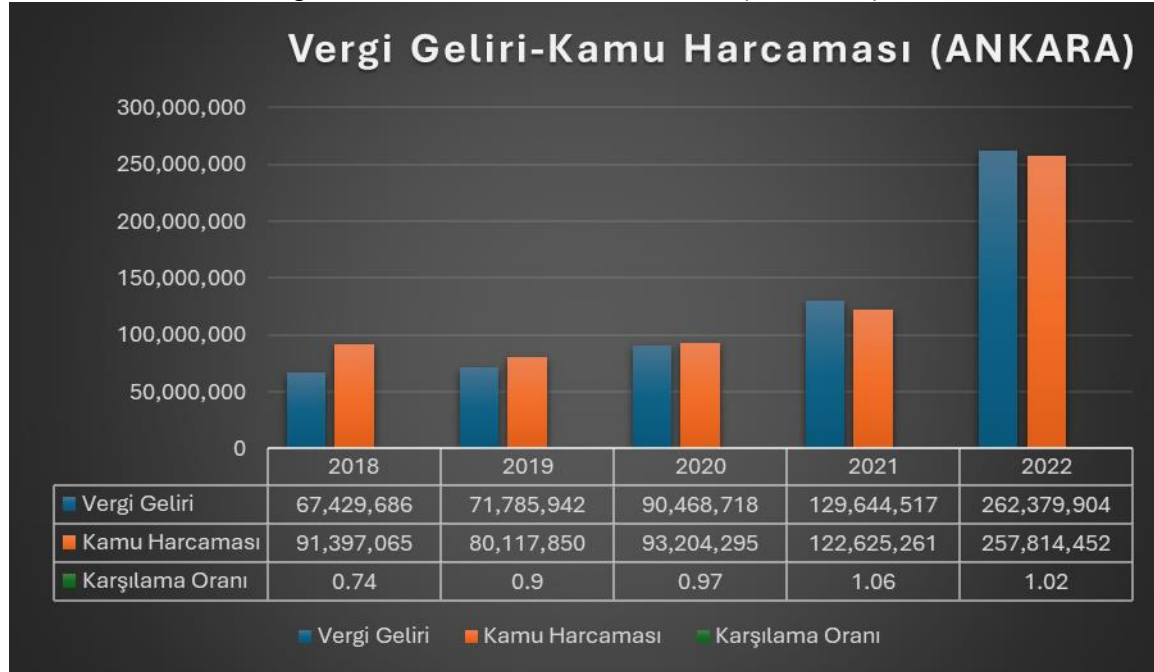
Grafik 6: Malatya İlinde Vergi Gelirleri ve Kamu Harcamaları Oranları (2018- 2022)



Kaynak: <https://muhasibat.hmb.gov.tr/merkezi-yonetim-butce-istatistikleri> sitesinden veriler alınmış, yazarın kendi hesaplamaları kullanılmıştır.

İç Anadolu Bölgesi'ni temsilen Ankara ilinin verileri Grafik 7'de sunulmuştur. Ankara ilinde vergi gelirleri 2018-2022 dönemleri arasında 4 kata yakın bir artış gösterirken, kamu harcamaları da 3 kata yakın bir artış göstermiştir. Karşılama oranları incelendiğinde ise, incelenen dönemin başında 1'in altında olan katsayısı 2022 yılında 1'in üzerine çıkmıştır. Böylelikle, Ankara'da kaynak transferi açısından kendi kendine yetebilen iller arasında yer almıştır.

Grafik 7: Ankara İlinde Vergi Gelirleri ve Kamu Harcamaları Oranları (2018- 2022)



Kaynak: <https://muhasibat.hmb.gov.tr/merkezi-yonetim-butce-istatistikleri> sitesinden veriler alınmış, yazarın kendi hesaplamaları kullanılmıştır.

#### 4.SONUÇ

Türkiye’de coğrafi bölgeleri temsilen seçilen iller temelinde, vergi gelirlerinin kamu harcamalarını karşılayabilme durumları araştırılmıştır. İstanbul ve İzmir illerinde karşılayabilme oranları bir hayli yüksek iken (>1) Ankara’da son dönemlerde 1’e yakın olarak hesaplanmıştır. Karşılama oranları 1’in üzerinde olan iller imalat sanayinin yoğun olduğu ve aynı zamanda dış ticaret için gerekli limanların olduğu illerdir. Bu iller üretim dinamikleri nedeniyle vergi kapasiteleri de yüksek olan illerdir. Vergi tahsilat rakamlarının yüksek olması nedeniyle kamu harcamaları bakımından hem kendilerini finanse edebilmekte hem de diğer illere kaynak transferi yapabilmektedirler. Buna karşın Malatya ili vergi gelirleri açısından diğer illere göre göreceli olarak düşük kalmaktadır. Analiz edilen diğer illerde kamu harcamaları yıllar içerisinde hep vergi gelirlerinin üzerinde seyretmiştir. Bölgesel eşitsilikleri gidermek, dezavantajlı oplan bölgelere destek vermek amacıyla bu illerde kalkınma planı temelinde politikalar uygulanmaktadır.

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## Halka Açık Şirketlerde Kurumsal Risk Yönetimi Bileşenlerine Yönelik Bir İnceleme

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**Özet:** İşletmelerde Kurumsal Risk yönetimi uluslararası örgütlerce belirlenen standartlar esas alınarak yapılandırılmaktadır. Risk yönetimiyle ilgili olarak düzenlenen standartlar iki işlev görmektedir. Birincisi; işletmelerin risk yönetimiyle ilgili asgari olarak yapılması gereken işlemleri ve süreçleri belirlemede rehberlik etme, ikincisi; risk yönetimi işlemlerinin başarısını değerlemede kriter olarak kullanılmasıdır. Standartların güncel versiyonları ve konuyla ilgili literatür incelendiğinde kurumsal risk yönetimiyle ilgili dört bileşenden söz edilebilir. Bunlar; yönetim ve kültür, kurumsal yönetim süreci, iç kontrol ve iç denetim ve performans analizidir. Bu dört bileşen Kurumsal Yönetime sahip şirketlerde Kurumsal Risk Yönetimi yapılandırılmasına yönelik algılar konusunda önemli ip uçları sağlamaktadır.

Türkiye’de 2012 yılından bu yana halka açık ve özellikle Kurumsal Yönetime tabii olan şirketler Kurumsal Risk Yönetimi bağlamında risk yönetimi uygulamalarını başlatmışlardır. Kurumsal Risk Yönetiminin entegre olarak uygulanması, literatür incelemesinde kolay bir iş olmadığı ve zamanla olgunlaştırılacak bir süreç olduğu vurgulanmaktadır. Bu çalışmanın amacı yukarıda belirtilen dört bileşenin seçili ve Kurumsal Yönetim uygulayan halka açık şirketlerde, bileşen bazında Kurumsal Risk Yönetimi uygulamalarına yönelik algılarını ortaya koymaktır. Araştırmada şirketlerin resmi internet siteleri incelenmiş olup açıklamış oldukları bilgilerden yararlanılmıştır. Kurumsal Risk Yönetimi, şirketlerin uzun vadeli ve sürdürülebilir başarıları için yaşamsal önem taşımaktadır. İşletmelerin karşı karşıya kaldığı riskler hem çok çeşitlilik göstermekte hem de küresel ölçekte etkili olmaktadır. Sürdürülebilir başarılar için işletmelerin risk almaları da gerekmektedir. Bu sistemin başarılı bir şekilde yürütülebilmesi standartlarda belirtilen bileşenleri ne derece iyi uygulayabildiği ile orantılıdır. Bu sebeple araştırma ülkemizde Kurumsal Risk Yönetiminin işleyişi ilgili olarak önemli bilgileri içermekte olup literatüre ve uygulayıcılara katkı sağlaması beklenmektedir. En az halka açık şirketler kadar kamu sektöründeki işletmeler için de önemli olduğundan bu konuda kapsamlı çalışmaların yürütülmesi önerilmektedir.

**Anahtar Kelimeler:** Kurumsal Risk Yönetimi, Risk Yönetimi, Kurumsal Risk Yönetimi Bileşenleri

### An Investigation into the Components of Corporate Risk Management in Publicly Listed Companies

**Abstracts:** Enterprise Risk management in businesses is structured on the basis of standards set by international organisations. The standards organised in relation to risk management serve two functions. The first is to provide guidance in determining the operations and processes that should be carried out as a minimum in relation to risk management of enterprises, and the second is to be used as a criterion in evaluating the success of risk management operations. When the current versions of the standards and the literature on the subject are analysed, four components related to corporate risk management can be mentioned. These are governance and culture, corporate governance process, internal audit and internal control, and performance analysis. These four components provide important clues about the perceptions towards structuring Enterprise Risk Management in companies with Corporate Governance.

In Turkey, since 2012, publicly traded companies, especially those subject to Corporate Governance, have initiated risk management practices within the context of Corporate Risk Management. In the literature review, it is emphasised that the integrated implementation of Enterprise Risk Management is not an easy task and is a process that will mature over time. The purpose of this study is to reveal the perceptions of the four components mentioned above towards Enterprise Risk Management practices on a component basis in selected publicly traded companies practicing Corporate Governance. In the research, the official websites of the companies were examined and the information they disclosed was utilized. Enterprise Risk Management is vital for the long-term and sustainable success of companies. The risks faced by businesses are both diverse and effective on a global scale. Businesses also need to take risks for sustainable success. The successful execution of this system is proportional to how well it can implement the components specified in the standards. For this reason, the research contains important information about the functioning of Enterprise Risk Management in our country and is expected to contribute to the literature and practitioners. Since it is at least as important for public sector enterprises as it is for publicly traded companies, it is recommended to carry out comprehensive studies on this subject.

**Keywords:** Enterprise Risk Management, Risk Management, Enterprise Risk Management Components

## 1. GİRİŞ

Risk olgusunun hem ulusal hem de küresel boyutta çeşitlenmesi ve etkileşimi işletmelerde entegre ve kurumsal düzeyde risk yönetimi uygulamalarını zorunlu kılmaktadır. İşletmelerde risk ile kar maksimizasyonu doğru orantılıdır. Risk Yönetimiyle ilgili nelerin yapılması konusunda çok sayıda standart düzenlemesi mevcuttur. Bu standartların güncel versiyonları Kurumsal Risk Yönetimine odaklanmakta ve risk yönetimi bileşenlerine yönelik asgari düzenlemeler konusunda rehberlik yapmaktadır.

Özellikle son yirmi yılda Kurumsal Risk Yönetimi konusunda ciddi akademik çalışmalar yapılmıştır. Kurumsal Risk Yönetimi olgusu Türkiye’de faaliyette bulunan işletmeler için yeni bir konudur. Başta halka açık şirketler olmak üzere Kurumsal Yönetim uygulamaları yapan işletmeler 2012 yılından bu yana düzenleyici kuruluşların da etkisiyle risk yönetimi olgusunu işletme düzeyinde örgütlemişlerdir. Bu örgütlemenin en sık görülen biçimi Risk Yönetimi Komitesi başlığı ile görülmektedir.

İşletme düzeyinde Kurumsal Risk Yönetiminin temel bileşenleri güncel risk yönetimi standartları bağlamında dört başlıkta ele alınmaktadır. Bunlar; kültür ve yönetim, risk yönetim süreci, iç kontrol ve iç denetim ile performans değerlemedir. Konuyla ilgili farklı ülke ve sektörlerde yapılan çalışmalar mevcuttur.

Bu çalışmada Türkiye’de faaliyette bulunan halka açık şirketlerin Kurumsal Risk Yönetimi algıları dört bileşen temelinde şirketlerin internet siteleri ve kamu aydınlatma platformuna bildirdikleri bilgiler esas alınarak belirlenecektir. Bu bağlamda çalışmanın amacı, Kurumsal Risk Yönetimi temel bileşenlerini seçili ve Kurumsal Yönetim uygulayan halka açık şirketlerde, bileşen bazında Kurumsal Risk Yönetimi uygulamalarına yönelik algılarını ortaya koymaktır.

Çalışmada ele alınan temel sorun halka açık şirketlerin Risk Yönetimi uygulamalarının uluslararası standartlarda belirlenen Kurumsal Risk Yönetimi bileşenlerine ne derece uygunluk gösterdiği.

Çalışmamızdaki veriler literatür incelemesi ile seçili şirketlerin resmi internet sitelerindeki Risk Yönetimi bilgileri ve Kamu Aydınlatma Platformunda açıkladıkları Risk Yönetimi ile ilgili bilgilerden elde edilmiştir. Veriler, işletmelerin halka açık resmi internet sitelerinde bulunan arama kutucuklarına Kurumsal Risk Yönetimi, Risk Yönetim Komitesi, Denetim Komitesi temel kavramları aratılarak elde edilmiştir.

Çalışma kapsamında, Kurumsal Yönetim endeksinde yer alan şirketlerden yirmisi incelenmiştir. Çalışma üç bölümden oluşmaktadır. Birinci bölümde temel kavramlara yönelik literatür incelemesi, ikinci bölümde Kurumsal Risk Yönetimi temel bileşenlerine yönelik bilgiler verilmiştir. Üçüncü bölümde ise araştırma bulgularına yer verilmiş olup sonuç ve öneriler ile tamamlanmıştır.

Mevcut yapı itibarıyla Türkiye’de birçok işletmenin 2012 yılından bu yana Türk Ticaret Kanunu’ndaki amir hükümler gereği Risk Yönetimiyle ilgili önemli çalışmalar yaptığı gözlemlenmiştir. Ancak bu çalışmaların uluslararası güncel Risk Yönetimi standartlarıyla uyumlu ve etkin olup olmadığı konusunda farklı görüşler bulunmaktadır. Çalışmamız işletmelerde mevcut Risk Yönetimi uygulamalarının güncel standartlarla uyumlu ve etkin bir şekilde uyumlaştırılması projelerine katkı yapması beklenmektedir.

## 2. TEMEL KAVRAMLAR

### 2.1 Risk Yönetimi

Literatür incelendiğinde risk ile ilgili pek çok tanım görmek mümkündür. Risk kavramı, Fransızca bir kelime olan “risque” kelimesinden gelmekte olup sözlükte;” bir zarar, kayıp ya da tehlike oluşturabilecek olayların meydana gelme olasılığı” ifade etmektedir. (Emhan, 2009: 210) Derici, vd. (2007: 152) risk kavramını en geniş anlamıyla “gelecekte oluşabilecek ve amaçların gerçekleşmesini engelleyebilecek tehditler/olumsuzluklar ya da amaçlara ulaşmayı kolaylaştırabilecek fırsatlar” şeklinde tanımlamıştır.

Bu tanıma göre risk, şu an da olan tanımlanmış ya da tanımlanmamış durumları değil, gelecekte meydana gelme olasılığı olan potansiyel durumları ifade eder. Bu ayırım, mevcut durum ile potansiyel risklere karşı alınabilecek önlem ve cevaplar açısından oldukça önemlidir. Mevcut durumda ortaya çıkan olumsuz gelişmelere verilen yanıtlar ile gelecekte ortaya çıkması muhtemel potansiyel risklere yönelik geliştirilecek yöntemler farklı bir bakış açısıyla değerlendirilmelidir.

Tüm risklerde dikkat edilmesi gereken esas konu, olayların gerçekleşme ihtimalleri ile onların sonuçlarına ilişkin fayda fırsatlarının veya başarı tehditlerinin farkında olmaktır. (Küçükyılmaz, 2007: 39)

Risk yalnızca bir tehdit değildir. Gelecekte işletmelerin amaçlarını gerçekleştirmede etkileyebilecek olumsuzluklar olduğu gibi olumlu etkileyecek fırsatlar da olabilir. Karşılaşılabilecek bu durumları doğru değerlendirmek, hazırlıklı olmak ve çözümler üretmek işletmeler açısından önemlidir.

Günümüzde riskler hızla değişmekte ve bu risklere yönelik çözüm arayışları her geçen gün artmaktadır. Her gün gelişen ve değişen dünyada riskleri yönetmenin önemi oldukça büyüktür. Önceleri riske yönelik algılarda reaktif bir bakış açısı sunulurken bugün bu tutum yerini proaktif anlayışa bırakmıştır. Proaktif anlayış; riskleri ortaya çıkarıp yönetirken, aynı zamanda fırsat yaratan bir değer olarak görülmektedir. (Sevim ve Koç, 2021:592) Bu noktada Risk Yönetimi ortaya çıkmaktadır.

Riski azaltmadaki en önemli unsur Risk Yönetimidir. Hangi olayların risk olduğunu belirlemek ve bu riskleri ortadan kaldırmak için yöntemler geliştirmek ve uygulamak Risk Yönetimi olarak açıklanmaktadır. (Sertman, 2017: 6) En temel ifadeyle Risk Yönetimi, kurumsal faaliyetleri tanımlayan, değerlendiren, iletişimi sağlayan ve riski azaltan bilimsel, çağdaş, proaktif bir yoldur. (Bush vd., 2005: 1)

Risk yönetimi, gerçekleşmesi muhtemel olan kayıplarla karşılaşma olasılığını en aza indirmek için geliştirilen sistematik bir yaklaşımdır. (Sung and Zhang, 2013: 677) Bir başka ifadeyle Risk Yönetimi, hedeflenen sonuca ulaşmak için başlangıcı ifade eder. (Özer ve Erdem, 2022: 61)

İşletmelerin yönetim anlayışları her ne olursa olsun etkili ve başarılı bir yönetim için Risk Yönetimi tartışmasız olarak uygulanması gereken bir yaklaşımdır. Çoğu zaman örgütlerdeki problemlerin çözülemeyişinin ana sebebi etkin bir Risk Yönetimi uygulamasının olmayışıdır.

## 2.2 Risk Yönetiminde Çağdaş Gelişmeler

Risk Yönetimi kavramı tarihsel süreç içerisinde bir taraftan risklerin çeşitlenmesi diğer taraftan küresel etkileri nedeniyle günümüzdeki anlamına evrilmiştir. İşletmelerin sürdürülebilir faaliyette bulunması ve karlarını maksimize etmeleri için çok çeşitli risklere maruz kalmakla birlikte bu riskleri de alması gerekmektedir. Geleneksel olarak silolar yaklaşımı ve belirli bir riske yönelik Risk Yönetimi yaklaşımı çağdaş anlamda işletmenin tamamını kapsayan entegre ve Kurumsal Risk Yönetimine dönüşmüştür. Bu bağlamda çağdaş Risk Yönetiminin özellikleri: (Pickett, 2005:175; PWC, 2006; Hall, 2007: 4)

Çağdaş Risk Yönetiminde riskler fırsata dayalı temellerdir.

Riskler, işletme içerisinde bir bütün olarak ele alınır ve yönetilir.

Riskler değerlendirilirken portföy yaklaşımı içerisinde ele alınır.

İşletme içerisinde riskler izlenir ve ölçümlendirilir.

Kurumda risklere uygun stratejiler vardır ve risk optimizasyonu sağlanır.

Risk Yönetimi uygulamaları tüm Kurumsal Yönetim sistemlerine entegre edilerek tasarlanır.

Kurum içerisinde çalışanların tamamı risk bilincine sahiptir ve sorumluluklarını yerine getirir.

Yönetim kurulunda etkin ve verimli bir risk yönetimi yapısını desteklemek amacıyla bir risk komitesi bulunmaktadır.

## 2.3 Kurumsal Risk Yönetimini Yönlendiren Standartlar

Çağdaş anlamda işletmelerde KRY konusunda nelerin yapılması gerektiğini belirleyen uluslararası Risk Yönetimi standartları mevcuttur. Bunların başlıcaları ISO 31000 Risk Yönetimi standardı, COSO Riskin Strateji ve Performansla Uyumlaştırılması çerçevesi ve COBIT standartlarıdır.

Bu standartlar Risk Yönetimi konusunda işletmede asgaride nelerin yapılması gerektiğini düzenlerken diğer yandan işletmelerin Kurumsal Risk Yönetimi uygulamalarının kalitesini de şekillendirmektedir. Türkiye’de de söz konusu standartlara düzenleyici kuruluşlar atıfta bulunmaktadır. Ayrıca TTK’da da riskin erken önlenmesi ile ilgili düzenlemeler mevcuttur.

### 2.3.1 ISO 31000 Risk Yönetimi Standardı

ISO 31000, risk yönetimiyle alakalı olarak en iyi uygulamaları tanımlayan uluslararası bir standarttır. (Almeida vd., 2010: 843) Genel amacı, tüm paydaşların ve çalışanların riski izlemenin ve yönetmenin önemini bilincinde olduğu bir risk yönetimi kültürü geliştirmektir. (ISO 31000, 2009: 1) 2009 yılında yayınlanan ilk versiyonu AS/NZS 4360 Risk Yönetimi standardının revize edilmiş yeni bir versiyonudur. Bu çerçeve de örgüt içerisindeki tüm paydaşların, riski izlemenin ve yönetmenin ciddi önem taşıdığı bilincinde olduğu bir risk yönetim kültürünü vurgulamıştır. (IRM, 2018:8)

2018 yılında yeni risklerin çıkması ve ekonomik sistemlerin daha karmaşık hale gelmesiyle beraber çerçeve revize edilmiştir. Bu versiyon stratejik bir rehberlik sağlayarak üst yönetimin risk yönetimine dahil olmasını ve risk yönetiminin kurumun tüm süreçlerine entegre edilmesine yani Kurumsal Risk Yönetimine vurgu yapmaktadır.

### 2.3.2 COSO KRY Riskin Strateji ve Performansla Uyumlaştırılması Çerçevesi

Hileli finansal raporlamanın önlenmesini sağlamak, iç kontrol, risk yönetimi ve yönetim, hilenin tespiti konularında kılavuzluk etmek amacıyla ABD Treadway Komisyonu tarafından 1985 yılında kurulmuştur. (Türedi vd.,2015: 142) (Uysal, 2021: 58). 1994 yılında İç Kontrol ve Bütünleşik çerçeveyi yayınlamıştır. 2004 yılında ise kurumlar açısından Risk Yönetiminin önemini vurgulayarak “Kurumsal Risk Yönetimi Bütünleşik Çerçevesini” yayınlamıştır. Güncellenen 2004 versiyonlu bu çerçeve, sekiz bileşeni ve dört hedef kategorisini içermektedir. (Hopkin, 2010: 55) Bütünleşik çerçeve, bileşen ve hedef kategorilerini üç boyutlu bir küp olan COSO küpünde tasvir etmiştir.

Zaman içerisinde yeni risklerin ortaya çıkması ve kurumlarda risk yönetimi farkındalığının benimsenmesiyle beraber mevcut çerçevenin revize edilmesi zorunlu hale gelmiştir. Bu sebeple Eylül 2017’de “COSO Kurumsal Risk Yönetimi-Riskin Strateji ve Performansa Uyumlaştırılması ” çerçevesini yayınlamıştır. (Aksoy,2019) COSO, yeni yaklaşımında işletmelerde yeni bir Kurumsal Risk Yönetimi örgütlenmesi üzerinde durmaktadır. Güncellenen bu çerçevede KRY, şirketin performansına ve stratejilerine bağlanmıştır. Bileşen sayısı sekizden beş bileşene düşürülerek daha yalın bir standart formunu almıştır. 2004 Bütünleşik çerçevesindeki COSO küpü yerini sofistike helezon bir sarmala bırakmıştır. (COSO, 2018: 7)

### 2.3.3 COBIT Standartları

COBIT standartları, bilgi teknolojileri yönetimi ve denetimi alanlarında en kapsamlı çerçeveyi sunarak uluslararası çapta en çok benimsenen ve kabul gören bilişim sistemleri standardıdır. (Kayrak,2007: 204) ISACA tarafından BT yönetimi ve risk yönetimi alanlarındaki profesyonel uzman ve çalışanlara kılavuzluk etmek amacıyla yayınlanmıştır. Bilgi yönetimi ve yönetim ile ilgili olarak işletmelerin yeni stratejiler geliştirmesine ve uygulamasına yardımcı olan COBIT 2012 yılına kadar birçok çerçeve yayınlamıştır.

En son yayınlanan COBIT 5 çerçevesi, önceki versiyonları olan COBIT 3 (200), COBIT 4(2005) ve COBIT 4.1 (2007)’ e göre yönetim ve bilgi teknolojileri riskleri yönetimine ilişkin olarak en ayrıntılı ve kapsayıcı bilgileri içermektedir.

Bu standartlara göre KRY’nin temel bileşenleri dört başlıkta toplanabilir bunlar: Yönetişim ve Kültür, Kurumsal Risk Yönetim Süreci, İç Kontrol ve İç Denetim ve Performans Değerlemesidir.

Ayrıntılar için bakabilirsiniz:

<https://www.coso.org/>

<https://www.iso.org/home.html>

<https://www.isaca.org/resources/cobit>

## 3.KURUMSAL RİSK YÖNETİMİ TEMEL BİLEŞENLERİ

### 3.1 Yönetişim ve Kültür

Risk yönetimi, sadece çok sayıda bağlantı ve paydaşların bulunduğu bir risk süreciyle sınırlı olmayıp aynı zamanda paydaşların ilişkilerini, rollerini ve sorumluluklarını belirleyen örgütsel düzenlemeler ve risk algısı da

dâhil olmak üzere mekanizmaların, teşviklerin veya normların kültürün ve politikanın koordinasyonu gibi bağlamsal faktörlerin dikkate alınmasını gerektiren bir konudur. (Renn and Sellke, 2011:356)

Risk yönetiminde kurumda risk ile ilgili tarafların katılımıyla; riskin değerlendirildiği yasal, kurumsal, sosyal ekonomik ve örgütsel kavramlar ele alınmaktadır. Risk Yönetimi, Kurumsal Risk Yönetiminin işletme sahipleriyle profesyonel yöneticilerin birlikte çalışarak işletmenin sürdürülebilir hedeflerine ulaşmasını sağlar. Dolayısıyla işletme sahipleri ve üst yöneticiler bu yaklaşımla KRY’nde liderlik yaparlar ve gerekli kaynağı tahsis ederler. KRY uygulamalarının geliştirilmesinin öncülüğünü yapar. Yönetim bileşeni, KRY’nin en önemli unsurlarından birisi olarak karşımıza çıkar.

Yönetim, işletme sahiplerinin ve yönetim kurulunun sorumluluğundadır ve kuruluşun risk Yönetimi stratejilerinin ve hedeflerini sürdürmesini ve genişletilmesini sağlayan liderlik, örgütsel yapılar ve süreçlerden oluşur. Ayrıntılar için bakınız: (Sevim ve Koç, 2023:7-9)

Risk kültürü, KRY’nin etkili olabilmesi için şirketlerin "kurum genelinde bir risk yönetimi kültürü oluşturmak için teknolojinin ötesine bakmaları" (Bruno and Britz, 2009: 20) ve KRY’nin mevcut uygulamalara ve yöneticilerin günlük kararlardaki bireysel davranışlarına nüfuz etmesi gerektiği ileri sürülmüştür. (Standard and Poor, 2008 )

KRY’ de risk kültürü, örgütte karar verenlerin risk zihniyetine dair ipuçları sunmaktadır. Kurum genelinde riske duyarlı bir kültür oluşturmak Kurumsal Risk Yönetimi uygulamalarının başarısını etkileyen önemli bir bileşendir. (Sevim ve Koç:2023:9 )

Risk kültürü, risk yönetimi uygulamalarının hedefe ulaşması ve kuruma değer kazandırmasında kritik öneme sahiptir. Standartlarda Risk kültürü etik değerlerle, istenilen davranışlarla ve kurumdaki risk davranışıyla ilgilidir. Bu öğeler Risk Yönetimi örgüt kültürünün içine yerleştirilmeli ve yapının bir parçası haline getirilmelidir. Bunun içinde risk iletişimi, risklerin önceliklendirilmesinde ve değerlendirilmesinde katılım, izleme ve geri bildirim mekanizmalarının etkili çalışması gerekmektedir.

### 3.2 Risk Yönetim Süreci

Günümüzde Risk yönetimi genel yönetimin ayrılmaz bir parçası olarak işlev görmektedir. Risk yönetimi, kurum kültürünün, kurumun en iyi uygulamalarının ve iş süreçlerinin bir parçasıdır. Kurum içerisinde Risk Yönetiminin yapılandırılması ve işlev görmesine ilişkin asgari düzenlemeler risk yönetim standartlarıyla yapılmaktadır.

Bu standartlardan ISO31000 Risk Yönetimi standardı çerçevesi, Risk Yönetimiyle alakalı en iyi uygulamaları tanımlayan küresel çapta kabul görmüş uluslararası bir standarttır. Bu standart içeriğinde Risk Yönetim Sürecinin aşamaları ve işlemleri tanımlanmıştır. Çalışmamızda Risk Yönetim süreci aşamaları, ISO31000 çerçevesinin tanımladığı Risk Yönetim süreci esas alınmıştır. Çerçeve kurumların risklerini en iyi şekilde yönetebilmesi için önemli ve kapsamlı bilgileri içermektedir. Birbirini izleyen aşamalar dizisi olarak Risk Yönetim süreci üç ana aşamadan oluşmaktadır. Bunlar:

1-Kapsam, Ortam ve Kriterlerin Belirlenmesi

2-Risklerin Değerlendirilmesi, bu aşama üç alt aşamayı içermektedir bunlar:

Risklerin Tanımlanması

Risklerin Analiz Edilmesi

Risklerin Değerlendirilmesi

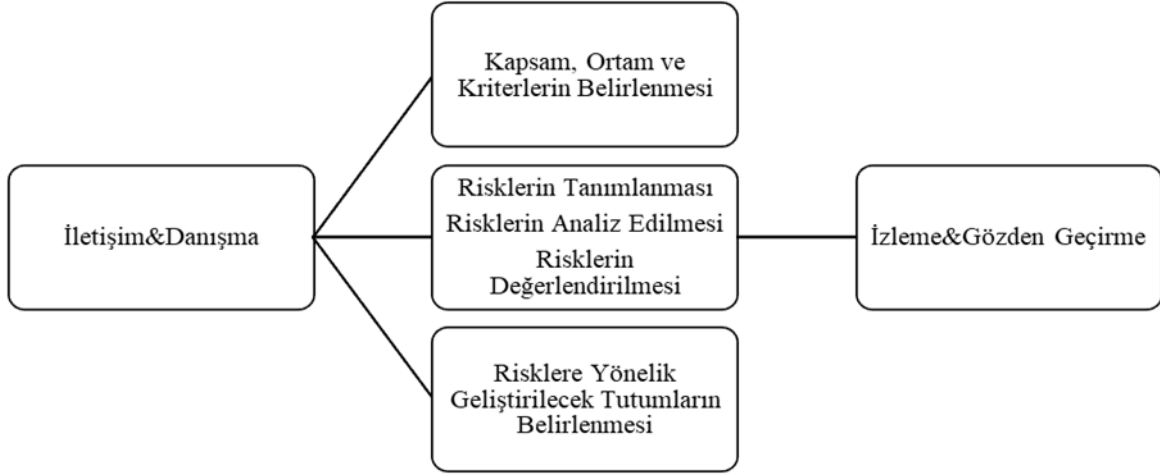
3- Risklere Yönelik Geliştirilecek Tutumların Belirlenmesi

Bu aşamaların sağlıklı ve etkin bir biçimde çalışmasını sağlayan iki temel bileşende;

İletişim ve Danışma ile İzleme ve Gözden Geçirmedir.

Bu süreci ve bileşenleri aşağıdaki şekil ile ifade edebiliriz.

Şekil 1: ISO 31000 Risk Yönetim Süreci ve Bileşenleri



Kaynak: (Koç, 2019: 58)

Risk Yönetim Süreci şekil 1'e göre, "yönetim politikalarının, prosedürlerinin ve uygulamalarının iletişim, danışma, bağlamın oluşturulması ve tanımlanması, analiz, tedavi, izleme ve riski gözden geçirme faaliyetlerine sistematik olarak uygulanmasından" oluşur. Risk yönetimi süreci hem kurumun yönetimine hem de kurumun uygulamalarına ve kültürüne entegre edilmesi ve her kuruma ve kendi süreçlerine özgü uyarlanması sürecin başarılı bir şekilde yönetilmesi için önem taşımaktadır. Risk yönetimi sürecindeki işlem ve faaliyetlerin belgelenmesi ve kayıt altına alınması etkili bir iletişim, danışma ile izleme ve gözden geçirme süreçlerinin etkin bir şekilde yürütülmesinde önem taşımaktadır.

### 3.3 İç Kontrol ve İç Denetim

KRY sisteminin başarısında etkili olan önemli bileşenlerden bir diğeri de Risk odaklı iç kontrol sistemi ve iç kontrol sistemlerinin tasarlanmasını, geliştirilmesini, uygulanması ve izlenmesi faaliyetlerini yürüten iç denetim sistemidir. Güçlü bir iç kontrol sistemi, işletmelerin hedeflerine ulaşmadaki risklerini azaltır. (Sevim, 1991, s.56)

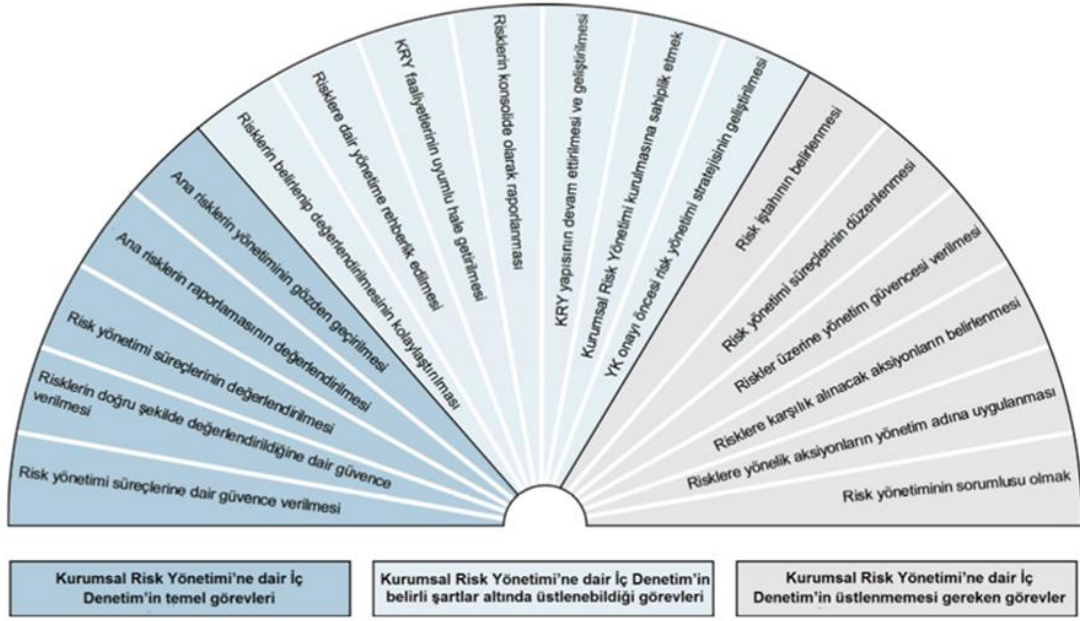
Risk yönetimi ve iç kontrol sistemi işletme yapısı içerisinde birbirlerini tamamlayan önemli kilit sistemlerdir. Etkin bir biçimde çalışan iç kontrol sistemi, kurum içerisinde açık bir risk iştahı ile birlikte doğru risk kültürünün oluşumunu destekleyecek olan risklerin değerlendirilmesini önemli ölçüde sağlar. (Koç ve Sevim, 2021: 140)

KRY esaslı iç denetim sisteminde Risk Yönetim süreci ile entegre olmuş işlemler söz konusudur. Bunlar; kurumun temel amaçları ve hedeflerine ilişkin ana risklerin tanımlanması, kabul edilebilir risk seviyesinin belirlenmesi, uygun iç kontrol mekanizmalarının geliştirilmesi ve iç kontrol sisteminin etkinliğinin kurumsal yönetimden sorumlu olanlara raporlanmasıdır. (Yılancı, 2003, s. 126)

KRY süreçleri içerisinde iç denetimin üstlendiği roller ve görevler ağısındaki şekilde özetlenmiştir.



Şekil 2: İç Denetimin Kurumsal Risk Yönetimindeki Rolü ve Görevleri



Kaynak: ( IIA, 2009, s.4)

Yukarıdaki şekilde, gösterilen roller ve görevler iç denetimin KRY süreçlerinde iki önemli rolünü vurgulamaktadır. Bunlar; güvence oluşturma ve danışmanlıktır. Dolayısıyla etkin iç denetim tasarımı ve işleyişi KRY'nin kilit başarı unsurudur.

### 3.4 Performans Değerleme

KRY uygulamalarının sürdürülebilir başarısını sağlamak belirli periyotlarda sistemin performansını değerlemekle mümkündür. KRY ile ilgili standartlarda performans denetimine atıfta bulunmakta ve her kurumun kendine yönelik bir performans ölçme ve değerlendirme sistemi geliştirilmesi önerilmektedir. Performans ölçümü ve değerlendirilmesinde önemli olan hususlar KRY bileşenlerinin her birine özgü performans ölçütleri geliştirmek ve bu ölçütlere ilişkin sağlıklı veriler ve bilgiler oluşturmaktır.

## 4. ARAŞTIRMA HAKKINDA

### 4.1 Araştırma Yöntemi:

Araştırma Kurumsal Yönetim uygulayan ve bilgilerini KAP ile kurumsal internet sitelerinde açıklayan halka açık işletmeleri kapsamaktadır. Kurumsal Yönetim uygulayan işletmelerde Risk Yönetimi de 2012 yılından bu yana düzenlemelerle zorunlu hale getirilmiştir. Araştırmada seçili yirmi şirketin KAP'a sunmuş olduğu bilgiler ve kamuya açık kurumsal internet sitelerindeki bilgilere veri tabanı içerik analizi yöntemi uygulanarak veriler elde edilmiştir.

İçerik analizinde aratılan başlıklar; Kurumsal Yönetim, Risk, Risk Yönetimi, Kurumsal Risk Yönetimi, Denetim Komitesi, Risk Kültürü, Risk Yönetim Süreci, İç Kontrol ve İç Denetimdir. Birinci adımda veriler KAP'ta araştırılmıştır. Seçili şirketlerin internet sitelerinde aynı kavramlar aratılmıştır. İkinci adımda Kurumsal Yönetim başlığı altında Riskin Erken Saptanması Komitesi Üyeleri ve yönergelerine ulaşılmıştır. Üçüncü adımda Kurumsal Risk Yönetimiyle ilgili kavramlar taratılmış, yatırımcı ilişkileri kısmında kurumsal raporlara ulaşılmıştır. Kurumsal raporlardan entegre kurumsal raporlama, sürdürülebilirlik raporlaması ve faaliyet raporları içerik analizine tabii tutulmuştur. Dördüncü adımda Google arama motorunda Kurumsal Risk Yönetimi uygulamaları başlığı ile arama yapılmıştır ve diğer bulgularda paylaştığımız veriler elde edilmiştir.

Araştırma kapsamında halka açık yirmi şirket incelenmiştir. Şirket seçiminde farklı sektörlerden işletmeler seçilmiştir.

## 4.2 Araştırma Bulguları:

Araştırma bulgularımızı araştırma yönteminde sunduğumuz adımlara göre beş başlık altında toplayabiliriz:

### 4.2.1 KAP'ta Yapılan İçerik Analizine İlişkin Bulgular;

KAP'da yapılan içerik analizinde halka açık tüm şirketlerin Kurumsal Yönetim Raporu ile bu rapor içinde Riskin Erken Saptanması Komitesi ve komite üyelerine ilişkin verilere ulaşılmıştır. Bu verilere göre; Türkiye'de tüm halka açık şirketler Riskin Erken Saptanması Komitesini oluşturmuştur ve komiteye üye ataması TTK'nın 378. Maddesine uygun olarak yapılmıştır.

### 4.2.2 Faaliyet Raporlarındaki Bulgular (üç şirket);

İşletmelerin faaliyet raporlarında KRY'nin görünümü Risk Yönetim ve Risk Yönetim Komitesi başlığında Risk Yönetiminin kapsamı ve Risk Yönetim Komitesi üyelerini belirtmekte KRY'nin örgüt içerisindeki yeri belirtilmektedir. Genellikle örgüt içerisinde bir genel müdür yardımcılığına bağlı olarak finans ve Kurumsal Risk Yönetimi direktörlüğü olarak örgütlenmiştir. Risk yönetiminin uygulama alanı İç Kontrol ve İç denetim başlığı ile sunulmuştur. Faaliyet raporlarında KRY başlığı ile sunum yapan işletmelerde; KRY'nin hangi standartlara göre yürütüldüğü KRY'nin örgüt yapısı, KRY sistemleri, koordinasyon ve gözetim, risk türleri ve her bir risk türü için yapılan çalışmalar ve bu çalışmaların raporlanmasına yönelik bilgiler yer almaktadır.

Faaliyet raporunda yer alan bilgileri bu şirketler açısından ele aldığımızda COSO ve ISO standartlarına uygun olarak yönetim ve kültür, süreç, iç kontrol ve iç denetim ile performans değerlemesine yönelik bileşenlerin yer aldığı görülmüştür.

### 4.2.3 Entegre Faaliyet Raporu Hazırlayan ve Genellikle Bankacılık Sektöründe Faaliyette Bulunan İşletmelerin (dört işletme) Raporları İncelendiğinde;

Kurumsal Yönetim başlığı altında faaliyet gösteren komitelerde KRY'nin Denetim Komitesi, Risk Komitesi, Operasyonel Risk komitesi olarak örgütlendiği görülmektedir. Raporda komite üyelerine ilişkin kişisel bilgiler, yıl içerisinde yapılan toplantı ve karar sayıları yer almaktadır. Bankacılık sektörüne ilişkin risk türleri, denetim komitesinin iç denetim, iç kontrol, uyum ve risk yönetim sistemlerinin işleyişine ilişkin değerlendirmeleri ve hesap dönemi içerisindeki bilgileri yer verilmiştir. KRY, denetim komitesine bağlı olarak işlev görmektedir. Finansal ve finansal olmayan risklerin etkin yönetimi için uygulanan politikalar ve sonuçlarına ilişkin bilgiler yer almaktadır. Bankacılık sektöründe ISO ve COSO ile birlikte COBIT standartlarına da atıfta bulunmaktadır. İncelenen dört bankanın faaliyet raporunda benzer bilgilere ulaşılmıştır. Bankacılık sektöründeki işletmeleri, KRY bileşenleri açısından değerlendirdiğimizde dört bileşeninde KRY içerisinde görüldüğü tespit edilmiştir.

### 4.2.4 İşletmelerin Resmi İnternet Sayfalarında, Riskin Erken Saptanması Komitesi ve Risk Yönetimi Komitesi Başlıkları Altında Sunulan Risk Yönetimine Dair Bulgularımız Şunlardır:

- Kurumsal Yönetim başlığı altında Risk Yönetimi Komitesini üyelerine ilişkin kişisel bilgiler yer almaktadır.
- Risk Yönetimi Komitesi çalışma esaslarına içeren bir yönerge bulunmaktadır. Bu yönergede, yönergenin amacı, Risk Yönetim Komitesinin görevleri, komite yapısı ve üyelik kriterleri, alt çalışma grupları, toplantılar, raporlama prosedürleri gibi bilgiler yer almaktadır.
- Şirketlerin faaliyet raporları incelendiğinde Risk Yönetimi başlığı altında kısa bir şekilde Risk Yönetim Komitesi tarafından yerine getirildiği, genel olarak KRY yararları, risk türleri ve Risk Yönetim Komitesinin Denetim Komitesine bağlı olarak çalıştığı vurgulanmaktadır. Bu grupta yer alan şirketlerin verilerine göre İç denetim ve İç kontrol faaliyetleri dışında KRY bileşenlerine yönelik bilgilere rastlanmamıştır.

### 4.2.5 Şirketlere Yönelik Diğer Bilgiler Başlığında Elde Edilen Bulgular Şunlardır:

- Üç şirkete ait (Akfen, Doğuş ve Tofaş) KRY el kitabı, Risk Yönetimi sistemine bakış Riskin Erken Saptanması Sistemi Komitesi hakkında denetçi raporu verileri bulunmuştur. Bu bilgiler standartlara

uygun bir KRY'nin nasıl olmasına gerektiğine dair bilgiler içermektedir. Denetçi raporu ise, Riskin Erken Saptanması Sistemi ve Komitesini denetleme amacıyla yapılmış olup şirketin komiteyi kurup kurmadığı kurulan komitenin TTK'nın 378. Maddesi çerçevesinde işleyip işlemediğinin değerlendirilmesini kapsamaktadır. Riskin Erken Saptanması Komitesi tarafından risklere karşı gösterilen çarelerin yerindeliği ve riskler karşısında uygulanan süreç ve sonuçlar denetim kapsamına alınmamıştır.

- Bir şirkette (Ayen Enerji) Riskin erken saptanması ve Risk Yönetiminden sorumlu komitesi toplantı tutanaklarına rastlanmıştır. Bu tutanaklarda şirketin Kurumsal Risk çalışmalarının takibi, gözden geçirilmesi ve risk faaliyetlerinin raporlanması ele alınmıştır.
- Bir şirkette (Cates) risk politikaları başlığı altında KRY bileşenlerine teorik olarak yer verilmiştir.

## SONUÇ

Kurumsal Risk Yönetimi olgusu dijital dönüşüm, küreselleşme, iklim değişiklikleri, doğal afetler, pandemi, nüfus hareketleri vb. dinamiklerle şirketlerin en önemli gündemini oluşturmaktadır. Şirketlerin sürdürülebilir kaynaklara ulaşımı ve bu kaynaklardan sürdürülebilir değer yaratması etkin bir KRY ile mümkündür. Türkiye'de 2012 yılından bu yana Kurumsal Yönetimin bir ögesi olarak Risk Yönetimi kavramı halka açık tüm şirketlerde yerini bulmuştur. Ancak KRY'nin uluslararası çağdaş Risk Yönetimi standartlarına uygun yapılandırılması ve uygulanmasıyla ilgili hem teorik hem de uygulama boyutundaki çalışmalar çok fazla değildir.

Bu çalışmada, seçili halka açık şirketlerin KRY bileşenleri temelinde Risk Yönetimi görünümleri kamuyu aydınlatma ilkesine göre açıkladıkları Kurumsal Yönetim bilgileri analiz edilerek incelenmiştir. Elde edilen veriler analiz edildiğinde ulaşılan sonuçlar şunlardır:

- TTK'nın amir hükümlerine göre halka açık şirketlerde Risk Yönetimi kurumsallaştırılmıştır.
- Bankacılık sektöründe KRY uluslararası standartlarda belirtilen bileşenlere göre yapılandırılmıştır.
- Uluslararası ticaret ilişkileri güçlü olan şirketler, diğer şirketlere göre KRY yapılandırmalarında daha ileri düzeydedir.
- Şirketlerin çoğunluğu denetim komitesi altında örgütlenmiş Riskin Erken Saptanması komitesi ile Risk Yönetimini kurumsallaştırmıştır. Bu gruptaki şirketlerin Risk Yönetimi uygulamalarında uluslararası Risk Yönetim standartlarında belirtilen bileşenlerden sadece iç kontrol ve iç denetim bileşeni yapılandırılmıştır. Bir başka ifade ile halka açık şirketlerin çoğunda Risk Yönetimi iç denetimin bir işlevi olarak görülmektedir.
- Bilgi paylaşımlarını sürdürülebilirlik raporlaması, entegre raporlama gibi raporlarla yapan işletmelerde KRY bileşenlerinin görünümü diğer raporlama türlerine göre daha yüksektir.
- Halka açık şirketlerin çoğunluğunda Risk Yönetimi kurumsal ve entegre Risk Yönetimi anlayışı yerine sınırlı ve belirli risklere odaklanarak yapılmaktadır.

Türkiye'de faaliyette bulunan halka açık şirketler, Risk Yönetimi uygulamalarını uluslararası çağdaş risk yönetim standartları temelinde belirtilen bileşenler doğrultusunda geliştirmelidir. Öncelikle mevcut Risk Yönetimi uygulamalarını bu bileşenler ile uyumlu hale getirecek projeler oluşturmalıdır. Bu projelerin başarılı olabilmesi için en kritik unsurlar; üst yönetimin Risk Yönetimine liderlik desteği, Kurumsal Risk Kültürünün oluşturulması ve Risk Yönetimi projelerine yeterli kaynak tahsis edilmesidir.

Unutulmamalıdır ki riskini yönetemeyen işletmeler krizlerini yönetirler.

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## The Relationship Between Leadership Styles and Crisis Management in Türkiye: A Literature Review

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**Abstract:** This study examines the leadership characteristics that determine crisis management in organizations in Türkiye, where crisis situations are not uncommon. A literature review has been conducted to understand the country-specific and effective leadership styles. A total of 35 empirical studies, including postgraduate theses, have been compiled. Upon evaluating the studies in terms of method and content, it has been revealed that a more in-depth investigation is needed into the role of leadership in crisis management within the socio-cultural context unique to the country. This study also points out several guidelines for future research.

**Key Words:** Leadership styles, Crisis management, Organizational competencies

### Türkiye’de Liderlik Tarzları ve Kriz Yönetimi Arasındaki İlişki: Bir Literatür İncelemesi

**Özet:** Bu çalışmada, kriz durumlarının az yaşanmadığı Türkiye’de, örgütlerde etkin kriz yönetimini belirleyen liderlik özelliklerini incelemek amaçlanmıştır. Ülkeye özgü ve sağlıklı işleyen liderlik tarzlarını anlamak adına, konuyla ilgili bir literatür taraması yürütülmüştür. Kısmen lisansüstü tez olmak üzere 35 görgül araştırmaya ulaşılmıştır. Çalışmalar yöntem ve içerik açısından değerlendirildiğinde, kriz yönetiminde ülkeye has sosyo-kültürel bağlamda liderliğin rolünün daha derinlemesine araştırılması gerektiği ortaya çıkmıştır.

**Anahtar Kelimeler:** Liderlik tarzları, Kriz yönetimi, Örgütsel yetkinlikler

#### 1. INTRODUCTION

A crisis is a serious threat to the fundamental structures or values of a system that requires critical decisions under highly uncertain conditions and time pressure (Rosenthal et al., 2001). The effects of major events such as the 2008 global financial crisis, the COVID-19 pandemic, and the 2023 Türkiye-Syria earthquakes will be remembered. For structures to survive, minimize damage, and recover from such events, it is necessary to identify potential risks and vulnerabilities, develop response plans, and train stakeholders on how to respond to a crisis. These organizational capabilities depend on the leadership qualities of the individuals and teams responsible for managing the crisis. In a crisis situation, leadership is collective and dynamic and requires the ability to perceive and make sense of the situation so that leaders can determine appropriate courses of action (Wooten and James, 2008). Thus, leadership is a key determinant of the success or failure of an organization's crisis management efforts.

Crisis management can be said to be a combination of both proactive and reactive strategies. Proactive strategies involve identifying potential risks and vulnerabilities, developing action plans and training employees on how to respond to a crisis. Reactive strategies reflect clear and effective communication as well as taking action quickly and effectively when a crisis occurs, which requires making difficult decisions under pressure (Pearson and Mitroff, 1993). Therefore, leaders are responsible for recognizing the signals of potential crises, assessing the risks, creating a crisis management plan that describes the appropriate response, and having the resources and people to respond effectively. In addition, leaders play a critical role in the recovery phase after a crisis. The organization needs to return to business as usual as soon as possible. Transparency about the measures taken against the crisis and the steps taken to prevent similar crises in the future is also important. On the other hand, organizations rarely allocate resources to crisis management on the grounds that it is not part of daily business or that it is difficult to predict a crisis (Bowers et al., 2017). Some of the causes of managerial and organizational failure in this respect include: ignoring threats, giving low priority to crisis preparedness, ignoring warning signs and past experience, and relying on ineffective, untested plans that will not provide protection during real crises (Lockwood, 2005).

Leadership styles refer to the patterns of behavior demonstrated by leaders in order to direct and influence individuals and groups within an organization. Academic discussions on leadership styles can be characterized

by the exploration and classification of various leadership paradigms. For example, transformational leadership emphasizes vision and inspiration; it triggers intrinsic motivation of followers and promotes long-term change and growth. In contrast, transactional leadership centers on the exchange of rewards and punishments; it emphasizes the achievement of goals through structured processes. Democratic leadership encourages follower participation in decision-making, while laissez-faire leadership supports individuals to approach their responsibilities with autonomy. Autocratic leadership, on the other hand, refers to an approach in which the leader makes dominant and unilateral decisions. Contingency theories draw attention to the contextual relevance of leadership styles by suggesting that the interaction of leaders, followers and situational variables determines the most effective leadership approach (Bass and Bass, 2008). The academic study of these leadership styles provides organizations with valuable insights into optimizing leadership approaches for specific environments and goals. Likewise, there are many studies in the literature linking leadership styles to crisis management (Bhaduri, 2019).

In this study, empirical research in the context of Türkiye will be reviewed and evaluated in terms of content and methodology. Thus, it is aimed to draw conclusions and open a discussion on country-specific effective leadership styles that will be successful in times of crisis.

## 2. RESEARCH AND FINDINGS

For the literature review, Web of Science, EBSCO, Google Scholar, Dergipark and YÖK National Thesis Center catalogs were searched for works in which the terms "crisis management" and "leadership" were used in Turkish and English. Articles and graduate theses were included in the review; working papers were not included in the list. After reviewing the titles, abstracts and full texts, a total of 35 empirical studies conducted in Türkiye and directly related to the topic were listed (Table 1).

Table 1: Complied research

Research Type	Reference
Articles	Aksu (2009), Ceylan and Yöndem (2021), Çırpan and Güner (2021), Doğanalp (2009), Duran and Arslan (2022), Düzgün (2022), Emen and Hamza (2020), İbrahimioğlu (2018), Maya (2014), Gök and Aydemir (2021), Ölmez et al., (2021), Seçilmiş and Sarı (2010), Soysal et al., (2011), Töre and Çilek (2021), Tuna and Ural (2021), Ulusoy and Yavuz (2022)
Graduate theses	Arslan (2013), Akgöl (2010), Balaban (2018), Balkan (2004), Bozkır (2022), Börü (2021), Doğan (2021), Ercan (2021), Erdinç (2018), Güvendi (2016), Kaplan (2006), Kurtuluş (2009), Şahinli, (2018), Şener (2020), Tanrikulu (2022), Teke (2022), Topaloğlu (2019), Ulutaş (2010), Yurtsever (2022)

Of the 35 studies, 16 are articles and 19 are graduate theses.

19 studies were defended or published in 2020 and later, while the other 16 studies are between 2004-2019.

As a research method, interviews were used in 2 studies, document analysis in 1 study, and surveys in the 32 studies.

In terms of the organizational environment, the sample was selected from the service sector in 25 studies, - mainly schools (9), banks (5), hospitals (4)- and the manufacturing sector in 6 studies; in 4 studies, the context was not specified.

In 26 of the studies, data were collected from more than one organization, and in 9 studies, a single organization was examined.

In the context of the crisis, the COVID-19 pandemic was specifically analyzed in 5 studies and the 2008 financial crisis in 1 study, while the scope of the crisis was discussed as a generic phenomena in the others.

Considering the fields of the researchers, 18 studies were prepared from the department of business administration, 9 studies from educational sciences, 5 studies from health management, and 1 study each from the fields of tourism management, coast guard and sports management.

In terms of leadership variables associated with crisis management, the most common ones are transformational leadership found in 7 studies and strategic leadership seen in 5 studies. In addition, 8 studies used multifactor leadership scales covering various leadership styles such as transformational, transactional and democratic. Visionary, charismatic and authentic leadership styles were found in 2 studies each.

In almost all of the studies, the leadership styles examined were found to have positive effects on effective crisis management. Only a few studies reported statistically insignificant or negative relationships between the variables.

### 3. DISCUSSION AND CONCLUSION

The highlights of this literature review, which was conducted in order to make inferences about Turkish-specific leadership in crisis management at the organizational level, are as follows:

Limited studies make theoretical and logical connections between leadership styles associated with crisis management and explanations are largely based on foreign literature. For example, while transformational leadership is frequently studied in early publications, strategic leadership is emphasized in more recent publications. This situation creates the impression that the studies follow a trend according to the period.

The impact of researched leadership characteristics on crisis management has not been sufficiently discussed in terms of structures and values in Türkiye. However, socio-cultural elements should be taken into account in processes based on human dynamics such as leader-member interaction. For example, it is noteworthy that paternalistic or charismatic leadership in Türkiye, which is considered a collectivist country, has been studied in very few works. In addition, it should be underlined that no counter hypotheses have been developed for laissez-faire or democratic leadership styles that may create counter effects during a crisis.

As a result, there is still little trace of a Turkish-specific leadership style for effective crisis management in the literature. This may be a manifestation of the focus on certain variables typically found in international literature and the publication bias that pervades academia in general. Deeper research by organizational behaviorists on leadership, which seems to be understudied in an environment as familiar with crises as Türkiye, is likely to make theoretical and practical contributions to the field.

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## ARDL Ve NARDL Tahmin Yöntemleriyle Tüketici Fiyat Endeksi Ve Seçilmiş Alt Kalemlerine Döviz Kurunun Geçiş Etkisi: Türkiye Örneği

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**Özet:** 1970'li yılların sonlarına doğru başlayan küreselleşmenin etkileriyle beraber ülkeler arasındaki ticaret ilişkileri artmıştır. Bu duruma uyum sağlamak için dünya ülkelerinin yeni adımlar atması gerekmiştir. Sabit kur rejimini yerine dalgalı kur rejiminin uygulanmaya başlanması da bu adımlardan birisidir ve bu durum yerel ve ulusal paranın önemini artırarak döviz kuru üzerine yapılan çalışmaları arttırmıştır. Özellikle gelişmekte olan ülkelerin döviz kurunda meydana gelen değişiklikler yerel piyasaları ve refah seviyesini etkilediği için döviz kuru geçiş etkisi kavramı önem kazanmıştır. Döviz kuru geçiş etkisi, nominal döviz kurunda meydana gelen belirsizliklerin ithalat fiyatları üzerinde neden olduğu değişim etkisi olarak açıklanabilmektedir. Çalışmalar sonucunda geçiş etkisinin, ithalatın iktisadi hayat için önemli etkisinin olduğu, Türkiye gibi gelişmekte olan ülkeler üzerinde etkili olduğu belirlenmiştir. Çalışma içerisinde döviz kurunda görülen değişimlerin tüketici fiyatları ve alt grupları üzerindeki etkileri incelenmiştir. 2006 Ocak ve 2023 Mayıs ayları arasındaki aylık veriler Genişletilmiş Dickey Fuller (ADF) ve Phillips Perron (PP) birim kök testleriyle sınanmış, çıkan sonuçlara göre otoregresif gecikmeli dağılım (ARDL) yöntemi ve doğrusal olmayan sınır testi yaklaşımı (NARDL) uygulanmıştır. Kısa dönemli ilişkilerse hata düzeltme modelleriyle (ECM) tahmin edilmiştir. Sonuç olarak döviz kuru geçiş etkisinin Türkiye için önemi ortaya konulmuş ve önerilerde bulunulmuştur.

**Anahtar Kelimeler:** Döviz Kuru Geçiş Etkisi, Enflasyon, Otoregresif Gecikmeli Dağılım Modeli (ARDL), Doğrusal Olmayan Otoregresif Gecikmeli Dağılım Modeli (NARDL)

**Abstract:** Trade relations between countries have increased with the effects of globalization that started towards the end of the 1970s. In order to adapt to this situation, countries had to take new steps. One of these steps was the implementing of a floating exchange rate regime instead of a fixed exchange rate regime. The concept of exchange rate pass-through effect has gained importance, especially since changes in the exchange rates of developing countries affect local markets and welfare levels. Exchange rate pass-through effect can be explained as the change effect caused by uncertainties in the nominal exchange rate on import prices. As a result, it has been determined that the transition effect is generally effective on developing countries, which has an import led economic activity, like Turkey. In this study, the effects of changes in exchange rates on consumer prices and their main categories were examined. Augmented Dickey Fuller (ADF) and Phillips Perron (PP) unit root tests were employed to determine the integration degree of selected variables. After determining the integration degree, the autoregressive lagged distribution (ARDL) method and nonlinear bounds test approach (NARDL) are applied over the sample 2006.01-2023.05. Furthermore, error correction models (ECM) are estimated in the short-time. As a result, the importance of the exchange rate transition effect for Turkish economy has been determined and policy implication has been made.

**Key Words:** Exchange Rate Pass Through, Inflation, Autoregressive Distributed Lag (ARDL), Non-Linear Autoregressive Distributed Lag (NARDL),

### 1. GİRİŞ

Geçmiş dönemlerde ülkeler, genel olarak, iç piyasalarda kendilerine ait para birimleriyle işlem gerçekleştirmekteydi. Ancak ülkelerin dış ticaret ilişkilerinin sürekli olarak genişlemesiyle birlikte ülke ekonomileri birbirleriyle bağlantılı hale gelmiş ve bu nedenle ülkelerin paraları yabancı piyasalar için de önemli hale gelmiştir. Ticaretin aksamaması için söz konusu yerel paralar gerektiğinde dış ülkenin para birimine dönüştürülerek kullanılmıştır (Aral, 2015: 3-4). Ulusal paranın dış ülke parası cinsinden değerine döviz kuru denir ve piyasalarda değerini bulur. İstikrarlı, dış şokların olumsuz etkilerinden etkilenmeyen, rekabet gücü yüksek ve tutarlı döviz kurları ülkelerin gelişmesinde ve kalkınmasında önemli bir rol oynamaktadır (TCMB, 2023). İlgili literatürden elde edilen sonuçlara göre döviz kuru ekonomik büyüme, refah seviyesi, yurtiçi fiyat seviyeleri ve üretim maliyetleri üzerinde etkili olmaktadır. Bu yüzden döviz kurunun geçiş etkisi çalışmalarda önemli bir yer tutmaktadır.

Döviz kuru geçiş etkisi, belirli bir ülkenin döviz kurunda meydana gelen oynaklıkların, aralarında ticaret bulunan ülkelerin yerel parası cinsinden ticareti söz konusu olan mal fiyatlarına ne şekilde etki ettiğini göstermektedir (Menon, 1996: 434). Bir başka tanıma göre, nominal döviz kurunda meydana gelen oynaklıkların ithal malı fiyatları üzerinde neden olduğu etkileri ifade etmek için kullanılmaktadır (Özdamar, 2015: 69). 1970li yılların

sonlarından itibaren Bretton Woods sisteminin geçerliliğini kaybetmesiyle beraber ülkelerin ilişkileri birbirine daha bağlı hale gelmiş, ticaret girişimleri artmış ve sıkı uygulamalar kalkmaya başlamıştır. Bu yüzden döviz kuru geçiş etkisinin, piyasalar ve ülkeler için, önemi giderek artmıştır (Ghosh, 2013: 164).

İlgili literatürde, döviz kuru geçiş etkisinin etkilediği ve etkilendiği faktörler, olumsuz etkilerinin ölçülmesi ve boyutları, geçiş etkisinin sıklığı gibi konular üzerinde durulmuştur. Döviz kuru geçiş etkisinin ülkelerin ekonomik ve gelişmişlik düzeyine göre farklılık gösterdiği de bu tür çalışmalarla birlikte ortaya çıkmıştır. Dornbusch (1987), yaptığı çalışma da döviz kuru ve yurtiçi fiyatları arasındaki geçişin ne derecede etkin olduğunu göstermiştir. Bunun yanında pek çok çalışma yurtdışı fiyatlarının da geçiş etkisi üzerinde etkili olduğunu ve fiyatların da bu durumdan etkilendiğini göstermiştir. Bunların yanı sıra döviz kuru geçiş etkisinde, üretici ve tüketici beklentilerinin, ekonomik ve politik istikrarın ve fiyat istikrarının da önemi anlaşılmıştır. (Mccarthy, 1999: 3-4).

TCMB (2021)'in hazırladığı rapora göre döviz kuru geçiş etkisi gelişmekte olan ülkelerin enflasyon oranlarını, gelişmiş ülkelerin enflasyon oranlarına göre çok daha fazla etkilemektedir. Çünkü söz konusu gelişmekte olan ve gelişmemiş ülkelerin ekonomik büyüklükleri, politikaları, karar alıcıları ve istikrar düzeyleri döviz kuruna çok daha duyarlı ve bağımlı bir yapıdadır. Söz konusu ülkelerin bu etkenleri göz önünde tutarak gerekli kararları alması ve buna yönelik politikalar uygulamaları gerekmektedir. Alınan tedbirler yerel para ve döviz arasındaki piyasa dengesini korumak için kullanılmalı, istikrarı sürdürmeli ve gerçekçi olmalıdır. Türkiye de gelişmekte olan ülkeler kategorisinde yer almaktadır ve Türkiye için döviz kuru geçiş etkisi çok önemli bir yere sahiptir. Bu nedenle çalışmamızda döviz kurunda meydana gelen değişimlerin TÜFE ve TÜFE alt kalemleri üzerindeki etkileri incelenmiştir. Çalışmamızda, 2006.01–2023.05 döneminde, TÜFE ve alt kalemleri bağımlı, döviz kuru ve ham petrol bağımsız değişken olarak kullanılmıştır. Döviz kuru geçiş etkisini tespit etmek için Gecikmesi Dağıtılmış Otoregresif (ARDL) ve döviz kurundaki asimetric değişimlerin fiyatlar üzerindeki etkisini incelemek için Doğrusal Olmayan Gecikmesi Dağıtılmış Otoregresif (NARDL) modelleri kullanılmıştır. Çalışmamızda hem ARDL hem de NARDL yöntemleriyle döviz kuru ve ham petrol fiyatlarının TÜFE ve alt kalemleriyle arasında meydana gelen uzun dönemli ve kısa dönemli sapmalar belirlenmiş ve değerlendirilmiştir.

Yürütülen çalışmanın en önemli amaçlarından biri Döviz Kuru Geçiş Etkisinin, ekonomi, piyasa fiyatları, TÜFE ve alt kalemleri, refah seviyesi, fiyat istikrarı gibi Türkiye için çok büyük önem arz eden etmenler açısından öneminin gösterilmesidir. Bir diğer amacıysa yürütülen ampirik çalışmadan elde edilen bulgularla birlikte uygun politika ve kararların alınmasını sağlayacak tavsiyelerin ortaya çıkartılmasıdır. Ayrıca elde edilen bulguların literatür de daha önce gerçekleştirilmiş çalışmalarla karşılaştırılması da ülkemiz ve yapılan araştırmalar açısından fayda sağlayacaktır. Elde edilen sonuçlar üzerinden yapılan yorumların dikkate alınmasıyla birlikte geleceğe yönelik daha istikrarlı ve güvenilir kararlar alınabilmesi mümkün olacaktır.

Çalışmanın ikinci kısmında döviz kuru geçiş etkisi tanımına yer verilmiş ve ilgili literatür özetlenmiştir. Üçüncü kısımda kullanılan veri ve yöntemler tanıtılmıştır. Dördüncü bölümde tahmin yöntemlerinden elde edilen sonuçlara yer verilmiş ve son bölümde ise sonuçlar özetlenmiş ve politika önermelerinde bulunulmuştur.

## 2. LİTERATÜR ÖZETİ

Döviz kuru geçiş etkisi, nominal döviz kuru üzerinde meydana gelen oynaklıkların ithalat fiyatları üzerinde sebep olduğu değişim etkisidir. (Özdamar, 2015: 69). Bir başka tanıma göre söz konusu ülkenin döviz kuru üzerinde meydana gelen oynaklıkların, ticaret yaptığı yabancı ülkelerin ulusal parası cinsinden, ticarete konu olan malların fiyatına ne şekilde etki ettiğini göstermektedir (Menon, 1996: 434-435). Döviz kuru geçiş etkisi özellikle yarattığı şoklar ve etkiler bakımından dışa açık ekonomilerde uygulanan para politikaları açısından büyük önem taşımaktadır. Bache (2007)'nin, Friedman (1953)' a dayandığı esnek döviz kurlarıyla ilgili teoriye göre döviz kuru geçiş etkisinin, ülkelere özgü şok ve dalgalanmaların fiyatlar üzerinde etki kurmayı kolaylaştırdığı görülmektedir. Fiyatlar etkilendiğindeyse yurtiçi ve yurtdışı malları arasındaki denge yeniden düzenlenecektir. Fakat bu durumda döviz kuru geçiş etkisi düşükse, yani fiyatlar döviz kuru üzerindeki oynaklıklara çok fazla tepki vermiyorsa, geçiş etkisi de küçük olmuş olacak ve fiyatlar üzerinde yapılabilecek olan düzenlemeler de sınırlı kalacaktır (Bache, 2007: 2). Piyasa içerisinde söz hakkı bulunan firmalar döviz kurunda meydana gelen değişimleri hali hazırdaki fiyatlar üzerine sınırlı bir şekilde yansıtırsa bu duruma “Kısmi Geçiş Etkisi”; olduğu haliyle tam şekilde yansıtırsa “Tam Geçiş Etkisi” meydana gelmiş olacaktır. Eğer fiyatlar üzerinde herhangi bir değişim yapılmaz ve oynaklık yansıtılmazsa geçiş etkisi meydana gelmemiş ve hiç oluşmamış demektir. Ayrıca döviz kuru geçiş etkisi sadece yurtiçi fiyatlarını değil yurtdışı fiyatlarını da etkileyebilmektedir (Özdamar, 2015: 69-20). Hyder ve Shah (2004)' a ait olan çalışmada para biriminin değer kaybetmesiyle birlikte meydana gelen dolaylı ve doğrudan etkiler gösterilmiştir. Çalışmaya göre hem ihracat hem ithalat malları etkilenmekte, aynı zamanda bu etkiler giderek daha fazla birimi etkisi altına almaktadır.

*İlgili literatürde döviz kuru geçiş etkisiyle ilgili oldukça fazla ekonometrik çalışma yapılmıştır. Sanayileşme sürecini sağlıklı bir şekilde geçirmiş olan ülkelerde 1970 yılları sonrasında enflasyon sürekli olarak bir düşüş trendi göstermiştir (Arat, 2003: 64). Yapılan çalışmalar da bu sürecin etkisiyle farklılıklar göstermiştir. Araştırmaların 2003 yılı ve sonrasında yeni açık ekonomi etrafında şekillendiği görülmektedir. Genel olarak yapılan analizlerin amacı döviz kurları üzerinde meydana gelen oynaklıkların tüketici fiyatları üzerindeki etkisini ortaya koymaktır. Ayrıca yapılan çalışmalar genel olarak tek bir ülke veya belli başlı ülkelerin gruplandırılmasıyla oluşturulmuştur. Daha sonra birden fazla ülkenin seçildiği çalışmalar da yaygınlık kazanmıştır.*

MacDonald (1997), çalışmasında G7 ülkelerini (Almanya, ABD, Birleşik Krallık, Fransa, İtalya, Japonya, Kanada) analiz etmiştir. Faiz oranı ve dış ticaret unsurlarının döviz kuru üzerindeki geçiş etkisini ortaya koyan bu çalışmada 1974'ün ilk çeyreğinden 1993'ün üçüncü çeyreğine kadar oluşan veriler modele dâhil edilmiştir. Çok değişkenli eşbütünleşik testlerle sınama yapılmış ve sonuç olarak, uzun dönemde seçili değişkenlerin döviz kuru üzerinde etkisi olduğu anlaşılmıştır. Dolar, Yen ve Alman Markı üzerinden değerlendirilen çalışmadaki bulgular bu birimlerin reel döviz kurunda kısa dönemde de etkili olduğunu ortaya koymuştur.

McCarthy (1999), yaptığı analizde seçilmiş olan 9 gelişmiş ülke verilerini kullanmıştır. 1976 ve 1998 yılları arasında bulunan verileri Vektör Otoregresyon (VAR) metoduyla değerlendirmeye almıştır. Model içerisinde petrol fiyatı artışı, döviz kuru yansıması, ithalat fiyatı oranında artış, ÜFE ve TÜFE'de meydana gelen artış, faiz oranı, parasal büyüme ve çıktı açığı değişkenlerini kullanmıştır. Çalışmadan elde edilen bulgulara göre döviz kurları üzerinde meydana gelen değişimlerin öncelikli olarak ithalat mallarının fiyatlarını etkilediği, daha sonra sırasıyla ÜFE ve TÜFE fiyatları üzerinde etkiye sahip olduğu tespit edilmiştir. Geçiş etkisinin zaman içerisinde meydana gelebilecek ekonomik ve küresel etkenlere göre azalıp yükselebileceği belirtilirken, genel olarak zamanla etkilerin azalma eğiliminde olduğu gözlemlenmiştir.

Campa ve Goldberg (2002), yaptıkları çalışmada Ekonomik Kalkınma ve İşbirliği Örgütü (OECD) ülkelerinden oluşan büyük bir örneklem havuzu oluşturmuş ve döviz kuru geçiş etkisinin ithalat fiyatlarına olan etkilerini inceleme altına almıştır. 1975-1999 dönemi için VAR yöntemi kullanılmış ve elde edilen sonuçlara göre, söz konusu ülkelerde döviz kurları üzerinde yaşanan dalgalanmalar kısa dönemde % 60, uzun dönemde % 80 oranında fiyatlara yansımaktadır. Bunlara ek olarak, ABD'de döviz kuru geçiş etkisinin oranı kısa dönemde % 25, uzun dönemde % 40 olarak belirlenmiştir. Birçok ülke için kısmi geçiş söz konusu olurken tam geçiş etkisi görülmemiştir. Elde edilen diğer sonuçlar da şu şekilde sıralanabilir: ülkelerin kendilerine ait ekonomik yapıları geçiş etkisinin seviyesini etkilemekte; döviz kuru geçiş etkisinin düşük olduğu ülkelerde ortalama enflasyonun da daha düşük olmakta; imalat ve gıda ürünlerinde geçiş etkisi kısmi olarak gerçekleşirken enerji ve hammadde ithalat fiyatları üzerindeki etki tama yakın olmakta ve makroekonomik politikaların ilerleyen zamanlarda bu dengeleri değiştirebilmektedir.

Brzezina ve Cuaresma (2008), 22 OECD ülkesi için 1983-2005 yıllarının zaman aralığında döviz kuru uygulamalarıyla faiz oranları arasındaki ilişkiyi Bayesian Dinamik Faktör modeliyle incelemiştir. Örneklemde bulunan ülkelere bakıldığında karar vericilerin aldıkları kur kararlarıyla faiz oranlarının düşüşü arasında ilişki tespit edilmiştir. Sabit döviz kuru politikalarına ve esnek kur politikalarına sahip olan ülkelerin farkları da çalışmada gösterilmiştir.

Mark (2009), oluşturduğu modelle birlikte geleceğe yönelik enflasyon tahminleri ve döviz kuru arasındaki ilişkiyi incelemiştir. Bu çalışmaya sadece Amerika Birleşik Devletleri (ABD) dâhil edilerek, 1976 ve 2007 yılları arasındaki aylık verilerle, döviz kurundaki oynaklıklar ve geniş dalgalanmaları incelemiştir. Ortaya çıkan sonuca göre geleceğe yönelik beklentiler, uygulanan politikalar, öngörülen enflasyon oranları ve işsizlik açığı gibi değişkenlerle döviz kuru üzerinde etkili bir geçiş olduğu gözlemlenmiştir.

Delatte ve López (2012), 1980-2009 zaman diliminde, Almanya, Japonya, İngiltere ve Amerika Birleşik Devletleri'nin verilerini kullanmayı tercih etmişlerdir. NARDL modeli kullanılarak analiz edilen modelde döviz kuru geçiş etkisinin tüketici fiyatları üzerinde meydana getirdiği asimetrik etkiler gözlem altına alınmıştır. Elde edilen sonuçlara göre döviz kuru geçiş etkisi, tüketici fiyatları üzerinde tam değil kısmi geçiş etkisine sahiptir. Ayrıca değişimlerin büyük çoğunluğunun döviz kurundan kaynaklandığı da söylenemez. Ancak uzun dönemde meydana gelen tüketici fiyatları üzerindeki değişimlerin döviz kuru geçiş etkisiyle ilişkili olduğu saptanmıştır. Son olarak asimetrik model üzerinde bulunan geçişkenlik katsayısı anlamlılık hipotezi kabul edilmiştir ve simetrik modele kıyasla daha yüksek olduğu gözlemlenmiştir.

Bal, Demiral ve Yetiz (2017), 19 OECD ülkesi için tüketici fiyat endeksi, üretici fiyat endeksi, nominal efektif döviz kuru ve sanayi üretimi verileri değişken olarak ele alınmıştır. Yapılan analiz sonucunda elde edilen bulgulara göre kısa ve uzun dönemde döviz kurlarının fiyatlara geçiş etkisinin anlamlı ancak söz konusu etkinin

çok güçlü olmadığı tespit edilmiştir. Ayrıca geçiş etkisi zaman geçtikçe azalma eğilimine girmektedir. Ayrıca nominal efektif döviz kuru ve TÜFE arasında pozitif ilişki gözlemlenmiş ve olası bir kur artışının ülkeler içerisindeki fiyatlar genel seviyesini de arttıracakı gözlemlenmiştir. Bu duruma göre geçiş etkisi fiyat dengesini bozma eğilimi taşımaktadır. Nominal efektif döviz kurunda meydana gelen bir değişimin, uzun dönemde, fiyatları etkilemediği; kısa dönemde ise tüketici fiyatlarını yükselteceği belirtilmiştir.

Literatürde gelişmiş ülke incelemelerinin yanında gelişmekte olan ülkelerdeki DKGE de incelenmiştir. Bu çalışmalardan biri Edwards (1988)'dir. Edwards (1988), ele almış olduğu regresyon analiziyle 12 gelişmekte olan ülkeyi incelemiştir. Modelde reel döviz kuruyla ihraç edilen, ithal edilen ve ticarete konu olmayan mallar kullanılmıştır. 1964 ile 1985 yılları arasındaki verileri kullanılmış ve elde edilen sonucu göre, hem kısa dönemde hem de uzun dönemde, döviz kuruyla makroekonomik birimler arasında bir ilişki olduğu tespit edilmiştir.

Mihaljek ve Klau (2001)'de, 1990-2001 dönemi belli periyotlara bölünerek incelenmiş ve aralarında Türkiye'nin de bulunduğu 13 ülke tercih edilmiştir. Yapılan bu çalışmada döviz kuru ve enflasyon arasında bulunan ilişkiyi analiz etmek için Granger nedensellik testi ve VAR analizi kullanılmışlardır. Elde edilen bulgulara göre nominal döviz kuru üzerinde meydana gelen oynaklıkların enflasyonla olan ilişkisinin, ithalat fiyatları üzerindeki değişimden daha güçlü olduğunu göstermişlerdir.

Juhn ve Mauro (2002) ekonomi hacminin döviz kuru geçiş etkisi üzerindeki etkisini incelemişlerdir. IMF üyesi ülkelerin verilerini ele alan bu çalışmada probit modeli kullanılarak analiz yapılmıştır. 184 ülkenin verisiyle yapılan çalışmada belirli ülkelerin sıklıkla döviz kuru politikalarını değiştirdikleri veya politik sebeplerle düzenlemeye gittikleri gözlemlenmiştir. Ayrıca veriler erişilebilirlikleri açısından 1990, 1995, 2000 yılları arasında ayrılmıştır. Yapılan detaylı analizler neticesinde ekonominin mevcut hacminin, uygulanan politikaların ve kararların kısa ve uzun dönemde döviz kurunu etkilediği sonucu ortaya çıkarılmıştır.

Hyder ve Shah (2004), döviz kuru geçiş etkisine yönelik yaptıkları çalışma için Pakistan verilerini örneklem olarak kullanmışlardır. Söz konusu veriler 1988.01- 2003.09 dönemini kapsamaktadır. Çalışmadan elde edilen bulgulara göre geçiş etkisinin yansımalarının düşük olduğu durumlarda yurtiçi fiyatları da düşüktür. Döviz kuru geçiş etkisi, enflasyon üzerinde ılımlı bir etkiye sahiptir ve söz konusu etkinin uzun zamana yayıldığı gözlemlenmiştir.

Ito ve Sato (2006), 1993-2005 zaman diliminde, Doğu Asya ülkelerinde meydana gelen döviz kuru geçiş etkisini analiz etmişlerdir. İthalat, ÜFE ve TÜFE verileri ele alınmış ve döviz kurlarıyla aralarında olabilecek olan anlamlılık düzeyi araştırılmıştır. Araştırma için VAR analizi uygulanmış ve elde edilen bulgulara göre geçiş etkisi en çok ithalat fiyatları üzerindedir. Daha sonrasındaysa sırayla ÜFE ve TÜFE'ye geçiş etkisinin olduğu görülmektedir.

Shu ve Su (2009), 1997 ve 2007 yılları arasındaki verileri kullanarak Çin ekonomisindeki döviz kuru geçiş etkisini VAR analiziyle incelenmiştir. Yapılan çalışmada döviz kurları üzerinde meydana gelen oynaklıkların kısa dönemde %7, uzun dönemde ise % 20 oranında fiyatlar üzerinde geçiş etkisine sebep olduğu tespit edilmiştir.

Kaplan ve Yapraklı (2014), ele aldıkları çalışmada cari açık, kamusal borçlanmalar ve rezervlerle döviz kuru arasındaki ilişkiyi sınıamıştır. Ekonomisi oldukça değişken yapıda olan 12 gelişmekte olan ülke, 2000-2012 zaman diliminde incelenmiştir. Söz konusu ilişki için panel veri analizi tercih edilmiş ve çalışmanın sonuçlarına göre döviz kuru; cari açık, kamusal borçlanmalar, brüt kamu borcu, özel sektör ülke içi borçlanmalar ve enflasyon verilerinden olumsuz etkilenirken, ihracat ve döviz rezervi değişkenlerinden olumlu yönde etkilenmektedir. En fazla etkisini gösteren değişkense döviz rezervi olmuştur.

Syzdykova (2016) Brezilya, Rusya, Hindistan, Çin ve Güney Afrika'nın meydana getirdiği "BRICS" ülkelerine ait verileri kullanmıştır. 2000 ve 2017 yılları arasında aylık verilerin kullanıldığı çalışmada, döviz kurunda meydana gelen değişimlerin enflasyon üzerindeki etkileri analiz edilmiştir. Elde edilen bulgulara göre Çin hariç Brezilya, Rusya ve Hindistan'da enflasyon ve döviz kurları arasında uzun dönemli bir ilişki tespit edilmiştir. Granger nedensellik testi sonuçlarına göre ise sadece Rusya'da döviz kuru ve enflasyon arasında çift yönlü nedensellik mevcuttur. Brezilya'da da enflasyon üzerinden döviz kurlarına doğru bir nedensellik tespit edilmiştir. Hindistan'da ise tam tersi olarak döviz kuru, uzun dönemde, enflasyonun Granger nedenidir.

Nasir vd. (2019), 1999.05-2018.12 zaman diliminde Çekya'da DKGE'yi Doğrusal Olmayan Otoregresifi Dağıtılmış (NARDL) modeli kullanarak incelemişlerdir. Elde edilen bulgulara göre döviz kuru geçiş etkisinin, enflasyon beklentilerini belirgin derecede etkilediği gözlemlenmiştir.

Uluslararası çalışmaların yanında sadece Türkiye'yi ele alan çalışmalar da mevcuttur. Berument (2002) döviz kurunun fiyatlar üzerindeki etkisini incelemiştir. Model içerisine reel GSYİH, enflasyon ve reel döviz kuru kullanılarak vektör oto regresyon tahmini gerçekleştirilmiş ve ülke dışında meydana gelen gelişmelerin etkisini hesaplamak için ABD faiz hadleri, dış değişken olarak değerlendirilmiştir. 1983.03-2001.11 dönemi için yapılan araştırmada, döviz kurundaki oynaklıkların, fiyatlar üzerinde etkili olduğu sonucu ortaya çıkmıştır.

Arat (2003), Türkiye'de meydana gelen döviz kuru geçiş etkisi üzerine yaptığı çalışmada 1994 ve 2002 yılları arasındaki verileri kullanmıştır. Modelin analiz edilebilmesi için yedi değişkene sahip ardışık VAR modeli oluşturmuştur. Bu değişkenler; petrol fiyatları, ithalat fiyat endeksi, döviz sepeti, sanayi üretim endeksi, ticarete konu olan mal fiyatları endeksi, toptan eşya fiyat endeksi (TEFE) ve ticarete konu olmayan mal fiyatları endeksidir. Yapılan VAR analizi sonuçlarına göre TEFE üzerinde meydana gelen döviz kuru geçiş etkisinin, TÜFE'nin alt kalemleri olan ticarete konu olan mallar endeksi ve ticarete konu olmayan mallar endekslerinden daha fazla olduğu görülmüştür. Oluşan etki önce toptan eşya fiyatlarını sonrasındaysa TÜFE'yi etkilemektedir.

Şimşek (2004), döviz kuru ile reel GSYH, dış varlıklar, ticaret haddi ve para arzı arasındaki ilişki ele alınmıştır. Modelde bulunan sorunların çözümü için ARDL yöntemi kullanılmıştır. Analiz sonucunda, modeldeki değişkenlerin para arzı dışında kalanlarının kısa dönemde anlamlı oldukları, uzun dönem ise dış ticaret dengesi dışında kalan tüm değişkenlerin etkisinin döviz kuru üzerinde anlamlı olduğu tespit edilmiştir.

Bilgin (2004) ise döviz kuru geçiş etkisi ve işsizlik oranı arasındaki ilişkiyi incelemiştir. Modelde reel döviz kuru endeksi 1995 ve 2004 yılları arasında, geri kalan verilerse 1991 ve 2004 yılları arası dönemi içermektedir. Kurduğu regresyon tahminlerinin ilkinde döviz kuru üzerindeki yüzdeli dalgalanmaların işsizlik oranı üzerinde oluşan etkilerini incelemiştir. İkinci modeldeyse reel döviz kuru endeksi değişiminin işsizlik oranı üzerindeki etkisini analiz etmiştir. Yapılan bu regresyon analizi sonuçlarına göre Türkiye'de belirli dönemlerde uygulanan döviz kuru rejimlerinin ve ekonomik krizlerin işsizlik üzerinde önemli sonuçları olduğu görülmüştür. Döviz kuru hareketleri, ithalat ve ihracat vasıtasıyla işsizlik oranlarına etki etmektedir. Özellikle ithalatın belirlenen yıllarda sürekli artması ve paranın değerinin aşırı artması işsizliği de aynı orantıda yükseltmektedir.

Durgut (2010), Türkiye'deki döviz kuru ve faiz oranları arasındaki ilişkiyi incelemiş ve fiyatlar genel seviyesi, kamu borçları, reel para arzı ve döviz kuru değişkenlerinin faiz oranları üzerindeki etkilerine odaklanmış ve 2004.01-2010.02 dönemi tercih edilmiştir. Model yapısı dâhilinde değişkenlerin arasındaki ilişkinin tespit edilebilmesi için Johansen Eş bütünleşme testi kullanılmıştır. Test sonucuna göre fiyatlar genel seviyesi, kamu iç borçları, reel para arzı, reel döviz kuru ve faiz oranları arasında, %5 anlamlılık seviyesinde, uzun döneme yansıyan bir ilişki gözlemlenmiştir.

Öztürk (2010), döviz kuru geçiş etkisi ve faiz oranları üzerinde meydana gelen oynaklıklar arasındaki ilişkiyi analiz etmiştir. Çalışmada, resmi tatilleri katmadan, 2002:04-2009:09 dönemleri arasındaki verileri kullanılmıştır. Verilerin analiz edilmesi için "Çok Değişkenli GARCH" ve "TGARCH" modelleri oluşturulmuş ve geçiş etkisi analiz edilmiştir. Çalışma sonucunda elde edilen bilgilere göre döviz kuru geçiş etkisi ve faiz oranları üzerinde meydana gelen etkiler arasındaki ilişki anlamlı bulunmuştur. Söz konusu iki değişkenin birbirlerinden etkilendikleri de tespit edilmiştir.

Damar (2010), vektör hata düzeltme modelini kullanarak Türkiye'de meydana gelen döviz kuru geçiş etkisinin yurtiçi fiyatlara olan yansımaları, 1995-2000 ve 2002-2009 yıllarına ait verileri kullanarak, incelemiş ve veri setini dalgalı kur rejimi öncesi ve dalgalı kur rejimi sonrası şeklinde ikiye ayırmıştır. Yapılan analizin sonucuna göre dalgalı kur rejimine geçiş sonrasında döviz kuru geçiş etkisinin düştüğü gözlemlenmiştir. Çekirdek enflasyondaysa TÜFE'ye nazaran geçiş etkisi yüksek seviyelerde seyretmiştir. Yine aynı çalışmada döviz kuru geçiş etkisinin yansımalarının gün geçtikçe azaldığı gözlemlenmiştir.

Önder (2011), VAR modelini tercih etmiştir. Veriler ışığında elde edilen bulgulara göre 2001 öncesi dönemlerde döviz kuru geçiş etkisinin oldukça yüksek olduğu, dalgalı kur rejimi sonrasındaysa azaldığı tespit edilmiştir. Oluşturulan veriler 1989:08-2010:11 dönemini kapsamaktadır ve bu verilerin analiziyle birlikte geçiş etkinin ithalat fiyatlarını da etkilediği gözlemlenmiştir. İhracat fiyatlarındaysa Euro'nun geçiş etkisi Amerikan dolarına göre çok daha hızlı meydana gelmektedir. 2001-2010 dönemlerinde uygulanmaya başlanan dalgalı döviz kuru rejimiyle birlikte bu yansımaların etkisinde azalma meydana geldiği saptanmıştır. Ayrıca söz konusu dönemlerde TL'nin değer kazanarak ithalat fiyatlarını ucuz hale getirmesi döviz kuru geçiş etkisinin azalmasına katkıda bulunmuştur.

Kara ve Ögünç (2012), Türkiye'nin döviz kuru fiyatlara geçiş etkisini VAR yöntemiyle incelemiştir. Analizde 2002-2011 dönemi verileri kullanılmıştır. Elde edilen sonuçlara göre geçişkenlik mevcuttur ve yıllık bir dönemde bu geçiş etkisi oranının iki değişken (ÜFE ve TÜFE) içinde % 15 olduğu sonucuna varılmıştır.

Aççı (2015)' nın ele aldığı döviz kuru geçiş etkisine yönelik çalışmada Türkiye ekonomisinde geçişkenliğin ihracat ve ithalat fiyatları üzerindeki etkisi sınanmıştır. 1997 ve 2004 yılları arasındaki verilerin kullanıldığı çalışmada nominal döviz alım ve satım kurları, ihracat ve ithalat değer endeksleriyle birlikte alt sektörler olarak tarım, ormancılık, madencilik, imalat, balıkçılık ve hurda sektörü değişken olarak belirlenmiştir. Uygulanan nedensellik testleri ve yapılan analizler sonucunda döviz satış kuruyla ihracat değer endeksi arasında nedensellik bulunamamıştır. Döviz alım kuru ve ihracat değer endeksi arasındaysa ters ilişki gözlenmiştir. Döviz kuru geçiş etkisi, ihracat fiyatları üzerinde etkili olmazken ithalat fiyatları üzerindeyse kısmi geçiş etkisi göstermektedir.

Ergin (2015), çalışmasında 2005 ve 2014 yılları arasındaki aylık verileri kullanarak Türkiye'de meydana gelen geçiş etkisini araştırmıştır. VAR analiz yöntemiyle iki farklı model oluşturmuştur. İlk model döviz kuru geçiş etkisinin ihracat fiyatlarına olan etkisini, diğer modelde ithalat fiyatlarına yönelik gerçekleşen döviz kuru geçiş etkisini ve genel fiyatlar üzerindeki değişimleri ele almaktadır. Modellerden ve yapılan analizlerden elde edilen bulgulara göre döviz kurunda meydana gelen oynaklıkların fiyatlar genel seviyesini arttırdığı gözlemlenmiştir. Söz konusu bu geçiş etkisi ithalat yoluyla oluşan etkinin yanında yurt içi mallarının ucuzlamasından dolayı oluşan dış talepten de kaynaklanmaktadır. Döviz kuru geçiş etkisi yansımalarının, ithalat fiyatları üzerinde TÜFE değişkeninden daha fazla etkiye sahip olduğu gözlemlenmiştir. Ağırlıklı döviz kuru geçiş etkisi ithalat fiyatları üzerinden kendisini göstermektedir.

Kolcu ve Yamak (2017), Türkiye'de döviz kuru geçiş etkisinin ithalat ve ihracat fiyatlarına olan yansımaları, 1998-2016 zaman diliminde ARDL ve NARDL modellerini kullanarak, analiz etmişlerdir. Hem ARDL hem NARDL modellerinin sonuçlarına göre ithalat ve ihracat fiyatlarının döviz kurlarındaki değişimlerden, uzun dönemde, etkilendiği gözlemlenmiştir. Bu etki aralarında meydana gelen ilişkinin ters yönlü olmasından dolayı döviz kurlarında meydana gelecek %1'lik bir artışın, ihracat ve ithalat fiyatlarını düşüreceği anlamına gelmektedir.

Kaygısız (2018), 2002-2016 dönemi için, Türkiye'de meydana gelen kur dalgalanmalarının enflasyon üzerindeki etkilerini VAR modelleriyle analiz etmiştir. Seçilen değişkenler ham petrol ithal fiyatları, para arzı, sanayi üretim endeksi, nominal döviz kuru ve üretici fiyat endeksidir (ÜFE). Elde edilen sonuçlara göre seçilen değişkenler döviz kurunda meydana gelen şoklardan etkilenerek kendi şoklarını arttıran bir eğilim göstermişlerdir. Döviz kuru; enflasyon, para arzı ve ÜFE'yi etkileyerek on dönem boyunca bu etkisini sürdürmektedir. Diğer değişkenler üzerindeki etki süresi 16 dönem olarak görülmektedir. Varyans ayrıştırma analizine göre enflasyon üzerinde meydana gelen değişimlerin yaklaşık % 20'si döviz kurundan kaynaklanmaktadır ve hem kısa dönemde hem de uzun dönemde aynı oranda etkisini göstermektedir. Bu durumda döviz kurları üzerinde meydana gelen değişimlerin yurtiçi fiyatları üzerinde etki yarattığı görülmektedir.

Çıtak ve Kendirli (2019), petrol fiyatları, döviz kuru ve hisse senetleri değişkenlerinin DKGE'ye asimetric etkisini, 2010.01-2019.12 döneminde, NARDL yöntemiyle incelemiştir. Yapılan analizler neticesinde petrol fiyatlarında meydana gelen bir değişimin, hisse senedi fiyatlarını veya döviz kurlarını, uzun dönemde, etkilemediği sonucuna ulaşılmıştır. Böylelikle petrol fiyatları üzerinden hisse senedi fiyatlarına veya döviz kurlarına yönelik asimetric bir geçiş bulunamamıştır. Hisse senedi fiyatları ve döviz kurlarında meydana gelen oynaklıkların, petrol fiyatları üzerinde meydana gelen değişimlere duyarlı kaldığı anlaşılmıştır.

Göktaş (2019) ise Türkiye üzerine yürüttüğü çalışmasında 2003-2018 yılları arasındaki verileri kullanarak NARDL modeli oluşturmuş ve döviz kuru üzerinden tüketici fiyatları üzerine yansıyan asimetric geçiş etkisini araştırmıştır. Çalışma sonucunda elde edilen bulgulara göre Türkiye'de meydana gelen döviz kuru dalgalanmalarının enflasyonist süreci devam ettirdiği ve bu durumdan dolayı oluşan şoklar üzerinden fiyatlara geçiş etkisinin asimetric olduğu yani doğrusal olmadığı sonucuna ulaşılmıştır.

Asimetric etki üzerine yapılan bir diğer çalışma da Özata (2019)'dur. Özata (2019)'da Türkiye'de meydana gelen döviz kuru oynaklıklarının asimetric etkileri, NARDL yöntemini kullanarak incelemiştir. Çalışmada 2010.Ç1-2018.Ç2 dönemi incelenmiştir. Analizden elde edilen sonuçlara göre döviz kuru geçiş etkisinin uzun dönemde enflasyon üzerinde önemli bir etkiye sahip olduğu sonucuna varılmıştır. Döviz kuru üzerinde meydana gelen % 1'lik artış tüketici fiyatlarını yaklaşık % 0,7 arttırırken; % 1'lik azalış, yaklaşık, % 0,04 oranında azaltmaktadır. Ancak bu sonuçlar anlamlı çıkmamakta ve kurlar üzerinde meydana gelen değişimlerin aynı oranda fiyatlara yansımadağı görülmektedir. Simetri testlerine göre döviz kuru geçiş etkisi, kısa dönemde, simetric gerçekleşirken, uzun dönemde, asimetric etkiler oluşturmaktadır. Ayrıca yapılan çalışmaya göre tüketici fiyatları üzerinde sadece döviz kurlarında meydana gelen değişimlerin etkisinin olmadığı, aynı zamanda petrol fiyatları, firma fiyatlama stratejileri ve beklentilerin de önemli etkilere sahip olduğu gösterilmiştir.

Güler (2020), yaptığı çalışmada Türkiye'de meydana gelen döviz kuru geçiş etkisini ARDL yöntemiyle incelemiştir. Çalışmada kullanılan veri seti 2006.Ç1- 2019.Ç4 zaman dilimindeki verilerden oluşmaktadır ve 6

değişken içermektedir. Elde edilen sonuçlara göre döviz kurunda meydana gelen oynaklıkların ithal edilen mal fiyatları üzerinden yurtiçi fiyatlarına yansıtıldığı gözlemlenmiştir.

Yıldırım (2021), Türkiye’de döviz kuru geçiş etkisi üzerine yürüttüğü çalışmasında VAR analiz yöntemini kullanmıştır. Analiz de kullanmak için 2008 ve 2018 yılları arasındaki dönemleri örneklem olarak seçmiş ve serileri aylık olarak oluşturmuştur. ÜFE, TÜFE, ABD doları, döviz kuru ve ithalat miktar endeksini oluşturduğu modelin içerisine değişken olarak katmıştır. Elde edilen bulgulara göre döviz kurları üzerinde meydana gelen % 1’lik değişimin üretici fiyatları üzerinde yaklaşık % 3,8 artışa neden olduğu saptanmıştır ve etkisi beş döneme kadar devam etmektedir. Aynı şekilde kurlar üzerinde meydana gelen değişim, tüketici fiyatlarında ise % 4,5 seviyesinde artış yaratmaktadır ve yine beş dönem sürmektedir. Bu durumdan da görüldüğü üzere ÜFE ve TÜFE üzerinde meydana gelen değişiklikler zincirleme olarak birbirlerini etkilemekte ve ÜFE üzerine döviz kurundan geçiş etkisi, TÜFE’ye kıyasla, daha çok ve uzun sürmektedir.

Kassaouri ve Altıntaş (2021), petrol fiyatları ve döviz kuru şoklarının, hisse senedi fiyatları üzerinde asimetric bir ilişkiye sahip olup olmadığı araştırma konusu olmuştur. Türkiye temel alınarak yapılan çalışmada 2002 ve 2018 yılları arasındaki aylık veriler kullanılarak veri seti oluşturulmuştur. Oluşturulan modelin analiz edilmesi için NARDL analiz yöntemi tercih edilmiştir. Çıtak ve Kendirli (2019)’nin elde ettiği sonucun aksine bu çalışmada elde edilen sonuçlara göre seçilen değişkenler arasında hem kısa dönemde hem uzun dönemde asimetric bir ilişki tespit edilmiştir.

Konak ve Peçe (2023) oluşturdukları çalışmada enflasyon oranı, faiz oranı ve döviz kuru geçiş etkisi değişkenlerinin birbirleriyle olan ilişkilerini sınamaya tutmuşlardır. 2011 ve 2021 yılları arasındaki aylık verilerden oluşan veri seti Türkiye genelinde toplanan verilerden oluşmaktadır. Yapılan analizler neticesinde kısa dönemde döviz kuru ve enflasyon oranı arasında karşılıklı ilişki tespit edilmiştir. Kısa dönemdeyse faiz oranından enflasyon oranına yönelik bir ilişki bulunmuştur. Uzun dönemde sadece enflasyon oranından döviz kuruna doğru tek yönlü bir nedensellik ilişkisi görülmüştür.

Son olarak, Berk ve Yanar (2023) döviz kuru üzerinde meydana gelen değişimlerin yurtiçi ÜFE ve TÜFE üzerine olan geçiş etkisini ve bu etkinin derecesini incelemiştir. Türkiye üzerine yapılan çalışma 2003.01-2021.12 dönemini kapsamaktadır. Çalışmada VAR modeli tercih edilmiştir. Edinilen bulgulara göre, uzun dönemde, nominal döviz kurunun, TÜFE ve ÜFE üzerinde pozitif artışa sebep olduğu sonucuna ulaşılmıştır. Ayrıca nedensellik analizlerinde kısa dönemde döviz kurundan TÜFE ve ÜFE’ye nedensellik olduğu, uzun dönemde ise ÜFE ve TÜFE’den döviz kuruna yönelik bir nedensellik ilişkisi olduğu saptanmıştır.

Yukarıda bahsi geçen çalışmalardan ve analizlerden de görüleceği üzere “Döviz Kuru Geçiş Etkisi” üzerine birçok ekonometrik çalışma yapılmıştır. Yapılan çalışmaların sonuçları her zaman aynı çıkmayıp, farklılıklar göstermiştir. Bu farkların sebebi elbette seçilen ülkelerin ekonomik ve siyasi yapısının farklı olması, analiz yönteminin farklı seçilmesi, seçilen dönemlerin değişkenlik göstermesi, kriz zamanlarında oluşan şokların farklı etkilere sahip olması, geleceğe yönelik beklentilerin ve firma seçimlerinin fark göstermesi, politika uygulayıcıların farklı kararlar alması gibi konulardan dolayı da kaynaklanmaktadır. Ancak hem döviz kuru ve petrol fiyatlarının asimetric etkisini inceleyen hem de söz konusu değişkenlerin TÜFE alt kalemleri üzerindeki etkisini inceleyen çalışmalar az sayıdadır. Bu az sayıdaki çalışmalarda uygulanan NARDL yöntemiyle elde edilen bulguların çoğunda seçilen değişkenlerin arasında uzun ve kısa dönemde asimetric ilişki söz konusu olduğu gözlemlenmiştir. Altıntaş ve Kassaouri (2021) ele aldıkları çalışmada petrol fiyatları, reel döviz kuru ve para arzı üzerinde oluşan asimetric etkileri incelemiş ve varlığına yönelik sonuçlar elde etmiştir. Gökteş (2019), yürüttüğü çalışmasında TÜFE ve nominal döviz kuru arasındaki geçişkenliği inceleyerek değişkenler arasında simetric bir ilişki bulmuştur. Bu çalışmada elde edilen bulgular da aynı sonucu vermektedir. TL üzerindeki hem artış hem azalış oranları TÜFE üzerinde artışa neden olmaktadır ve döviz artışı fiyatları daha fazla etkilemektedir. Özata (2019) da yine döviz kuru artışının döviz kuru azalışından daha fazla fiyatlar üzerinde etkili olduğunu göstererek aynı bulgulara ulaşmıştır. Bunun yanında Kolcu ve Yamak (2017), yukarıda belirtildiği gibi elde ettikleri sonuçlarda DGKE’nin ithalat üzerinde simetric, ihracat fiyatlarındaysa uzun dönemde simetric kısa dönemde asimetric olduğu sonucuna ulaşmışlardır.

#### 4. EKONOMETRİK YÖNTEM

Çalışmamızın dönemi 2006.01-2023.05’tir. Para birimi değişkeni olarak dünya ekonomisinde genel olarak kabul gören ve Türkiye ekonomisi açısından da büyük öneme sahip olan ABD doları satış kuru verileri kullanılmıştır. Toplanan ve kullanılan veriler TÜİK’in resmi internet sitesinden, TCMB’ye ait olan Elektronik Veri Dağıtım

Sistemi (EVDS)'den, ham petrol varil fiyatları ise ABD Enerji Bilgi Yönetim İdaresine ait olan resmi internet sitesi üzerinden alınmıştır.

TÜFE ve Alt kalemleri, ham petrol ve döviz kuruna ait 15 grup oluşturulmuş ve değişken olarak modele dâhil edilmiştir. Sırasıyla LTUFEGENEL: TÜFE Genel Endeksini, LTUFEALT1: TÜFE Gıda ve Alkolsüz İçecekleri, LTUFEALT2: TÜFE Alkollü İçecekler ve Tütün'ü, LTUFEALT3: TÜFE Giyim ve Ayakkabıyı, LTUFEALT4: TÜFE Konut, 56 Su, Elektrik, Gaz ve Diğer Yakıtları, LTUFEALT5: TÜFE Mobilya, Ev Aletleri ve Ev Bakım Hizmetlerini, LTUFEALT6: TÜFE Sağlık, LTUFEALT7: TÜFE Ulaştırmayı, LTUFEALT8: TÜFE Haberleşmeyi, LTUFEALT9: TÜFE Eğlence ve Kültür'ü, LTUFEALT10: TÜFE Eğitim'i, LTUFEALT11: TÜFE Lokanta ve Otelleri, LTUFEALT12: TÜFE Çeşitli Mal ve Hizmetleri, LHAM: Ham Petrol Varil Fiyatlarını ve son olarak LKUR: Döviz Satış Kurunu temsil etmektedir.

Çalışmada yararlanılan ve oluşturulan zaman serileri çoğu zaman değişken tavırlar sergilemektedir. Edinilen verilerin düzenli ve düzensiz hareketler sergilemesinden dolayı bir dizi işlem uygulanması gerekmiştir. Verilerin mevsimselliklerinden arındırılmaları için CENSUS X-12 yöntemi kullanılmıştır. Veriler mevsimsellikten arındırıldıktan sonra Augmented Dickey Fuller (ADF) testi ve Phillips Perron (PP) testleriyle, serilerin durağanlık durumları kontrol edilmiştir.. Ardından ARDL ve NARDL tahmin modelleri oluşturulmuştur. Modellerde varyans sapmasının ve değişkenliğin önüne geçebilmek amacıyla tahmin modeli kurulurken HAC (Newey-West) yöntemi kullanılmıştır. Daha sonrasında Breusch-Godfrey Seri Korelasyon LM testi kullanılarak hata terimleri arasında otokorelasyon meydana gelip gelmediği test edilmiştir. Modellerde uzun dönem ilişkileri sınır testi kullanılarak belirlenmiş ve Ramsey Reset testi kullanılarak model yapısının işlerliği test edilmiştir. Son olarak kısa dönem ilişkileri Error Correction model (ECM) ile tahmin edilmiştir.

#### 4.1. ARDL Modeli ve Model Tahmini

Değişkenler arasında oluşan ilişkilerin incelenmesi amacıyla genellikle eş bütünleşme testleri kullanılmaktadır. Başlarda bu testler değişkenlerin aynı dereceden bütünleşik olmasını şart koşmaktaydı ancak Pesaran ve diğerleri (1996), birbirinden farklı derecelerdeki değişkenler arasında gerçekleşen ilişkilerin sınanmasını mümkün kılan (ARDL) sınır testi yaklaşımını ortaya atmışlardır. Bu yaklaşım ilerleyen yıllarda daha da geliştirilerek yaygın hale getirilmiştir. Otoregresif dağıtılmış gecikme olarak tanınan bu yaklaşım en küçük kareler yöntemine dayanmakta; I(0) ve I(1) gibi değişken sınıflandırmalarına ihtiyaç duymamaktadır. Ayrıca geri kalan standart eş bütünleşme metodlarından farklı olarak daha öncesinde birim kök testi yapılmasına da zorunluluk getirmemiştir (Shahrestani ve Sharifi, 2007: 4). ARDL testiyle eş bütünleşme testi yapılırken eş bütünleşmenin olmadığı  $H_0$  hipotezi, eşbütünleşmenin olduğunu belirten  $H_1$  alternatif hipotezine karşı sınanmaktadır. Hipotezler aşağıdaki şekilde kurulur ve F testiyle birlikte kullanılır.

$H_0: \theta_1 = \theta_2 = \theta_3 = \theta_4 = 0$  (Eş bütünleşme yoktur, uzun dönem ilişkisi yoktur.)

$H_1: \theta_1 \neq \theta_2 \neq \theta_3 \neq \theta_4 \neq 0$  (Eş bütünleşme vardır, uzun dönem ilişkisi vardır.)

Bu hipotezleri sınamak için kullanılan F istatistiği ve Wald test istatistiği, Pesaran vd. (2001)'nin araştırmalarında asimptotik olarak belirlenen anlamlılık düzeyleriyle karşılaştırılmaktadır. Kritik değer kümelerinden birisi tüm değişkenlerin I(0) seviyesinde olduğunu varsayarken diğer küme tüm değişkenlerin I(1) seviyesinde olduğunu varsaymaktadır ve bu değerler için alt ve üst sınır noktaları belirlenmiştir. Hesaplanan ve ortaya konulan F istatistiği alt sınırdan küçükse  $H_0$  hipotezi reddedilemez ve eş bütünleşmenin olmadığı anlamına gelir. Eğer F istatistiği üst sınırdan büyük çıkarsa  $H_0$  hipotezi reddedilerek eş bütünleşme olduğu göz önüne konulur. F istatistik değeri üst ve alt sınırın arasında kalıyorsa sonuç belirsiz olacaktır (Shahrestani ve Sharifi, 2007: 4-5).  $H_0$  Hipotezinin kabul edilmemesi seçilmiş değişkenler arasında uzun dönem ilişkisi olduğunu ortaya koymaktadır.

Uzun dönem ilişkisini ortaya koyan ARDL modeli aşağıdaki şekilde gösterilmektedir:

$$\ln T U F E_t = \beta_0 + \sum_{i=1}^k \beta_{1i} \Delta \ln T U F E_{t-i} + \sum_{i=1}^k \beta_{2i} \Delta \ln X_{1t-i} + \sum_{i=1}^k \beta_{3i} \Delta \ln K u r_{t-i} + \sum_{i=1}^k \beta_{4i} \Delta \ln P e t r o l_{t-i} + \theta_1 \ln T U F E_{t-1} + \theta_2 \ln X_{t-1} + \theta_3 \ln K u r_{t-1} + \theta_4 \ln P e t r o l_{t-1} + u_t \quad (4.1)$$

X, TÜFE'nin alt kalemlerini ifade eder. Ayrıca denklemde  $u_t$  hata terimini,  $k$  gecikme sayısını ifade etmektedir. Seçilen değişkenler arasındaki kısa dönemli ilişkiyi inceleyen ARDL modeli aşağıdaki gibidir:

$$\Delta \ln T U F E_t = \omega_0 + \sum_{i=1}^k \omega_{1i} \Delta \ln T U F E_{t-i} + \sum_{i=0}^k \omega_{2i} \Delta \ln X_{1t-i} + \sum_{i=0}^k \omega_{3i} \Delta \ln K u r_{t-i} + \sum_{i=0}^k \omega_{4i} \Delta \ln P e t r o l_{t-i} + \omega E C M_{t-1} \quad (4.2)$$



Denklemden ECM hata düzeltme terimini ifade etmektedir.  $\omega$  katsayısıysa kısa dönemde meydana gelen sapmanın kaç dönem içerisinde tekrar dengeye gireceğini göstermektedir. Modelin tutarlı ve istatistiksel olarak anlamlı çıkabilmesi için hata düzeltme modelini ifade eden terimin negatif çıkması gerekmektedir.

Gerçekleştirdiğimiz çalışmada ilk olarak ARDL testi kullanılarak TÜFE ve alt kalemleriyle ayrı ayrı ham petrol ve döviz kuru arasındaki dönemsel ilişkiler sınanmıştır.

## 4.2. NARDL Modeli ve Model Tahmini

Sınama yapmak için kullanılan ilk dönemlerdeki testler, değişkenler üzerinde gerçekleşen artış ve azalışların, geçiş etkisi üzerinde aynı yönde etki yaratacağını kabul etmiştir. Fakat farklı tipte karar alıcıların olduğu, beklenti ve tepkilerin farklılık gösterdiği, simetrik yapının tam olarak sağlanamadığı piyasalar için bu varsayım her zaman geçerli olmamaktadır. Bundan dolayı test sonuçları yanıltıcı olabilmektedir çünkü asimetrik etkinin varlığından da şüphe edilmesi gerekmektedir. Değişkenlerde meydana gelen pozitif ve negatif yönlü şoklar arasındaki etkinin, değişkenler arasındaki ilişkiden farklı yönde olabileceğini ilk olarak Granger ve Yoon (2002) ortaya koymuştur. Sonrasında Hatemij (2012) nedensellik testinde oluşan asimetrik ilişkinin pozitif ve negatif şoklarının birbirinden farklı nedensellik etkilere sahip olabileceğini ortaya koymuştur (Göktaş, 2019:37). Shin vd. da aynı yönde çalışmalar yürüterek daha sonralarında Peseran ve Shin (1998), Peseran vd. (2001) tarafından oluşturulan ARDL yaklaşımını, asimetrik etkilerin eklenmesiyle genişleterek Doğrusal Olmayan Otoresif Gecikmesi Dağıtılmış (N-ARDL) yöntemini ortaya koymuşlardır (Kolcu ve Yamak, 2017: 648). Yöntemde belirlenen değişkenlerin arasında bulunduğu kabul edilen asimetrik uzun dönem ilişkisi (4.3) eşitliğinde gösterilmiştir.

$$y_t = \varphi_0 + \varphi^+ x_t^+ + \varphi^- x_t^- + u_t \quad (4.3)$$

Eşitlikte  $y_t$  bağımlı değişkeni,  $u_t$  hata terimini,  $\varphi = (\varphi_0, \varphi^+, \varphi^-)$  ise asimetrik uzun dönem katsayılarını ifade etmektedir. Son olarak  $x_t^+$  ile  $x_t^-$  bağımsız değişken üzerinde meydana gelen pozitif ve negatif değişimin kısmi toplamlarını,  $x_0$  bağımsız değişkenin ilk gözlem değerini göstermektedir (Göktaş, 2019: 37-38). Çalışmada yararlanılan NARDL yöntemi ARDL yaklaşımının genişletilmiş halidir. Bu yüzden değişkenlerin hem I(0) hem I(1) seviyeleri modelde test edilebilmektedir. Ayrıca oluşturulacak olan hipotezler için de aynı yaklaşım uygulanabilmektedir. Böylece model hipotezleri aşağıdaki gibi olacaktır.

$H_0: \theta_1 = \theta_2 = \theta_3 = \theta_4 = 0$  (Eş bütünleşme yoktur, uzun dönem ilişkisi yoktur.)

$H_1: \theta_1 \neq \theta_2 \neq \theta_3 \neq \theta_4 \neq 0$  (Eş bütünleşme vardır, uzun dönem ilişkisi vardır.)

Yöntemde ARDL yaklaşımında olduğu gibi uzun dönem ve kısa dönem etkileri asimetrik ilişki ihtimali de göz önünde bulundurularak sınanmaktadır. F istatistik değerleri sınır kritik değerleriyle karşılaştırılarak sonuca ulaşılabilmektedir. F istatistik değeri kritik değerlerin üstünde olursa değişkenler arasında eş bütünleşme olduğu yani  $H_0$  hipotezi reddedilmektedir. Elde edilen değer kritik seviyelerin arasında olursa karar verilemeyeceği anlaşılmaktadır. Kısa ve uzun dönemli asimetrik ilişkinin birlikte sınanmasını uygun hale getiren NARDL (p-q) yaklaşımı hata düzeltme modeli (4.3.6.2) eşitliğindeki gibi kurulabilmektedir.

$$y_t = c + \theta_1 y_{t-1} + \theta_2 x_{t-1}^+ + \theta_3 x_{t-1}^- + \sum_{i=1}^{p-1} \alpha_i \Delta y_{t-i} + \sum_{j=0}^q (\beta_j^+ \Delta x_{t-j}^+ + \beta_j^- \Delta x_{t-j}^-) + \varepsilon_t \quad (4.4)$$

(4.3.6.2) eşitliğinde p ve q bağımlı olan ve bağımsız olan değişkenlerin sahip olduğu en uygun gecikme uzunluklarını, c model sabitini ve  $\varepsilon$  beyaz gürültü (White Noise) süreci barındıran hata terimini ifade etmektedir.  $\theta_1, \theta_2, \theta_3$  uzun dönemli ilişki dinamiklerini,  $\sum_{j=0}^q \beta_j^+$  ile  $\sum_{j=0}^q \beta_j^-$  kısa dönemli ilişki dinamiklerini göstermektedir. Asimetrik etkiye sahip uzun dönem katsayıları  $\varphi^+ = -\theta_2/\theta_1$  ve  $\varphi^- = -\theta_3/\theta_1$  işlemleriyle belirlenmektedir (Göktaş, 2019: 38).

## 4.3. Model Tahminlerinden Elde Edilen Sonuçlar

Çalışmada döviz kuru ve ham petrol bağımsız değişken olarak belirlenmiş, TÜFE ve alt kalemleriye bağımlı değişken olarak belirlenerek döviz kuru geçiş etkisinin fiyatlar üzerine etkisi incelenmiştir.

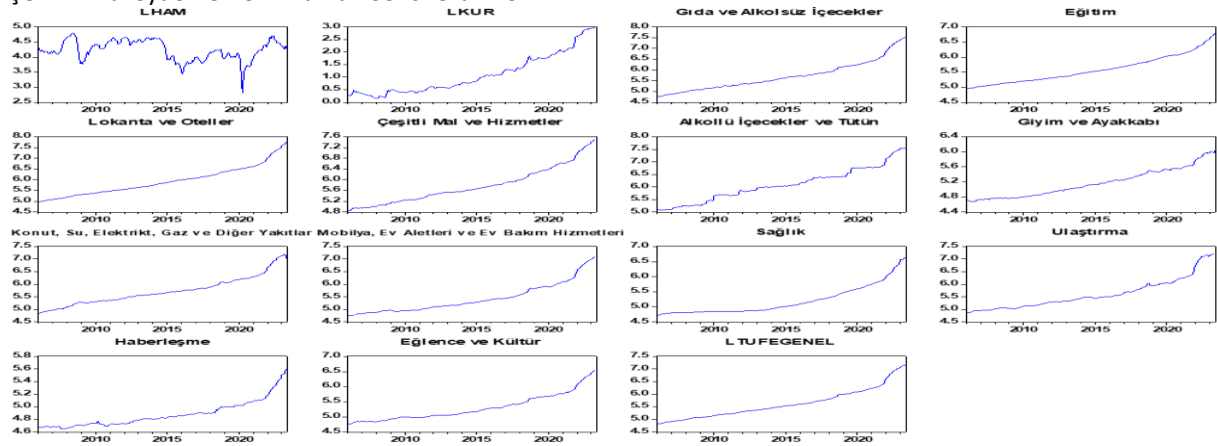
Tablo 1. Verilere Ait Tanımlayıcı İstatistikler

	TUFE GENEL	LTUFEALT1	LTUFEALT 2	LTUFEALT 3	LTUFEALT 4	LTUFEALT5	LTUFEALT6	LTUFEALT7
Ortalama	5,614564	5,710679	6,079929	5,167608	5,725953	5,439635	5,194754	5,607735
Medyan	5,505348	5,602177	6,040002	5,125261	5,635602	5,260511	4,993674	5,469665

	0,574382	0,666464	0,64772	0,366966	0,548904	0,586248	0,467441	0,600721
Standart Sapma	0,574382	0,666464	0,64772	0,366966	0,548904	0,586248	0,467441	0,600721
Çarpıklık	0,882449	0,87607	0,32782	0,553069	0,749473	1,147059	1,305354	1,118362
Basıklık	3,204752	3,227078	2,443602	2,317921	3,19287	3,595888	3,915033	3,639783
Jarque-Bera	27,49037 (0,000)	27,18359 (0,000)	6,439324 (0,039)	14,7064 (0,000)	19,89014 (0,000)	48,92393 (0,000)	66,64563 (0,000)	47,13173 (0,000)
Gözlem Sayısı	209	209	209	209	209	209	209	209
	LTUFEALT8	LTUFEALT9	LTUFEALT10	LTUFEALT11	LTUFEALT12	LKUR	LHAM	
Ortalama	4,876683	5,303915	5,582742	5,93534	5,789144	1,096742	4,228488	
Medyan	4,821868	5,166074	5,504996	5,8 38375	5,629985	0,783155	4,229647	
Standart Sapma	0,203592	0,43468	0,44474	0,656161	0,672598	0,786708	0,331287	
Çarpıklık	1,417111	1,042869	0,650969	0,732564	0,755427	0,873400	-0,641448	
Basıklık	4,853537	3,404472	2,61814	2,983957	2,785824	2,715439	3,616987	
Jarque-Bera	99,87077 (0,000)	39,30852 (0,000)	16,03082 (0,000)	18,69555 (0,000)	20,27777 (0,000)	27,27696 (0,000)	17,64739 (0,000)	
Gözlem Sayısı	209	209	209	209	209	209	209	

Tablo 1’de yer alan değerlere bakıldığında birçok TÜFE alt grubunun ortalamalarının TÜFE genel seviyesinden uzaklaştığı anlaşılmaktadır. Tablo 1’de görülen çarpıklık, ölçme sonuçlarının dağılımı hakkında bilgi vermektedir. Çarpıklık değerinin sıfır olması normal dağılıma, pozitif olması pozitif dağılıma, negatif olmasıysa negatif dağılıma işaret etmektedir. Aynı zamanda basıklık kriteri de normal dağılım varsayımı altında sıfır değerini almaktadır. Genel olarak değerlerin -1 ve +1 değerleri arasında olması beklenmektedir. Bir başka kriter olan standart sapma değerinin yüksek olması modelin ayırt edici özelliğinin fazla ve seçilen grubun heterojen olduğuna işaret eder. Eğer standart sapma düşüğe ayırt edicilik düşük ve grup homojendir. Tablo 1 içerisinde verilen medyan, ortalama gibi değerler de model dağılımı hakkında bizlere yardımcı olmaktadır. Dikkatli bakıldığında elde edilen verilerin medyan ve ortalama değerlerinin birbirlerine yakın olduğu görülmektedir. Buna göre söz konusu değerler yatay ekseninde normal dağılım sergilemektedir. Ancak bazı değişkenlerin çarpıklık değerleri +1 seviyesinin üzerinde çıkmaktadır. Bu yüzden sola çarpık bir dağılımdan söz edilebilmektedir. Bu değişkenler LTUFEALT 5, LTUFEALT6, LTUFEALT7, LTUFEALT8 ve LTUFEALT9 değişkenleridir. Basıklık değeri elde edilen tüm verilerde +1 seviyesinden yüksek çıkmıştır. Pozitif oldukları için sivri bir dağılım söz konusudur. Ancak 3-4 seviyelerine kadar bu değerler ideal kabul edilmektedir (Turan, 2011:6, 19-26). Standart sapma değerleri sıfır değerine yakın oldukları için ortalamaya yakın seyretmektedir.

Şekil 1. Düzeyde Verilerin Zaman Serisi Grafikleri



Şekil 1’de verilen grafiklerden de anlaşılacağı gibi ham petrol fiyatlarına ait olan veriler hariciden geriye kalan verilerde yukarı yönlü trend gözükmemektedir. Oluşan trendin durağanlık özelliğini sağlamamasından dolayı verilerin durağan olmadığı sonucuna ulaşılmaktadır. Kesin sonuca ulaşabilmek için veriler birim kök testleriyle test edilecek ve sonuçlara göre durağan olmayan serilerin durağan hale getirilmesi gerekecektir. Durağanlık koşulunun sağlanıp sağlanmadığının anlaşılması için yapılan PP ve ADF testi sonuçları Tablo 2’de gösterilmiştir.

Tablo 2. ADF ve PP Birim Kök Testi Sonuçları

Değişkenler	Test	Seviye		Birinci Fark		Entegrasyon Derecesi
		Sabit	Sabit ve Trend	Sabit	Sabit ve Trend	
Tüfe Genel	ADF	2,421 (1,000)	0,723 (0,999)	-3,928*** (0,002)	-4,591*** (0,000)	I(1)
	Phillips-Perron	4,406 (1,000)	2,656 (1,000)	-6,755*** (0,000)	-7,673*** (0,000)	
1 Tüfe Gıda ve Alkolsüz İçecekler	ADF	4,784 (1,000)	4,346 (1,000)	-3,818*** (0,003)	-11,219*** (0,000)	I(1)
	Phillips-Perron	4,570 (1,000)	3,230 (1,000)	-11,636*** (0,000)	-12,107*** (0,000)	
2 Tüfe Alkollü İçecekler ve Tütün	ADF	1,854 (0,999)	-1,054 (0,932)	-11,932*** (0,000)	-12,083*** (0,000)	I(1)
	Phillips-Perron	1,379 (0,999)	-1,276 (0,890)	-12,148*** (0,000)	-12,247*** (0,000)	
3 Tüfe Giyim ve Ayakkabı	ADF	3,778 (1,000)	-0,327 (0,989)	-10,907*** (0,000)	-11,546*** (0,000)	I(1)
	Phillips-Perron	3,476 (1,000)	-0,531 (0,981)	-10,826*** (0,000)	-11,310*** (0,000)	
4 Tüfe Konut, Su, Elektrik, Doğalgaz, Diğer	ADF	-0,162 (0,939)	-3,626** (0,030)	-3,703*** (0,004)	-3,607** (0,031)	I(0)
	Phillips-Perron	1,632 (0,999)	-0,073 (0,995)	-9,124*** (0,000)	-9,238*** (0,000)	
5 Tüfe Mobilya, Ev Aletleri ve Bakım	ADF	3,999 (1,000)	1,830 (1,000)	-6,893*** (0,000)	-7,914*** (0,000)	I(1)
	Phillips-Perron	5,493 (1,000)	2,482 (1,000)	-6,990*** (0,000)	-7,968*** (0,000)	
6 Tüfe Sağlık	ADF	3,051 (1,000)	1,895 (1,000)	0,133 (0,967)	-1,646 (0,771)	I(1)
	Phillips-Perron	12,313 (1,000)	7,016 (1,000)	-7,859*** (0,000)	-10,409*** (0,000)	
7 Tüfe Ulaştırma	ADF	1,753 (0,999)	-0,315 (0,989)	-4,848*** (0,000)	-5,295*** (0,000)	I(1)
	Phillips-Perron	3,040 (1,000)	0,623 (0,999)	-9,503*** (0,000)	-9,963*** (0,000)	
8 Tüfe Haberleşme	ADF	8,223 (1,000)	5,736 (1,000)	-3,660*** (0,005)	-4,688*** (0,001)	I(1)
	Phillips-Perron	6,468 (1,000)	5,161 (1,000)	-12,653*** (0,000)	-13,660*** (0,000)	
9 Tüfe Eğlence ve Kültür	ADF	5,395 (1,000)	3,529 (1,000)	-4,151*** (0,001)	-5,227*** (0,000)	I(1)
	Phillips-Perron	5,430 (1,000)	3,300 (1,000)	-10,387*** (0,000)	-11,286*** (0,000)	

10 Tüfe Eğitim	ADF	1,508 (0,999)	2,824 (1,000)	2,782 (1,000)	1,505 (1,000)	I(1)
	Phillips-Perron	6,113 (1,000)	8,484 (1,000)	-8,609*** (0,000)	-10,520*** (0,000)	
11 Tüfe Lokanta ve Oteller	ADF	2,099 (0,999)	2,344 (1,000)	-0,011 (0,955)	-1,011 (0,939)	I(1)
	Phillips-Perron	4,901 (1,000)	6,467 (1,000)	-4,756*** (0,000)	-6,555*** (0,000)	
12 Tüfe Çeşitli Mal ve Hizmetler	ADF	4,262 (1,000)	2,207 (1,000)	-4,809*** (0,000)	-9,599*** (0,000)	I(1)
	Phillips-Perron	5,151 (1,000)	2,794 (1,000)	-8,960*** (0,000)	-9,727*** (0,000)	
Ham Petrol Fiyatları	ADF	-3,111** (0,027)	-3,242* (0,079)	-10,948*** (0,000)	-10,920*** (0,000)	I(0)
	Phillips-Perron	-2,749* (0,067)	-2,822 (0,190)	-10,580*** (0,000)	-10,545*** (0,000)	
Döviz Kuru	ADF	2,455 (1,000)	-0,703 (0,970)	-9,900*** (0,000)	-10,411*** (0,000)	I(1)
	Phillips-Perron	2,313 (1,000)	-0,815 (0,961)	-9,491*** (0,000)	-9,637*** (0,000)	

Not: “\*” işareti % 10, “\*\*” işareti % 5 ve “\*\*\*” işareti % 1 de anlamlı olan sonuçları göstermektedir

Seride birim kök bulunup bulunmadığı Tablo 2’ de verilen değerler üzerinden anlaşılmaktadır ve seçilen kritik değerler Schwarz bilgi kriteriyle (SIC) belirlenmiştir. 0,05 anlamlılık düzeyinde  $p$  değerinin 0,05’ten küçük olması veya  $t$  istatistik değerinin kritik değerlerden küçük olması  $H_0$  hipotezinin reddedilmesini gerektirmektedir. Bu durumda yukarıdaki tablodan hareketle  $H_1$  hipotezi reddedilemediğinden dolayı serinin durağan olduğu anlaşılmaktadır. Tablo içerisine hem sabit katsayılı hem de sabit katsayı ve trendin bulunabileceği durumlar eklenmiştir. Görüldüğü gibi ham petrol fiyatları ve TÜFE Konut, Su, Elektrik, Doğalgaz ve Diğer değişkeni farkı alınmadan durağan halde görünmektedir. Geri kalan grupların  $H_0$  hipotezi reddedilemediğinden dolayı birim kök barındırdıkları sonucuna ulaşılmaktadır. Bu yüzden 1. Dereceden farklarının alınması gerekmiştir.

Tablo 3. Model Seçim Kriter Tablosu

Model	LogL	AIC	SIC*	HQ	Adj. R-sq	Specification
1857	658,113827	-6,610293	-6,493631	-6,563067	0,999757	ARDL(2, 0, 2)
1844	660,168507	-6,621000	-6,487672	-6,567028	0,999760	ARDL(2, 1, 2)
1519	662,603446	-6,635568	-6,485574	-6,574849	0,999765	ARDL(4, 0, 2)
1506	665,172967	-6,651502	-6,484842	-6,584037	0,999770	ARDL(4, 1, 2)
1856	658,911636	-6,608240	-6,474912	-6,554268	0,999757	ARDL(2, 0, 3)

Çalışma için en uygun model yukarıda verilen Tablo 3 üzerinden de görüleceği üzere ARDL (2,0,0) modeli olarak belirlenmiştir. Bu modeli veren model 1857. Modeldir. Oluşturulan modelde LTUFEGENEL değişkeninin 2 dönem, LKUR değişkeninin 2 dönem gecikmesi alınırken LHAM değişkeninin gecikmesi alınmamıştır.

Tablo 4. Breusch-Godfrey LM Testi (TÜFE, Ham Petrol ve Döviz Kuru)

Breusch-Godfrey LM Testi					
1. Gecikme Değeri	F-İstatistik	2,236687	Prob. F(1,199)	0,1364	
2. Gecikme Değeri	F-İstatistik	1,250075	Prob. F(2,198)	0,2887	
3. Gecikme Değeri	F-İstatistik	2,416215	Prob. F(3,197)	0,0677	

4. Gecikme Değeri	F-İstatistik	2,021757	Prob. F(4,196)	0,0929
6. Gecikme Değeri	F-İstatistik	1,422345	Prob. F(6,194)	0,2078
8. Gecikme Değeri	F-İstatistik	1,398954	Prob. F(8,192)	0,1991

Tablo 4'den anlaşılacağı gibi olasılık değerlerinin tümü 0,05 ve 0,01 değerlerinden büyük çıkmaktadır. Bundan dolayı %1 ve %5 anlamlılık düzeylerinde  $H_0$  hipotezi reddedilememektedir. Böylece hata terimleri arasında ilişki yani otokorelasyon bulunamamıştır. Bir sonraki Tablo 5'de modelde yapısal kırılma olup olmadığını test eden Ramsey Reset değerleri verilmiştir.

Tablo 5. Ramsey Reset Testi (TÜFE, Ham Petrol ve Döviz Kuru)

Ramsey Reset Testi (Ham Petrol)			
	Value	df (Serbestlik Derecesi)	Olasılık Değeri
F-İstatistik	0,416640	(1, 199)	0,5194

Tablo 5'den de görüleceği gibi olasılık değeri 0,01 ve 0,05 anlamlılık düzeylerinden yüksek çıkmıştır. Bundan dolayı  $H_0$  hipotezi reddedilemez. Model içinde model kurma hatası veya yapısal bir hata söz konusu değildir.

Çalışma içerisine modelin yapısını ve güvenilirliğini belirten testlerden sonra ARDL sınır testi uygulanarak model içerisine dâhil ettiğimiz değişkenlerin uzun dönem ilişkileri incelenmiştir. Ortaya çıkan F testi sonucu aşağıda bulunan Tablo 6 aracılığıyla verilmiştir. Daha önce de belirtildiği gibi  $H_0$  hipotezi uzun dönem ilişkisi olmadığını,  $H_1$  hipoteziyse uzun dönemli bir ilişkinin olduğunu göstermektedir.

Tablo 6. ARDL Sınır Testi

F Sınır Testi (TÜFE, Döviz Kuru ve Ham Petrol)				
Test İstatistiği	Değer	Anlamlılık	I(0)	I(1)
Sonlu Örneklem n=80				
F İstatistiği	14,79982	10%	3,26	4,247
k	2	5%	3,94	5,043
Örneklem	207	1%	5,407	6,783

Yukarıda verilen Tablo 9'dan da görüleceği üzere test istatistiği olan değer 14.79982 tüm anlamlılık düzeylerinden büyük olduğu için  $H_0$  hipotezi reddedilmektedir. Bu da bizlere seçilen değişkenler arasında uzun dönem ilişkisinin bulunduğunu göstermektedir.

Bir sonraki Tablo 7' de seçilen değişkenlere ait katsayılar verilmiş ve aralarındaki uzun dönemli ilişkiler yorumlanmıştır. Tablo 7 üzerinden de anlaşılacağı gibi seçilen değişkenler istatistiksel olarak anlamlı çıkmaktadır çünkü olasılık değerleri 0,01 ve 0,05 kritik değerlerden küçük çıkmaktadır. Uzun dönemde ham petrol üzerinde meydana gelen yüzde 1' lik artış TÜFE üzerinde yaklaşık yüzde 0.37 artışa neden olacaktır. Döviz kurunda meydana gelen yüzde 1 oranında artışa TÜFE üzerinde yaklaşık yüzde 0.90 seviyesinde bir artışa neden olmaktadır.

Tablo 7. ARDL Testi Uzun Dönem İlişkileri

Uzun Dönem İlişkileri				
Değişken	Katsayı	Standart Hata	T İstatistik	Olasılık Değeri (P)
LKUR	0,905801	0,053428	16,95371	0,0000
LHAM	0,367026	0,070980	5,170817	0,0000

EC = LTUFEGENEL - (0,9058\*LKUR + 0,3670\*LHAM )

ARDL modeliyle birlikte uzun dönemli ilişkilerin incelenmesinin ardından hata düzeltme modeliyle birlikte kısa dönemli ilişkiler incelenmiştir. Ortaya çıkan hata düzeltme modelleri ve sonuçlar Tablo 8'de verilerek yorumlanmıştır.

Tablo 8. Hata Düzeltme Modeli (Error Correction Model)

ARDL ERROR CORRECTION MODEL (Tüfe, Ham Petrol ve Döviz Kuru)				
Bağımlı Değişken: D(LTUFEGENEL)				
Değişken	Katsayı	Standart Hata	T-İstatistik	Olasılık Değeri(p)
C	0,110065	0,016031	6,865839	0,0000
D(LTUFEGENEL(-1))	0,275791	0,061043	4,517981	0,0000
D(LKUR)	0,100444	0,016031	6,265548	0,0000
D(LKUR(-1))	0,068997	0,017539	3,934009	0,0001
CointEq(-1)*	-0,033890	0,005061	-6,696526	0,0000
Modele Ait İstatistikler				
Gözlem Sayısı (n) = 207	$R^2 = 0,658662$		F ist. = 97,44	Prob: 0,000
$Adj. R^2 = 0,651903$				

Tablo 8’de döviz kuru ve ham petrol değişkenlerinin TÜFE genel seviyesiyle aralarındaki kısa dönemli ilişkiye yer verilmiştir. Edinilen verilere göre uzun dönem ilişkisinde kısa dönemlik bir sapma meydana geldiğinde bu sapmanın yaklaşık yüzde 3.3’lük kısmının bir sonraki ayda düzeleceği öngörülmektedir. Son olarak döviz kuru üzerinde meydana gelebilecek yüzde 1 oranında değişimin kısa dönemde TÜFE’yi yaklaşık yüzde 0.10 seviyesinde arttıracığı tahmin edilmektedir. Elde edilen olasılık değerleri modelin anlamlı olduğuna işaret etmektedir.

TÜFE genel değişkeninden sonra sıra TÜFE Alt Kalemleriyle ham petrol ve döviz kuru arasındaki ilişkiyi incelemeye gelmiştir. Yapılan testlerin içerisine TÜFE’ye ait olan 12 alt kalem dâhil edilmiştir ve birim kök testleri gerçekleştirilmiştir. Böylece modelin ve çalışmanın bütünlüğü de bozulmamıştır. Daha sonrasında aynı şekilde Ramsey Reset ve Breusch-Godfrey LM testleriyle sınama yapılmıştır. Sonuçlar Tablo 9 üzerinden toplu şekilde gösterilmiştir.

Tablo 9. TÜFE Alt Kalemleri ve Test Sonuçları

Değişkenler	Model Seçim Kriterleri		Breusch-Godfrey LM Testi		Ramsey Reset Testi	
	SIC	Spesifikasyon	Gecikme Değeri	Ki-Kare Olasılık Değeri (p)	F İstatistikleri	Olasılık Değeri (p)
LTUFEALT1	-5,279307	ARDL(1,0,2)	1	0,9403	1,946963	0,1645
LTUFEALT2	-4,146370	ARDL(1,0,0)	1	0,0367	2,125511	0,0348
LTUFEALT3	-5,765359	ARDL(1,0,0)	1	0,0315	22,54735	0,0000***
LTUFEALT4	-5,229671	ARDL(1,0,2)	1	0,3148	5,470537	0,0203
LTUFEALT5	-5,953464	ARDL(2,0,2)	1	0,9500	7,518950	0,0067***
LTUFEALT6	-6,621399	ARDL(7,0,3)	1	0,4056	9,854408	0,0020***
LTUFEALT7	-5,216304	ARDL(4,1,2)	1	0,0512	1,393068	0,1069
LTUFEALT8	-6,430201	ARDL(1,0,0)	1	0,5203	18,30661	0,0000***
LTUFEALT9	-6,246231	ARDL(1,0,2)	1	0,9515	23,91830	0,0000***

LTUFEALT10	-6,959504	ARDL(7,0,0)	1	0,5058	12,72979	0,0005***
LTUFEALT11	-6,750966	ARDL(7,0,1)	1	0,2181	12,99866	0,0004***
LTUFEALT12	-6,107549	ARDL(2,0,1)	1	0,5791	0,897340	0,3446

Tablo 9’ da bağımlı değişkenler olan TÜFE alt kaleleriyle döviz kuru ve ham petrol arasında ilişki olup olmadığının tespit edilmesi için uygulanan testler gösterilmiştir. Tablo değerlerinden ulaşılan sonuca göre TÜFE Giyim ve Ayakkabı, TÜFE Mobilya, Ev Aletleri ve Ev Bakım Hizmetleri, TÜFE Sağlık, TÜFE Haberleşme, TÜFE Eğlence ve Kültür, TÜFE Eğitim ve TÜFE Lokanta ve Oteller değişkenleri Ramsey Reset testinde gerekli olan olasılık değerlerini vermedikleri için anlamsız çıkmışlardır. Bu nedenle modelde yapısal bozukluk ve model kurma hatası olmadığını belirten  $H_0$  hipotezi reddedilmiştir. Ki-Kare olasılık değerlerine bakıldığında seçilen ve geriye kalan değişkenlerin çoğunluğunda otokorelasyon sorunu olmadığı gözlemlenmektedir.

Tablo 10. TÜFE Alt Kalemleri ve Ham Petrol, Döviz Kuru Uzun Dönem İlişkisi  
Uzun Dönem İlişkisi (Ham Petrol, Döviz Kuru)

Değişken	Katsayı	T-İstatistik	Olasılık Değeri(p)
LHAM	0,435677	4,912875	0,0000
LKUR	1,084898	17,68424	0,0000
EC = LTUFEALT1 - (0,4357*LHAM + 1,0849*LKUR )		F İstatistiği: 23,75405	
LHAM	0,369760	1,658399	0,0988
LKUR	1,073017	7,283295	0,0000
EC = LTUFEALT2 - (0,3698*LHAM + 1,0730*LKUR )		F İstatistiği: 5,072576	
LHAM	0,405357	3,298235	0,0012
LKUR	0,802368	9,268177	0,0000
EC = LTUFEALT4 - (0,4054*LHAM + 0,8024*LKUR )		F İstatistiği: 14,60338	
LHAM	0,270526	7,317460	0,0000
LKUR	0,815539	28,51913	0,0000
EC = LTUFEALT7 - (0,2705*LHAM + 0,8155*LKUR )		F İstatistiği: 6,374265	
LHAM	0,198972	2,439562	0,0156
LKUR	1,048538	14,46475	0,0000
EC = LTUFEALT12 - (0,1990*LHAM + 1,0485*LKUR )		F İstatistiği: 12,96002	
Kritik Değerler		I(0)	I(1)
10%		3,26	4,247
5%		3,94	5,043
1%		5,407	6,783

Tablo 10 ve Tablo 11 de verilen modellerle incelemesi yapılan ilk grup TÜFE Gıda ve Alkolsüz İçecekler grubu yani LTUFEALT1 olmuştur. Hata düzeltme regresyonuyla oluşturulan modelin olasılık değerleri anlamlı çıkmıştır. F istatistik değerinin kritik değerlerden büyük olması sebebiyle değişkenler arasında uzun dönemli bir ilişki olduğu da görülmektedir. Bundan hareketle döviz kurunda meydana gelecek yüzde 1’lik artışın TÜFE gıda ve alkolsüz içecek fiyatlarını yaklaşık olarak % 1.08 arttıracığı tahmin edilmektedir. Böylelikle tam döviz kuru geçiş etkisi meydana gelecektir. Ham petrol üzerinde meydana gelecek % 1 seviyesinde bir değişimse gıda ve alkolsüz içecek fiyatlarını yaklaşık % 0.43 arttıracaktır. Ayrıca Tablo 11’de verilen hata düzeltme modeline göre uzun

dönemli dengede meydana gelecek kısa dönemli bir sapma olduğunda oluşacak olan sapmanın % 4.5'lik kısmının bir dönem sonra dengeye geri döneceği söylenebilmektedir.

Sinama testlerinden sonra anlamlı ve tutarlı olan değişkenlerin uzun ve kısa dönemli ilişkileri test edilerek tablo haline getirilmiştir. Bağımlı değişkenlerin TÜFE alt kalemler, bağımsız değişkenlerinse ham petrol ve döviz kuru olduğu modellerde LTUFEALT1, LTUFEALT2, LTUFEALT4, LTUFEALT7 ve LTUFEALT12 değişkenlerinin uygun olduğu görülmüştür. Bu sonuçlara dayanarak uzun dönem ve kısa dönem ilişki testleri gerçekleştirilmiştir. Test sonuçları Tablo 10 ve Tablo 11' de gösterilmiştir.

Alkollü İçecekler ve Tütün grubunu içeren LTUFEALT2 değişkeninin hata düzeltme regresyonuyla elde edilen model değerleri istatistiksel olarak anlamlı çıkmıştır. Uzun dönemli ilişki içinde ham petrol değişkeninin olasılık değeri %10 seviyesinde anlamlı görünmektedir. Elde edilen F istatistiği % 1 ve % 5 kritik düzeylerinde anlamlı çıkmaktadır. Bunlarla birlikte seçili değişkenler arasında uzun dönemli ilişki bulunduğu görülmektedir. Tablo 10'da bulunan değerlere göre döviz kuru üzerinde meydana gelen % 1 seviyesindeki artış, TÜFE alkollü içecekler ve tütün grubu fiyatlarını %1.07 arttırmaktadır. Bundan dolayı tam döviz kuru geçiş etkisinden söz edilebilecektir. Ham petrol üzerinde meydana gelen % 1 oranındaki değişimse alkollü içecekler ve tütün grubu fiyatlarını % 0.36 oranında arttıracaktır. Uzun dönemli dengede kısa dönemli bir sapma olduğundaysa oluşan sapmanın %2.6'lık kısma bir dönem sonra dengeye geri dönecektir.

Tablo 11. TÜFE Alt Kalemleri ve Ham Petrol, Döviz Kuru Kısa Dönem İlişkisi  
Kısa Dönem İlişkisi (Ham Petrol, Döviz Kuru)

Değişken (LTUFEALT1)	Katsayı	T-İstatistik	Olasılık Değeri(p)
C	0,1435950	9,133612	0,0000
D(LKUR)	0,087801	2,932348	0,0038
D(LKUR(-1))	0,100165	3,229628	0,0014
CointEq(-1)	-0,045922	-8,483585	0,0000
Gözlem Sayısı (n) = 207	<i>Adj. R<sup>2</sup> = 0,393730</i>	F İst. = 45,59411	0,0000
Değişken (LTUFEALT2)	Katsayı	T-İstatistik	Olasılık Değeri(p)
C	0,101447	4,416094	0,0000
CointEq(-1)	-0,026951	-3,920067	0,0001
Gözlem Sayısı (n) = 208	<i>Adj. R<sup>2</sup> = 0,064901</i>	F İst. = 15,36692	0,0001
Değişken (LTUFEALT4)	Katsayı	T-İstatistik	Olasılık Değeri(p)
C	0,164044	6,975131	0,0000
D(LKUR)	0,027968	0,911638	0,3641
D(LKUR(-1))	0,142635	4,545901	0,0000
	-0,049679	-6,651771	0,0000
Gözlem Sayısı (n) = 207	<i>Adj. R<sup>2</sup> = 0,301302</i>	F İst. = 30,61138	0,0000
Değişken (LTUFEALT7)	Katsayı	T-İstatistik	Olasılık Değeri(p)
C	0,304975	4,394499	0,0000
D(LTUFEALT7(-1))	0,245940	4,580456	0,0000
D(LTUFEALT7(-2))	-0,088805	-1,608836	0,1093
D(LTUFEALT7(-3))	0,206891	4,009533	0,0001
D(LHAM)	0,082072	7,361420	0,0000
D(LKUR)	0,304779	1,037188	0,0000
CointEq(-1)	-0,084488	-4,371016	0,0000
Gözlem Sayısı (n) = 205	<i>Adj. R<sup>2</sup> = 0,572096</i>	F İst. = 46,45701	0,0000
Değişken (LTUFEALT12)	Katsayı	T-İstatistik	Olasılık Değeri(p)
C	0,129395	6,527197	0,0000
D(LTUFEALT12(-1))	0,173548	3,114855	0,0021



D(LKUR)	0,214219	11,39694	0,0000
CointEq(-1)	-0,031996	-6,266334	0,0000
Gözlem Sayısı (n) = 207	<i>Adj. R<sup>2</sup> = 0,575367</i>	F İst. = 94.04173	0,0000

Üçüncü sırada incelenen LTUFEALT4 değişkeni Konut, Su, Elektrik, Gaz ve Diğer Yakıtlar grubunu barındırmaktadır. Modelin istatistiksel olarak anlamlı olduğu görülmektedir. Ayrıca F test istatistiği hem I(0) hem I(1) seviyesinde kritik değerlerden büyük olduğu için uzun dönemli ilişki söz konusudur. Buna göre döviz kurundan meydana gelecek % 1 değişim TÜFE enerji fiyatlarını yaklaşık olarak %0.80 arttırmaktadır. Bu artış doğrudan birbirleriyle ilişkili oldukları için normal görünmektedir. Ham petrol üzerinde meydana gelen yüzde birlik değişim, enerji fiyatlarını yaklaşık olarak % 0.40 yükseltmektedir. Uzun dönemde görülen kısa dönemli bir sapmadan dolayı oluşan kaymaların % 5'lik kısmıysa bir sonraki ay da dengeye tekrardan geri dönecektir.

İncelenen bir sonraki grup olan LTUFEALT 7 grubu TÜFE Ulaştırma grubudur. Tablo 10'dan elde edilen değerlere göre F istatistik değeri % 5 ve % 10 kritik değerlerinden yüksek bulunmuş ve anlamlı çıkmıştır. Ayrıca hata düzeltme değerinin olasılık değeri de anlamlı bulunmuştur. Bu nedenden dolayı  $H_0$  hipotezi reddedilmiştir. Dolayısıyla seçili değişkenler arasında uzun dönemli bir ilişkinin varlığından söz edilebilmektedir. Sonuçlara göre döviz kurunda meydana gelen % 1'lik bir artış TÜFE ulaştırma grubu üzerinde % 0.81 artışa sebep olmaktadır. Ayrıca ham petrolde meydana gelen % 1'lik artış haberleşme grubu fiyatlarını % 0.27 olarak arttırmaktadır. Uzun dönemli dengede meydana gelebilecek kısa dönemli sapmaların % 8.4'lük kısmıysa bir sonraki ay dengeye geri dönecektir.

Son olarak LTUFEALT12 değişkeniyse Çeşitli Mal ve Hizmetler grubunu içermektedir. Belirlenen değerlere göre modelin anlamlı çıktığı görülmektedir. Modelde Ham Petrol değişkeni %5 ve %10 seviyelerinde anlamlıdır. Ayrıca F test istatistiği I(0) ve I(1) için olası tüm kritik değerlerden yüksek çıkmıştır. Böylece değişkenler arasında uzun dönemli ilişki olduğu saptanmıştır. Tablo 10'da gösterilen değerlere göre döviz kuru üzerinde meydana gelen yüzde 1 oranında artış yaklaşık olarak TÜFE çeşitli mal ve hizmetler grubu fiyatlarını yüzde 1.04 yükseltmektedir. Bu da tam döviz kuru geçiş etkisine işaret eder. Ham petrol fiyatları üzerinde meydana gelen % 1 değişimse çeşitli mal ve hizmetler grubu fiyatlarını yaklaşık % 0.20 oranında arttırmaktadır. Uzun dönemli dengede oluşabilecek olan kısa dönemli sapmalar nedeniyle meydana gelecek oynaklıkların % 3.1'lik kısmı bir sonraki dönemde dengeye geri dönecektir.

ARDL testi sonrasında değişkenler arasında simetrik ve asimetric etki olup olmadığının incelenmesi için NARDL metodu kullanılmıştır. NARDL yaklaşımına yönelik bulgular ve sınama testleri bu kısımda verilecektir. Buna göre Tablo 12' de elde edilen sınama sonuçları bütün olarak gösterilmiştir.

Tablo 12. TÜFE ve Alt Kalemleri Test Sonuçları (NARDL)

Değişkenler	Model Seçim Kriterleri		Breusch-Godfrey LM Testi		Ramsey Reset Testi	
	SIC	Spesifikasyon	Gecikme Değeri	Ki-Kare Olasılık Değeri (p)	F İstatistikleri	Olasılık Değeri (p)
TÜFEGENEL	-6,498021	ARDL(2,0,0,2,0)	1	0,0479	4,411098	0,0370
LTUFEALT1	-5,230017	ARDL(1,0,0,2,0)	1	0,8684	3,479321	0,0636
LTUFEALT2	-4,131766	ARDL(1,0,0,0,0)	1	0,0226	0,120281	0,7291
LTUFEALT3	-5,735731	ARDL(1,0,0,0,0)	1	0,5903	12,7955	0,0004***
LTUFEALT4	-5,216468	ARDL(1,0,0,2,0)	1	0,2271	0,597075	0,4406

LTUFEALT5	-5,970980	ARDL(2,0,0,2,0)	1	0,9554	4,016978	0,0464
LTUFEALT6	-6,650750	ARDL(7,0,0,3,0)	1	0,5132	12,18271	0,0006***
LTUFEALT7	-5,081372	ARDL(4,0,1,1,0)	1	0,8730	14,82808	0,0002***
LTUFEALT8	-6,415704	ARDL(1,0,0,0,0)	1	0,2514	12,12651	0,0006***
LTUFEALT9	-6,271633	ARDL(1,0,0,2,0)	1	0,2679	13,96704	0,0002***
LTUFEALT10	-6,939869	ARDL(7,0,0,0,0)	1	0,8499	6,507931	0,0115
LTUFEALT11	-6,785326	ARDL(7,0,0,2,0)	1	0,1871	3,544381	0,0613
LTUFEALT12	-6,047167	ARDL(2,0,0,1,0)	1	0,7723	12,81180	0,0004***

Tablo 12'den anlaşılacağı gibi LTUFEALT3 değişkeni olan TÜFE Giyim ve Ayakkabı, LTUFEALT6 değişkeni olan TÜFE Sağlık, LTUFEALT7 değişkeni olan TÜFE Ulaştırma, LTUFEALT8 değişkeni olan TÜFE Haberleşme, LTUFEALT9 değişkeni olan TÜFE Eğlence ve Kültür ve LTUFEALT12 değişkeni olan TÜFE Çeşitli Mal ve Hizmetler değişkenlerinin olasılık değerleri 0,01 değerinden küçük çıkmıştır. Bu yüzden Ramsey Reset testinde  $H_0$  hipotezleri reddedilmiştir ve değişkenlerde model kurma hatası olduğu saptanmıştır. Ayrıca LTUFEALT6 ve LTUFEALT7 değişkenlerinin ki-kare olasılık değerleri 0,01 değerinden küçük çıktığı için otokorelasyon bulduklarını anlamıştır. Çıkan sonuçlardan dolayı söz konusu değişkenlerin sınama metodundan çıkarılması gerekmiştir. Elde edilen sonuçlardan sonra NARDL yöntemiyle uzun dönemli ve kısa dönemli ilişki tahmini gerçekleştirilmiştir. Ulaşılan sonuçlar Tablo 13 ve Tablo 14'de gösterilmiştir.

Tablo 13. TÜFE ve Alt Kalemler Uzun Dönem İlişkileri (NARDL)

N-ARDL Uzun Dönem İlişkisi (Ham Petrol, Döviz Kuru)

Değişken	Katsayı	T-İstatistik	Olasılık Değeri(p)
LHAM_POS	0,625786	2,4777188	0,0141
LHAM_NEG	0,143042	2,870856	0,0045
LKUR_POS	0,745155	4,523455	0
LKUR_NEG	1,428308	2,332853	0,0207
EC = LTUFEGENEL - (0,6258*LHAM_POS + 0,4107*LHAM_NEG + 0,7452*LKUR_POS + 1,4283*LKUR_NEG)		F İstatistiği: 9,218191	
LHAM_POS	0,702838	2,443363	0,0154
LHAM_NEG	0,540993	2,713776	0,0072
LKUR_POS	1,123506	4,019128	0,0001
LKUR_NEG	1,841837	2,545956	0,0117
EC = LTUFEALT1 - (0,7028*LHAM_POS + 0,5410*LHAM_NEG + 1,1235*LKUR_POS + 1,8418*LKUR_NEG)		F İstatistiği: 13,46397	
LHAM_POS	0,139371	0,667639	0,5051

LHAM_NEG	0,183619	1,83844	0,0675
LKUR_POS	0,592998	2,106511	0,0364
LKUR_NEG	-0,29438	-0,635157	0,526
EC = LTUFEALT2 - (0,1394*LHAM_POS + 0,1836*LHAM_NEG + 0,5930*LKUR_POS - 0,2944*LKUR_NEG )		F İstatistiği: 4,637412**	
LHAM_POS	0,374691	2,185238	0,03
LHAM_NEG	0,313715	2,324105	0,0211
LKUR_POS	0,550087	3,388491	0,0008
LKUR_NEG	0,510024	1,177343	0,2405
EC = LTUFEALT4 - (0,3947*LHAM_POS + 0,3137*LHAM_NEG + 0,5501*LKUR_POS + 0,5100*LKUR_NEG )		F İstatistiği: 8,758399	
LHAM_POS	0,553989	3,004555	0,003
LHAM_NEG	0,362741	4,681374	0
LKUR_POS	0,877186	6,527077	0
LKUR_NEG	1,699436	3,672436	0,0003
EC = LTUFEALT5 - (0,5540*LHAM_POS + 0,3627*LHAM_NEG + 0,8772*LKUR_POS + 1,6994*LKUR_NEG )		F İstatistiği: 9,324605	
LHAM_POS	-0,195788	-0,865066	0,3881
LHAM_NEG	-0,248721	-1,126989	0,2056
LKUR_POS	-0,061269	-0,228211	0,8197
LKUR_NEG	-0,598968	-0,994309	0,3213
EC = LTUFEALT10 - (-0,1958*LHM_POS - 0,2487*LHAM_NEG - 0,0613*LKUR_POS - 0,5990*LKUR_NEG )		F İstatistiği: 3,408894***	
LHAM_POS	-0,745825	-1,379041	0,1695
LHAM_NEG	-0,637865	-1,702188	0,0904
LKUR_POS	-0,410619	-0,878038	0,381
LKUR_NEG	-2,36217	-1,57811	0,1162
EC = LTUFEALT11 - (-0,7458*LHAM_POS - 0,6379*LHAM_NEG - 0,4106*LKUR_POS - 2,3622*LKUR_NEG )		F İstatistiği: 7,678963	
Kritik Değerler	I(0)	I(1)	
10%	3,26	4,247	
5%	3,94	5,043	
1%	5,407	6,783	

Tablo 14. TÜFE ve Alt Kalemler Kısa Dönem İlişkileri (NARDL)

N-ARDL Kısa Dönem İlişkisi (Ham Petrol, Döviz Kuru)

Değişken (LTUFEGENEL)	Katsayı	T-İstatistik	Olasılık Değeri(p)
C	0,138504	6,89824	0,0000
D(LTUFEGENEL(-1))	0,241329	3,919991	0,0001
D(LKUR_POS)	0,102714	5,266364	0,0000
D(LKUR_POS(-1))	0,096719	4,579387	0,0000
CointEq(-1)*	-0,027054	-6,85761	0,0000
Gözlem Sayısı (n) = 206	<b>Adj. R<sup>2</sup> = 0,661257</b>	F ist. = 101,0444	0,0000
Değişken (LTUFEALT1)	Katsayı	T-İstatistik	Olasılık Değeri(p)
C	0,166981	8,608001	0,0000
D(LKUR_POS)	0,094233	2,599946	0,0100
D(LKUR_POS(-1))	0,124582	3,352203	0,001
CointEq(-1)*	-0,031836	-8,28733	0,0000
Gözlem Sayısı (n) = 206	<b>Adj. R<sup>2</sup> = 0,398440</b>	F ist. = 46,26015	0,0000

Değişken (LTUFEALT2)	Katsayı	T-İstatistik	Olasılık Değeri(p)
C	0,349004	5,029986	0,0000
CointEq(-1)*	-0,068209	-4,862737	0,0000
Gözlem Sayısı (n) = 208	<b>Adj.R<sup>2</sup> = 0,098613</b>	F ist. = 23,64621	0,0000
Değişken (LTUFEALT4)	Katsayı	T-İstatistik	Olasılık Değeri(p)
C	0,347013	6,77245	0,0000
D(LKUR_POS)	0,007087	0,194773	0,8458
D(LKUR_POS(-1))	0,185033	0,037365	0,0000
CointEq(-1)*	-0,068209	-6,684062	0,0000
Gözlem Sayısı (n) = 206	<b>Adj.R<sup>2</sup> = 0,331227</b>	F ist. = 34,84391	0,0000
Değişken (LTUFEALT5)	Katsayı	T-İstatistik	Olasılık Değeri(p)
C	0,181408	6,912867	0,0000
D(LTUFEALT5(-1))	0,226918	3,843295	0,0002
D(LKUR_POS)	0,088457	3,542927	0,0005
D(LKUR_POS(-1))	0,140421	5,281116	0,0000
CointEq(-1)*	-0,036382	-6,897078	0,0000
Gözlem Sayısı (n) = 206	<b>Adj.R<sup>2</sup> = 0,626597</b>	F ist. = 87,00122	0,0000
Değişken (LTUFEALT10)	Katsayı	T-İstatistik	Olasılık Değeri(p)
C	-0,131731	-4,200499	0,0000
D(LTUFEALT10(-1))	-0,100768	-1,360644	0,1752
D(LTUFEALT10(-2))	-0,021319	-0,307541	0,7588
D(LTUFEALT10(-3))	-0,091392	-1,336841	0,1829
D(LTUFEALT10(-4))	0,002538	0,037063	0,9705
D(LTUFEALT10(-5))	0,354986	5,00701	0,0000
D(LTUFEALT10(-6))	0,275073	3,645685	0,0003
CointEq(-1)*	0,027834***	4,17126	0,0000
Gözlem Sayısı (n) = 202	<b>Adj.R<sup>2</sup> = 0,999770</b>	F ist. = 79,28461	0,0000
Değişken (LTUFEALT11)	Katsayı	T-İstatistik	Olasılık Değeri(p)
C	-0,063662	-6,255961	0,0000
D(LTUFEALT11(-1))	0,184779	2,714328	0,0073
D(LTUFEALT11(-2))	0,029215	0,438455	0,6616
D(LTUFEALT11(-3))	0,023593	0,355212	0,7228
D(LTUFEALT11(-4))	0,307381	4,564874	0,0000
D(LTUFEALT11(-5))	0,118887	1,291232	0,1982
D(LTUFEALT11(-6))	-0,421606	-4,851613	0,0000
D(LKUR_POS)	0,061298	3,785479	0,0002
D(LKUR_POS(-1))	0,051862	3,023305	0,0028
CointEq(-1)*	0,014974***	6.261.927	0,0000
Gözlem Sayısı (n) = 202	<b>Adj.R<sup>2</sup> = 0,764675</b>	F ist. = 73,57075	0,0000

Not: Her iki tablo da SIC bilgi kriteriyle oluşturulmuştur. “\*\*\*” işareti değerlerin anlamsız çıktığını göstermektedir. “\*\*” işareti %5 seviyesinde anlamlılığı ifade etmektedir.

Tablo 13 ve Tablo 14’ den hareketle bağımlı ve bağımsız değişkenler arasında asimetrik bir ilişki olduğu görülebilmektedir. Ham petrol ve döviz kuru üzerinde oluşabilecek negatif ve pozitif şokların etkilerinin LTUFEGENEL değişkeni olan TÜFE genel üzerinde pozitif etkiye sebep olduğu görülmektedir. Bu enflasyonun artacağına işaret etmektedir ve değişkenlerin olasılık değerleri anlamlı bulunmuştur. Katsayılara göre ham petrole gelen pozitif şokun etkisi negatif şokun etkisinden daha fazladır. Bu durumda şokların asimetrik etkiye sahip olduğu sonucuna ulaşılmaktadır. Döviz kuruna ait olan katsayılara bakıldığında da negatif şok etkilerinin pozitif şok etkilerinden daha fazla olduğu görülmektedir. Bu da aynı şekilde asimetrik ilişkiye işaretler. Bu sonuçlardan yola çıkarak sadece döviz kurunun veya ham petrol değerlerinin düşürülmesiyle enflasyonun

düşürülemeyeceği yorumu yapılabilmektedir. Ayrıca Tablo 14’de verilen hata düzeltme değerine göre uzun dönemli dengede oluşacak kısa dönemli bir sapmanın % 2,7’lik kısmının bir sonraki dönemde tekrar dengeye geleceği söylenebilmektedir.

LTUFEALT1 değişkeni olan TÜFE Gıda ve Alkolsüz İçecekler grubuna bakıldığında da olasılık değerlerinin anlamlı olduğu görülmektedir. Tablo 13’ e bakıldığında ham petrol ve döviz kurunda meydana gelen negatif veya pozitif şokların Gıda ve Alkolsüz İçecekler grubu üzerinde pozitif bir etki yaratacağı görülmektedir. Katsayılara bakılırsa ham petrol üzerinde meydana gelen pozitif şokların etkisi, negatif şokların etkisinden daha fazla olacaktır. Döviz kurunu da meydana gelebilecek olan negatif şokların etkisiye pozitif şokların meydana getireceği etkilerden daha fazla olacağı görülmektedir. Bu tespitlerden dolayı değişkenler arasında asimetrik etki bulunduğu çıkarılabilir. Tablo 14 incelendiğinde hata düzeltme değerinin negatif çıktığı gözükmemektedir. Bu katsayıya göre uzun dönemli dengede meydana gelebilecek kısa dönemli bir sapmanın yaklaşık yüzde 3,1’lik kısmı bir sonraki ay dengeye dönecektir.

LTUFEALT2 değişkeni TÜFE Alkollü İçecekler ve Tütün grubunu temsil etmektedir. Ham petroldeki pozitif etkili şokların ve döviz kurundaki negatif etkili şokların olasılık değerlerinin 0,05 değerinden fazla çıktığı görülmüştür. Ham petrol üzerinde meydana gelen negatif şokların etkisi, Alkollü İçecekler ve Tütün grubu üzerinde pozitif şoklardan daha fazla etkiye sahip görülmektedir. Ayrıca ikisi de pozitif yönde etki göstermektedir. Döviz kuruna bakıldığında döviz kuru üzerinde meydana gelen pozitif yönlü şokların alt kalem grubu üzerinde pozitif etkiye sahip olduğu görülürken negatif yönlü şoklarınsa azaltıcı bir etkiye sahip olduğu görülmektedir. Buradan döviz kurunu azaltan bir şokun grup üzerindeki enflasyonu da azalttığı sonucuna ulaşılabilmektedir ve asimetrik etki söz konusudur. Öte yandan hata düzeltme modeline bakıldığında hata düzeltme katsayısı bizlere kısa dönemli ilişki hakkında bilgi vermektedir. Buna göre uzun dönemli dengede oluşabilecek kısa dönemli sapmanın yaklaşık yüzde 6,8’lik kısmının bir sonraki dönemde dengeye döneceği tahmin edilmektedir.

LTUFEALT4 değişkeni, TÜFE Konut, Su, Elektrik, Doğalgaz ve Diğer grubunu ifade etmektedir. Olasılık değerlerine bakıldığında döviz kurundaki negatif şokların kritik değerlerin üzerinde çıktığı görülmektedir. Diğer değişkenler anlamlıdır. Buna göre ham petrol üzerinde meydana gelen pozitif şokların bağımlı değişkene olan etkisi negatif şokların etkisinden daha fazladır. Döviz kuruna bakıldığında da kur üzerinde meydana gelen pozitif yönlü şokların etkisi bağımlı değişkeni negatif şoklardan daha fazla etkilemektedir. Her iki durumda da bağımlı değişkende artış meydana gelmektedir. Ayrıca Tablo 14’den görüleceği üzere uzun dönemde oluşabilecek kısa dönemli bir sapmanın yaklaşık yüzde 6,8’lik kısmının bir sonraki dönemde dengeye geri gelecektir.

Son değişken olan LTUFEALT5 değişkeni TÜFE Mobilya Ev Aletleri ve Bakım grubudur. Söz konusu değişkenlerin tüm olasılık değerleri anlamlı çıkmıştır. Buna göre ham petrolde meydana gelecek pozitif yönlü şokun etkisi bağımlı değişken üzerinde negatif yönlü bir şoktan daha fazla etkiye sahip olacaktır. Ters olarak döviz kurunda oluşacak negatif yönlü bir şok bağımlı değişkende pozitif yönlü bir şoktan katsayı açısından daha etkili olacaktır. Hata düzeltme modeline bakıldığında uzun dönemde meydana gelebilecek olan kısa dönemli sapmanın yaklaşık yüzde 3,6’lık kısmının bir sonraki dönemde dengeye geri geleceği çıkarılabilmektedir.

## 5. SONUÇ ve TARTIŞMA

İthalata ve petrole bağımlı olan Türkiye ekonomisi için döviz kurundaki değişimler, Türkiye ekonomisini derinden etkilemektedir. Bu nedenle döviz kurundaki değişimler ithalat ve petrol fiyatlarını etkilemekte ve enflasyon oranları üzerinde baskı yaratmaktadır. Bu nedenle döviz kurundaki değişimlerin ve petrol fiyatlarındaki değişimlerin enflasyon oranlarını nasıl etkilediği incelenmelidir. İlgili literatürde döviz kuru ve petrol fiyatlarının enflasyon etkisi detaylı incelenmiş ancak TÜFE alt kalemlerinin bu değişkenlerden nasıl etkilendiği çok incelenmemiştir. Bu nedenle çalışmamızda nominal döviz kuru ve ham petrol fiyatlarında görülen oynaklıkların Türkiye’nin TÜFE ve TÜFE alt kalemleri üzerindeki geçiş etkisi araştırılmıştır. Bu ilişkiyi test etmek için açık enflasyon hedeflemesine geçilen tarihten sonraki zaman dilimi tercih edilmiş ve analiz dönemi 2006.01-2023.05 olarak belirlenmiştir. Döviz kuru ve ham petrolün TÜFE ve TÜFE alt kalemleri üzerindeki doğrusal etkileri ARDL; söz konusu değişkenlerin TÜFE ve TÜFE alt kalemleri üzerindeki asimetrik etkisinin olup olmadığıysa NARDL yöntemiyle test edilmiştir.

Hem doğrusal olan hem doğrusal olmayan modellerden edinilen sonuçlara göre döviz kuru ve ham petrol fiyatlarının, yurtiçi fiyatlarına döviz kuru geçiş etkisinin oldukça yüksek olduğu belirlenmiştir. Elde edilen sonuçlara göre döviz kuru geçiş etkisinin belirginliğinin yüksek olduğu görülmektedir. Elde edilen olasılık değerleriyse modelin anlamlı olduğunu ortaya koymaktadır.

Değerlendirilen sonuçlar daha önce de yapılmış olan ve Türkiye’yi temel alan Özata (2019), Kolcu ve Yamak (2017), Göktaş (2019), Güler (2020)’ e ait deneysel çalışmalarla kıyaslandığında kısa dönemde döviz kurunun

yurtiçi fiyatlarını etkileyeceği sonucu bu çalışmalarla benzer sonuçlar vermiştir. Fakat uzun dönemde meydana gelen kur ve ham petrol artışının geçiş etkisi fiyatlar üzerinde bu çalışmalara göre oldukça yüksek görünmektedir. Bu durumun en büyük nedenleri arasında son yıllarda meydana gelen kur artışları, salgının olumsuz etkileri gibi etkenler göz önünde tutulabilir.

TÜFE alt kalemlerine bakıldığında ulaşılan sonuçlara göre döviz kuru geçiş etkisinin en fazla gerçekleştiği alt kalem grupları gıda ve alkolsüz içecekler, alkollü içecekler ve tütün gruplarıyla birlikte çeşitli mal ve hizmetler grubu olmuştur. Bu sonuçlarla beraber uzun dönemde mevcut fiyatların, kur değişkenliklerinin bile üzerinde bulunduğu anlaşılmaktadır. Sınaması yapılan diğer alt kalem gruplarına bakıldığında konut, su, elektrik, doğalgaz grubu ve ulaştırma grubuna yönelik döviz kuru geçiş etkisinin daha sınırlı olduğu gözükmektedir.

Ham petrol fiyatlarının etkilerine bakıldığında petrol fiyatlarından en çok etkilenen gruplar arasında enerji grubu yer almaktadır. Buna ek olarak, gıda grubunda da yakın bir etki oluşturduğu görülmektedir. Ancak genel alt kalem grupları üzerinde kısa dönemde ham petrol etkisinin döviz kuru geçiş etkisine göre çok daha sınırlı kaldığı anlaşılmaktadır.

NARDL yaklaşımına göre alkollü içecekler ve tütün grubu üzerinde ham petrol pozitif etkili olasılık değerinin ve döviz kuru negatif etkili olasılık değerlerinin anlamsız çıktığı görülmüştür. Ancak anlamsız çıksa bile her iki durumda da fiyatlar üzerinde bir artış yaşanacağı öngörülmekte ve simetrik bir süreç görülmektedir. İncelenen diğer gruplarda hem döviz kuru hem de ham petrol fiyatları üzerinde gerçekleşecek negatif ve pozitif etkilerin genel olarak fiyatları yükselteceği, artışın azalıştan daha fazla etkili olacağı sonucuna varılmıştır. Sadece alkollü içecek ve tütün grubu üzerinde döviz kurunun gerilemesi halinde uzun dönemde enflasyonun da gerileyeceği tahmin edilebilmiştir. Kısa dönemde sınırlı değişkenler üzerinde meydana gelen sapmaların bir sonraki dönemlerinde belirli oranlarının dengeye geleceği saptanmıştır.

Elde edilen sonuçların bir kısmı daha önce çalışma gerçekleştiren Özata (2019)'nın çalışmasıyla benzerlik göstermektedir. Özata (2019), Ele aldığı çalışmada döviz kuru geçiş etkisinin fiyatlar üzerindeki etkilerini incelerken bu çalışmada, Alkollü içecekler ve Tütün grubunda olduğu gibi döviz kurunun düşmesi halinde fiyatların da düşeceği sonucuna varmış fakat tıpkı ulaştığımız sonuç gibi olasılık değerini anlamsız bulmuştur. Üstelik katsayı değerleri de birbirine yakın çıkmıştır. Son olarak aynı çalışmada simetrik değişkenler arasındaki simetrik ilişkiyi incelerken çalışmamızda ulaştığımız sonuçlara benzer olarak döviz kuru ve petrol üzerinde meydana gelebilecek artışların TÜFE ve alt kalemlerini arttıracığına ve kısa dönemde sapmanın belirli oranının dengeye döneceği sonucuna da varmıştır.

ARDL ve NARDL yöntemleriyle ulaşılan sonuçların karşılaştırılmasında TÜFE genel fiyatları ve alt kalemleri için her iki yöntemde de döviz kuru geçiş etkisinin ham petrol fiyatları üzerinde meydana gelebilecek değişimlerden daha yüksek olduğu sonucuna ulaşılmaktadır. Döviz kuru ve ham petrol fiyatları üzerinde oluşan pozitif etkili değişimler fiyatlar üzerinde oldukça etkili olmaktadır. Aynı sonuçlara gelişmiş ülkeleri ele alan çalışmaları Delatte ve Lopez (2012) ve Çekya'yı ele alan Nasir, Huynh ve Vo (2019) da ulaşılmıştır.

Bu sonuçlara bakıldığında genel fiyatlar seviyesinin döviz kuru geçiş etkisiyle çok net bir ilişkisi olduğu görülmektedir. Bu durumda döviz kuru geçiş etkisinin kontrol altında tutulması ve bu etkinin düşürülmesi gerekmektedir. Türkiye'de döviz kuru geçiş etkisini belirleyen etkenler arasında karar alıcıların gelecek beklentisi ve fiyat yükselişinin sürekli olacağına düşünülmesi, döviz kurlarının durağan olmayan hareketlilikleri, gelişmişlik düzeyi ve fiyatlar üzerinde görülen istikrarsız hareketlilikler bulunmaktadır. Bundan dolayı döviz kuru üzerinde gerçekleşen değişimlerin ve geçiş etkisinin sürekli kontrol altında tutulmasına, tahmin edilebilir ve istikrarlı olmasına yönelik politikalar uygulanmalıdır.

Ülkeler arasında küreselleşmenin artmasıyla beraber döviz kurunda meydana gelen değişiklikler ülkelerin piyasalarını önemli ölçüde etkilemeye başlamıştır. Döviz kurunda meydana gelen artış aynı zamanda yurtiçi fiyatlarını, firmaların üretim maliyetlerini, ihracat ve ithalat oranlarını da etkilemektedir. Üretim maliyetlerinin artması genel fiyatlar seviyesini de arttıracaktır. Bununla birlikte döviz kurundaki artışların yerel para birimini değersiz hale getireceği için ihracatı arttıracığı yönünde bir etkisi de olabilirdi. Fakat bunun için ara malların ithalata bağımlı olmaması gerekir. Döviz kuru geçiş etkisi, piyasa içerisinde karar alıcılar için de oldukça önemli bir yer tutacaktır. Çünkü istikrarsız bir yapıda bu karar alıcıların ve firmaların gelecek tahminleri doğru olmayabilir. Ayrıca kur üzerindeki artış, bu firmaların borçlanma maliyetlerini veya kârlarını da etkileyecektir. Yatırımcılar açısından bakıldığında yabancı yatırımcılar bu kadar değişken bir durumun olduğu piyasalara yatırım yapmamayı tercih edebilirler. Bundan dolayı yatırımlarda azalma söz konusu olabilir.

Tüm bu çıkarımlara bütünüyle bakıldığında döviz kuru geçiş etkisi ülke ekonomisi için çok büyük önem arz etmektedir. Döviz kuru geçiş etkisinin doğru ve sürekli olarak ölçülmesi ve buna yönelik kararlar alınır

politikalar uygulanması ekonomik durgunluğun gerilemesinde ve refah seviyesinin yükselmesinde önemli rol oynayacaktır.

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## Petrol İthalatında Şoklar Geçici mi? Yeni Testlerden Bulgular

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**Özet:** Ülke ekonomilerinin büyüme ve kalkınma performansları üzerinde enerji tüketimi önemli bir rol oynamaktadır. Dünya enerji talebinin önemli bir kısmı petrol tüketimi ile sağlanmaktadır. Ülkelerin ekonomik açıdan bağımsız politikalar izleyebilmeleri enerji alanında da bağımsızlığı gerektirmektedir. Bu bağlamda ülkelerin petrol ithalatı enerji bağımsızlığı ve dolayısıyla ekonomik bağımsızlık itibarı ile büyük önem arz etmektedir. Çalışmada Ocak 1973 ve Ekim 2023 arasındaki aylık veriler kullanılarak Amerika Birleşik Devletleri'nin hem OPEC üyesi hem de OPEC üyesi olmayan ülkelere gerçekleştirdiği petrol ithalatına yönelik dinamikler ortaya koyulmaktadır. Serilerin durağanlık özelliklerini incelemek için geleneksel birim kök testlerinin yanı sıra GLS tahmincilerine dayanan doğrusal olmayan birim kök testleri kullanılmaktadır. Böylece ülkelerin enerji bağımsızlığını etkileyen temel faktörlerden olan petrol ithalatı üzerindeki şokların geçici etkiye sahip olup olmadığı araştırılmıştır. Elde edilen bulgular petrol ithalatında şokların kalıcı etkiye sahip olduğunu göstermektedir. Bu sonuçlar, enerji bağımlılığını azaltmaya yönelik politikaların önemini vurgulamaktadır.

**Anahtar Kelimeler:** Doğrusal Olmayan Birim Kök, Petrol İthalatı, OPEC

### 1. GİRİŞ

Ülke ekonomilerini etkileyen temel faktörlerin başında enerji gelmektedir. 1970'li yıllarda yaşanan petrol krizi Dünya ekonomilerinde enerjinin önemini gözler önüne sermiştir. Ekonomilerin büyüme ve kalkınma performanslarını etkilemekte olan enerji tüketiminin önemli bir kısmı petrol tüketimi ile sağlanmaktadır.

Artan enerji talebi beraberinde petrol talebinin artışını getirmektedir. Dünyadaki petrol rezervlerinin yaklaşık yüzde sekseni Petrol İhraç Eden Ülkeler Teşkilatı(OPEC) ülkelerinde yer almaktadır. Petrol kaynaklarının bu dağılımı petrol üretemeyen ülkelerin enerji sorunu yaşamamaları için petrol ithal etmeleri gerekli kılmaktadır. Petrol arzının sınırlı oluşu ise artan talep karşısında fiyatların artışına neden olmaktadır. Petrol fiyatlarındaki artış petrol üretiminde dışa bağımlılığı yüksek ülkelerin makroekonomik istikrarı üzerinde önemli etkilere sahip olmaktadır. Artan petrol fiyatı petrol ithal eden ülkelerde döviz rezervlerinin azalmasına bu durum da cari işlemler dengesinin bozulmasına neden olmaktadır. Özellikle cari işlemler açığı sorunu ile karşı karşıya olan gelişmekte olan ülke ekonomilerinde ithal edilen enerji talebi artışı cari açık üzerinde olumsuz bir etkiye sahiptir. Petrol ithal etmek durumunda olmak ülke ekonomilerinin dışa bağımlılığına yol açmaktadır.

Günümüzde özellikle fosil kaynaklı enerji kaynaklarının azalıyor olması ve çevresel faktörleri de göz önünde bulunduran enerjide dışa bağımlı ülkeler alternatif enerji kaynaklarına yönelmiştir. Küresel ısınma ve iklim değişikliği ile mücadele kapsamında petrol tüketiminin azaltılmasına yönelik çalışmalar ülkeleri yenilenebilir enerji alanında yatırımlara zorlamaktadır. Sürdürülebilir kalkınma anlamında ülke ekonomilerinin sıkıntı yaşamaması adına petrol ithalatı kapsamında dışa bağımlılığı azaltmak ve aynı zamanda petrol tüketimi kaynaklı sera gazlarının azaltılması politik hedef olarak düşünülmeye başlanmaktadır.

Petrol ithalatında şokların geçici ya da kalıcı olması petrol tüketiminden kaynaklı enerji bağımlılığını azaltmaya yönelik politikalar açısından oldukça önemli olacaktır. Aynı zamanda ekonomide sürdürülebilir kalkınma ve istikrar hedefleri kapsamında da petrol ithalatındaki şokların etkisi önemlidir. Bu çalışmanın amacı petrol ithalatındaki şokların kalıcı etkiye sahip olup olmadığının araştırılmasıdır. Bu kapsamda literatürdeki diğer çalışmalardan farklı olarak birim kök test prosedüründe genelleştirilmiş en küçük kareler(GLS) yöntemini kullanan doğrusal ve doğrusal olmayan testler kullanılarak analiz gerçekleştirilmiştir.

Çalışmanın takip eden bölümünde ampirik analizde kullanılan ekonometrik metodoloji sonraki bölümünde ise elde edilen ampirik bulgulardan bahsedilmiştir.

### 2. EKONOMETRİK METODOLOJİ

Genelleştirilmiş en küçük kareler (GLS) tahmincisine dayanan ilk birim kök testi Elliott, Rothenberg ve Stock (1996) testidir. Bu çalışmada elde edilen bulgular GLS kullanımının test gücünü arttırdığı yönündedir

(Güriş,2023). GLS kullanımının birim kök testlerinde güç artışına yol açtığı bulgusu, GLS tahmincilerinin doğrusal olmayan birim kök testlerinde de kullanımına neden olmuştur.

Bu kapsamda Kapetanios ve Shin (2008) çalışmasında Kapetanios, Shin ve Snell (2003) tarafından ileri sürülen yumuşak geçişli otoregresif (STAR) modele dayanan birim kök test prosedüründe ve Kapetanios ve Shin (2006) çalışmasında ileri sürülen kendinden uyarımlı eşik değerli otoregresif (SETAR) modele dayanan birim kök test prosedüründe GLS yöntemini kullanan yeni birim kök testleri geliştirmişlerdir.

Kapetanios ve Shin (2008) çalışmasında Elliott, Rothenberg ve Stock (1996) çalışmasın ile literatüre kazandırılan ortalama ve trendden arındırma için Genelleştirilmiş En Küçük Kareler (GLS) kullanımı önerilmiştir. Bu test prosedüründe öncelikle aşağıdaki denklem tahmin edilir.

$$\tilde{y}_t = x_t - \tilde{\alpha} - \tilde{\beta}_t$$

Burada  $\alpha$  ve  $\beta$ ,  $x_{\bar{p}}$  ve  $z_{\bar{p}}$  regresyonunun GLS ile elde edilen  $\alpha$  ve  $\beta$  tahminleridir. Buradaki  $x_{\bar{p}}$  ve  $z_{\bar{p}}$  aşağıdaki gibi gösterilebilir.

$$x_{\bar{p}} = (x_1, x_2 - \bar{\rho}x_1, \dots, x_T - \bar{\rho}x_{T-1})'$$
$$z_{\bar{p}} = (z_1, z_2 - \bar{\rho}z_1, \dots, z_T - \bar{\rho}z_{T-1})'$$

Burada  $\bar{\rho} = 1 - \frac{c}{T}$  olarak gösterilebilir. Ortalamadan arındırma için asimptotik dağılımın  $\bar{c}$  den bağımsız olduğu gösterilmişken trendden arındırma durumunda  $\bar{c} = -17.5$  kullanımı önerilmiştir. Test prosedürünün ikinci adımında ise elde edilen kalıntılar kullanılarak aşağıdaki denklem tahmin edilir.

$$\Delta \tilde{y}_t^j = \delta (\tilde{y}_{t-1}^j)^2 + \text{error}, j = \mu, \tau.$$

Burada  $\delta$  parametresinin t istatistik değeri Kapetanios ve Shin (2008) test istatistik değeridir (Güriş, 2023). Güriş ve Güriş (2022) çalışmasında ise Kruse (2011) çalışmasında ileri sürülen üstel fonksiyonlu yumuşak geçişli otoregresif (ESTAR) modele dayanan birim kök test prosedüründe GLS kullanımını önermiştir. Kruse (2011) çalışmasında ileri sürülen konum parametresi  $c$  nin sıfır olmadığı temel varsayımına dayanan ESTAR-c model Taylor serisi kullanımı ile aşağıdaki gibi gösterilebilir.

$$\Delta y_t = \delta_1 y_{t-1}^2 + \delta_2 y_{t-1}^2 + \sum_{j=1}^p \varphi_j \Delta y_{t-j} + \varepsilon_t$$

Bu denklem kullanılarak test istatistik değeri aşağıdaki gibi hesaplanabilir.

$$\tau = t_{\delta_1=0}^2 + 1(\hat{\delta}_1 < 0) t_{\delta_1=0}^2$$

Güriş ve Güriş (2022) çalışmasında ortalama ve trendden arındırma için Genelleştirilmiş En Küçük Kareler (GLS) trendden arındırma kullanımını önerilmiştir.

GLS kalıntılar  $(\tilde{y}_t)$ ,  $y_t - \tilde{a}_t$ ,  $\tilde{a}_t$ ,  $x_{\bar{p}}$  ve  $z_{\bar{p}}$  regresyonunun GLS ile elde edilen kalıntılardır. Burada  $x_{\bar{p}}$  ve  $z_{\bar{p}}$  aşağıdaki gibi gösterilebilir.

$$x_{\bar{p}} = (x_1, x_2 - \bar{\rho}x_1, \dots, x_T - \bar{\rho}x_{T-1})'$$
$$z_{\bar{p}} = (z_1, z_2 - \bar{\rho}z_1, \dots, z_T - \bar{\rho}z_{T-1})'$$

Burada  $\bar{\rho} = 1 - \frac{c}{T}$  olarak gösterilebilir. Güriş ve Güriş (2022) çalışmasında ortalama arındırma için asimptotik dağılımın  $\bar{c}$  den bağımsız olduğu gösterilmişken trendden arındırma durumunda  $\bar{c} = 18.5$  kullanımı önerilmiştir. Test prosedürünün ikinci adımında ise elde edilen kalıntılar kullanılarak Kruse(2011) çalışmasında gösterilen ve yukarıda ifade edilen test istatistiği hesaplanır (Güriş, 2023) .

### 3. AMPİRİK BULGULAR

Petrol ithalatında şokların geçici ya da kalıcı etkiye sahip olup olmadığının araştırıldığı bu çalışmada Amerika'nın OPEC ve OPEC üyesi olmayan ülkelere petrol ithalatı verileri kullanılmıştır. Kullanılan veriler 1973 Ocak 2023 Ekim dönemini kapsayan aylık verilerdir ve ABD Enerji Bilgi İdaresi'nden alınmıştır.

Çalışmanın ilk aşamasında geleneksel birim kök testleri (Dickey ve Fuller (1981) (ADF), Phillipis Perron (1988) (PP), Elliott, Rothenbergand, Stock (1996) (DF-GLS) birim kök testi ve Kwiatkowski, Phillips, Schmidt ve Shin (1992) (KPSS) durağanlık testi) kullanılarak analiz gerçekleştirilmiştir. İlgili testlerden elde edilen bulgular Tablo 1 de sunulmuştur.

**Tablo 1: Birim Kök Test Sonuçları**

OPEC Ülkelerinden Petrol İthalatı	Model A	Model B	Model C
ADF	-0.8568	-1.8899	-2.1393
PP	-0.7889	-1.9227	-2.1716

KPSS	-	0.4526 <sup>c</sup>	0.4143
GLS-ADF	-	-1.5984	-1.6319
OPEC Ülkeleri Haricindeki Ülkelerden Petrol İthalatı			
	Model A	Model B	Model C
ADF	0.7946	-0.9686	-1.9727
PP	0.2996	-2.178	-4.985 <sup>a</sup>
KPSS	-	2.9256	0.4179
GLS-ADF	-	0.1413	-1.7641
Toplam Petrol İthalatı			
	Model A	Model B	Model C
ADF	-0.3779	-2.1256	-2.118
PP	-0.1745	-2.2943	-2.3726
KPSS	-	1.666	0.488
GLS-ADF	-	-1.1973	-2.1082

Model A, otonom parametre ve trendin olmadığı modeli, Model B Otonom parametrelili modeli, Model C ise otonom parametre ve trendli modeli ifade etmektedir.

<sup>a,b,c</sup> %1, %5 ve %10 seviyesinde durağanlığı göstermektedir.

Tablo 1 de sunulan sonuçlar incelendiğinde OPEC ülkelerinden petrol ithalatı için KPSS testi model B de, OPEC haricindeki ülkelerden petrol ithalatı için ise PP testi model C de durağanlık bulgularına rastlanmıştır. Diğer tüm test ve durumlarda serileri durağan değildir.

Çalışmanın ikinci aşamasında GLS tahmincilerine dayanan doğrusal olmayan birim kök testlerinden Kapetanios ve Shin (2008) testi ile Güriş ve Güriş (2022) testleri kullanılarak analiz gerçekleştirilmiştir. İlgili testlerden elde edilen bulgular tablo 2 de sunulmuştur.

**Tablo 2: GLS Tahmincisine Dayanan Doğrusal Olmayan Birim Kök Testleri**

	OPEC Ülkelerinden Petrol İthalatı	
	Model A	Model B
Kapetanios ve Shin (2008)	-2.418365 <sup>b</sup>	-0.8394213
Güriş ve Güriş (2022)	8.976686 <sup>c</sup>	5.652355
OPEC Ülkeleri Haricindeki Ülkelerden Petrol İthalatı		
	Model A	Model B
Kapetanios ve Shin (2008)	-0.3322997	-0.9257155
Güriş ve Güriş (2022)	4.646054	0.8660337
Toplam Petrol İthalatı		
	Model A	Model B
Kapetanios ve Shin (2008)	-1.141727	-0.7036453
Güriş ve Güriş (2022)	2.660187	2.754909

<sup>a,b,c</sup> %1, %5 ve %10 seviyesinde durağanlığı göstermektedir.

Tablo 2 de sunulan bulgular incelendiğinde OPEC ülkelerinden petrol ithalatı verileri için yalnızca model A kapsamında durağanlık bulguları elde edilmiştir. Diğer tüm test ve model yapıları için birim kök temel hipotezi kabul edilmektedir. Elde edilen bulgular çerçevesinde Amerika petrol ithalatı serilerinde şokların kalıcı etkiye sahip olduğu söylenebilir.

#### 4. SONUÇ

Ülke ekonomilerini etkileyen temel faktörlerin başında enerji gelmektedir. Ekonomilerin büyüme ve kalkınma performanslarını etkilemekte olan enerji tüketiminin önemli bir kısmı petrol tüketimi ile sağlanmaktadır. Petrol ithalatında şokların geçici ya da kalıcı etkiye sahip olup olmadığının araştırıldığı bu çalışmada GLS tahmincisine

dayanan doğrusal olmayan birim kök testleri kullanımı ile gerçekleştirilmiştir. Bu kapsamda elde edilen bulgular petrol ithalatında şokların kalıcı etkiye sahip olduğunu göstermektedir.

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## The Impact of Servant Leadership on Job Embeddedness

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**Abstract:** Contemporary leadership theories have been developed after traditional leadership approaches. Economic, technological and social changes have transformed traditional organizations. Managing human resources has become more complex, and organizational cultures which employees are given more importance have emerged. One of the leadership theories developed on the basis of exemplary concepts such as transformational, ethical, spiritual, responsible and paternalistic is "Servant Leadership".

Servant leadership is important as a leadership philosophy that prioritizes employee needs and expectations, avoids instrumentalizing employees to achieve organizational goals and seeing them as individuals who should only serve the organization. In servant leadership educating, strengthening and supporting employees have been emphasized. Servant leaders, who focus on what can be done to develop their followers and integrate them within the organization, highlight the concepts of justice, humility, and cooperation (Greenleaf, 1970).

"Job Embeddedness" is a term aiming to understand employees' connections (links) and harmony (fit) with other employees, groups and communities in the organization. It is also explaining the gains they have in their current jobs which not wanted to lose (sacrifice). It includes directly work-related (on-the-job embeddedness) and non-work-related (off-the-job embeddedness) factors that enable employees to stay in their job. Work-related elements are the links established with colleagues and organization, the fit between personal competencies and demands of the job, the fiscal and psychological benefits received from the work. Non-work factors are individual, family and communal elements that are not directly related to job (Mitchell et al., 2001).

In our research, it is planned to examine possible consequents of servant leadership and antecedents of job embeddedness. The relevant literature was examined, and the mediating effect of perceived organizational support and employee empowerment has been considered meaningful to research.

The relationship between servant leadership and job embeddedness can be tested based on "Social Exchange Theory". Under the circumstances which employees perceive their contributions are valued by their managers and organizations, they develop positive feelings toward their job and organization. The theory explains reciprocal social interaction that people should help and not harm those who benefit them (Cropanzano and Mitchell, 2005).

**Keywords:** Servant Leadership, Job Embeddedness, Social Exchange Theory

**Özet:** Yönetim-organizasyon literatüründe geleneksel liderlik yaklaşımlarından sonra çağdaş liderlik teorileri geliştirilmiştir. Ekonomik, teknolojik ve sosyal değişimler geleneksel organizasyonları dönüştürmüştür. İnsan kaynağını yönetmek daha karmaşık bir hal almış, çalışanların daha fazla önemsendiği örgüt kültürleri ortaya çıkmıştır. Dönüşümcü, etik, manevi, sorumlu, babacan gibi örnek kavramlar temelinde geliştirilen liderlik teorilerinden biri "Hizmetkar Liderlik"tir.

İşgören ihtiyaçlarını ve beklentilerini önceleyen, işgörenleri örgütsel hedeflere ulaşmak için araçsallaştırmaktan ve sadece organizasyona hizmet etmeleri gereken bireyler olarak görmekten kaçınan hizmetkar liderlik önemlidir. Çalışanları eğitmeye, güçlendirmeye, desteklemeye odaklanan bir liderlik felsefesidir. Takipçilerini geliştirmek için neler yapılabileceğine, organizasyon içinde bütünlük oluşturmaya odaklanan hizmetkar liderler adalet, alçakgönüllülük, işbirliği kavramlarını öne çıkarır (Greenleaf, 1970).

"İşe Gömülmüslük" çalışanların örgüt içindeki birey, grup ve topluluklarla bağlantılarını, uyumunu, mevcut işlerinde sahip oldukları ve kaybetmek istemeyecekleri kazanımları anlamaya dönük bir kavramdır. Çalışanların örgütte kalmalarını sağlayan doğrudan iş ile ilgili ve iş dışı faktörleri kapsar. İşe yönelik unsurlar çalışma arkadaşlarıyla ve örgütle kurulan bağlar, kişinin yetkinlikleri ve görevinin gereklilikleri arasındaki uyum, çalıştığı işyerinden sağladığı maddi ve psikolojik faydalardır. İş dışı faktörler iş ile doğrudan ilgisi olmayan kişisel, ailesel ve toplumsal unsurlardır (Mitchell vd., 2001).

Araştırmamızda hizmetkar liderliğin ardılı ve işe gömülmüslüğün öncülü olabilecek kavramların incelenmesi planlanmaktadır. İlgili literatür incelenmiş, algılanan örgütsel destek ve personel güçlendirme kavramlarının aracılık etkisi araştırmaya uygun bulunmuştur.

Hizmetkar liderlik ve işe gömülmüslük arasındaki ilişki "Sosyal Mübadele Kuramı" temel alınarak incelenebilir. Buna göre çalışanlar yöneticileri ve örgütleri tarafından katkılarında değer verildiğini algıladığında işlerine ve örgütlerine karşı olumlu duygular geliştirir. Teori, karşılıklı sosyal etkileşim üzerinden insanların kendilerine fayda sağlayanlara yardımcı olması ve zarar vermemesi gerektiğini açıklar (Cropanzano ve Mitchell, 2005).

**Anahtar Kelimeler:** Hizmetkar Liderlik, İşe Gömülmüslük, Sosyal Mübadele Kuramı

## INTRODUCTION

The leadership, which emerges in the process according to the characteristics of organizations and followers, external environmental conditions, superior-subordinate relations, is about influencing, shaping and transforming attitudes and behaviors of employees. In order to achieve organizational goals, different conjunctures create need for different leadership styles (Koçel, 2020).

The prior studies on leadership theories are grouped into three groups. This grouping is conceptualized through leadership characteristics, leadership behaviors, situational terms of leader and organization (Eren, 2020). After traditional leadership approaches, modern leadership theories have been adopted. Increasing competitive conditions, growing and fragmenting industries into different segments, consumer expectations increasing in quantity and diversifying in terms of originality, difficulty in satisfying customers, innovation and creativity requirements have transformed the relationships between employee needs and organizational outcomes. Considering that there is a relationship between preferred leadership style and organizational performance, one of the contemporary leadership approaches developed is "Servant Leadership" (Greenleaf, 1970; Spears, 1996).

Servant leadership is a theory that emphasizes primarily and effectively serving employees, evaluating business life more comprehensively through economic and social perspective, creating and increasing shareholder feeling among employees, sharing leadership authority and power by ensuring participation of followers in organizational decisions (Spears, 2010).

While social and environmental susceptibilities are vital in businesses nowadays, ethical concerns for sustainability are considered as important as economic interests. Servant leaders can differentiate themselves by adopting unique leadership style, with their focus on ethical values, trust-based relationships with their employees, creating value for internal and external shareholders of their organizations. Servant leadership is a theory that encompasses other leadership approaches defined by ethical, spiritual, authentic, empowering, charismatic and responsible characteristics (Dierendonck, 2011).

## CONCEPTUAL FRAMEWORK

The reason for the emergence of contemporary leadership theories such as servant leadership is that traditional leadership approaches are inadequate to meet today's organizational needs. Servant leadership aims to create co-existence and partnership within the organization (Liden et al., 2008). Servant leaders, who set goals and objectives, try to manage constructive contradictions with their prominent characteristics such as tolerance and consociationalism (Gökçen, 2019).

The uniqueness of servant leadership comes from encouraging its followers to enhance themselves, to act independently, to use initiative. It is based on accepting personal differences without prejudice and negative judgement (Patterson, 2003). In doing so, it prioritizes community awareness and feeling, shared authority, relational power and strengthening followers. The leader is the person who holds the power, and the servant leader prioritises sharing this power with subordinates (Sendjaya and Sarros, 2002).

Servanthood and leadership might be contradictory concepts. However, these two characteristic have been harmonized in the theory conceptualized by Greenleaf. The author revealed the definition of servant leader who has robust leadership competencies and desire to serve her/his organization, employees and society (Greenleaf, 1998). The leader works to benefit less powerful people by sacrificing when necessary, to meet the needs of followers, and to consciously raise leaders like herself/himself. In this respect, it differs from other leadership theories. The servant leader should not be perceived only as "a person who serves". A servant leader is not a person who performs routine and low-quality activities, but a manager who can combine leadership competencies with motivation to serve organization and employees. Servant leader is a person who serves for the mutual interests, leads not for her/his individual goals and well-being, but to promote followers.

What differentiates servant leadership from other leadership approaches is not the decision power and success of the leader, but how they act when taking decisions (Greenleaf, 1970). It is the behavior of sharing responsibility in the decision-making process, consulting and including followers in the process. Servant leader shows democratic approach as much as possible while leading. Servant leadership is more people-oriented and authority delegating than other leadership styles (Dierendock, 2011). According to Greenleaf, the fundamental of servant leadership is that the leader thinks beyond her/his own individual interests. In other leadership approaches, the leader also does not act solely based on her/his benefits. However, this perspective as the core value of theory is distinctness of servant leadership (Greenleaf, 1970; 1998).

Example for an organizational outcome aimed by leaders is the employees' commitment and continuity to the organization. Besides the leadership factor, there are other antecedents that have an impact on achieving these consequents. Developed as a theory to understand these elements, job embeddedness examines the factors that cause employees to stay in the organization from a positive perspective (Mitchell et al., 2001). Job embeddedness is the combination of forces that prevent employees from leaving their job. Instead of focusing only on the employee-employer relationship, it tries to explain the employee's attitude and organizational commitment through job satisfaction (Holtom et al., 2006).

Job embeddedness is a theory that examines employees' connections with other individuals, groups and communities; their harmony with job and organization; what they would lose in case of leaving their job (Mitchell et al., 2001). It includes directly work-related and non-work-related factors that enable employees to stay in the organization. Positive bonds established with colleagues and managers, effective compatibility between employee's expertise and requirements of the job, salary received, office environment that is favourable with its physical and social features are examples of work-related factors. Non-work factors are personal, family and community factors affecting the employee at outside of the workplace (Felps et al., 2009).

Factors such as extended-self compliance with the organization, the fiscal, physical and emotional gains provided to her/his family, the social external environment with which she/he can establish closeness through the organization, may be the reasons that encourage the employee to stay in the job. Job embeddedness refers to the feelings of difficulty and negativity that would be experienced in case of leaving the current economic, social and psychological environment. The more ties an individual establishes at workplace, the more committed she/he becomes to job and organization (Zhang et al., 2012).

While on-the job embeddedness refers to how committed the employee is to the organization worked in, off-the job embeddedness refers to how embedded the employee is to the society lived in because of existing job. Job embeddedness operates as a critical mediating concept between work-related and non-work factors and employee retention (Holtom et al., 2006). It represents the accumulated psychological and rational reasons for an employee to remain at work.

#### **AIM OF THE RESEARCH**

When looking at the consequents of leadership theories, employee-organization integration is one of the intended outcomes (Avolio et al., 2009; Day et al., 2014). Employees' ability to work efficiently and happily means that their intention to leave the job decreases and their thoughts of staying at work increase. Employees become closer to their organizations, in other words, their degree of job embeddedness increases (Mitchell et al., 2001; Mitchell and Lee, 2001). Approach of the person leading the organization may be an important factor in achieving this result. The main question of our research will be whether employees' perceptions of their managers as servant leaders affect their job embeddedness behaviors.

The components of job embeddedness - what needs to be done to increase organizational compliance, connections and gains - coincides with the attitudes and behaviors of a servant leader. The objective of servant leaders is to create an organizational structure compatible with employees and to lead them by making sacrifices from herself/himself. This overlap is why our research focuses on servant leadership and job embeddedness. Leaders who prioritize and value their employees, accept them as they are and create empathy, encourage and empower them, are ideal managers who superiors want to work with. Followers of these type of leaders would face sacrificing the emotional factors that ensure job embeddedness, even if they can achieve higher financial gains in case of changing jobs. Based on this perspective, relationship possibility between servant leadership and job embeddedness is rational to search.

Mitchell et al., who introduced job embeddedness theory to the literature, stated employees' relationship with their superiors as a variable with high potential impact on job embeddedness. They particularly emphasized the importance of sacrifice dimension of job embeddedness in superior-subordinate relationship. A critical characteristic of servant leadership is altruism, caring others. A hypothesis can be derived via similarity of altruism and sacrifice.

In summary, the aim of our research will be to determine employee's level of job embeddedness to their organizations through servant leadership perceptions for their superiors.

#### **THEORY AND HYPOTHESES OF RESEARCH**

The research subject will be examined through social exchange theory, which forms the theoretical basis of many studies in organizational behavior discipline. The theory explains interactions arising from interpersonal



relationships and provides understanding to social relationships in the context of cause and effect. These relationships may be between people in social life or within the scope of management-organization science, such as employee-organization, employee-leader interactions (Lambe et al., 2001). Important concepts such as leadership (Liden et al., 1997), perceived supervisor support (Eisenberger et al., 1986) can be explained within the scope of social exchange theory.

Social exchange theory provides an understanding of the reciprocal social exchanges that motivate society and human behavior. It explains the contributions of employees to their organizations and their expectations from their organizations as a result of organization-employee interaction. According to social exchange theory, when people do a favor to someone they hope that this favor will be reciprocated and they will be rewarded when they exhibit positive behavior (Cropanzano and Mitchell, 2005). The theory shows that if organizations meet employee needs, value their contributions and pay attention to their interests, employees will experience job satisfaction and satisfied employees will provide higher benefits to the organization, and at the end of the process, perceived organizational support will increase. It includes external benefits, psychological needs, advice and information sharing between employee and employer. According to the theory, developing and maintaining relationships between individuals is based on social and financial benefits. Individuals want to maintain mutually beneficial relationships (Lambe et al., 2001).

Management-organization terms that have a possible mediating effect on the relationship between servant leadership and job embeddedness will be included in our research. Perceived organizational support and employee empowerment will be selected as variables that are likely to affect the job embeddedness (Arici et al., 2023). Employees who evaluate that they are empowered and supported by their organizations will have an increased intention to continue in their jobs (Mitchell and Lee, 2001; Holtom et al., 2006; Felps et al., 2009).

Giving confidence to followers, empowering them, making sacrifices, ensuring organizational justice, and creating attitudes towards organizational commitment and cooperation are the successors of servant leadership. In other words, they are the positive organizational outcomes that are desired to be achieved by applying servant leadership. Listening, persuading, motivating, dedication to the development of people, empathy, forming groups and strengthening group relations are among the qualities that a servant leader must have. A manager who has these characteristics supports and strengthens his subordinates (Eva et al., 2019).

Perceived organizational support, perception of justice, job satisfaction, job burnout are possible antecedents of job embeddedness. It has been observed that employee empowerment has an effect on increasing employees' organizational commitment, engagement, well-being within the organization they work for. Empowerment can also help in favor of the organization through decreasing job burnout feelings and intentions to leave job (Zhang et al., 2012). As a consequential empowered personnel's job embeddedness may increase.

In their study on the effects of servant leadership on employees' attitudes, behaviors and psychology, Ozyilmaz and Cicek (2015) measured the level of job satisfaction through the positive psychological climate that the servant leader can create. Psychological climate is followers' perception of the psychological impact of their workplace environment on their individual well-being. Raising these perceptions can be considered as strengthening employees psychologically. A servant leader who helps followers to solve their problems, demonstrates managerial competence and consistency, meets the needs of subordinates to devote themselves to the job, creates a cooperated and coordinated working environment, would be always valued. These circumstances affect positive organizational outcomes such as job satisfaction and organizational commitment, which are highly interrelated with job embeddedness theory. In this context, it is meaningful to examine possible relationship between servant leadership and job embeddedness.

In a comprehensive literature review which servant leadership and the attitudinal outcomes on followers are summarized, employee empowerment and trust appear as variables (Eva et al., 2019). A trusted leader is someone who has been perceived as supporting her/his employees. The relevant terms are similar to the variables of our research, personnel empowerment and perceived organizational support.

The starting point of Michell et al. (2001) in their study that introduced theory of job embeddedness, is to find reasons for voluntary turnover. There is a literature which turnover intention and job embeddedness are tested together (Akgunduz and Sanli, 2017). The difference of our research will be questioning hypotheses based on job embeddedness rather than intention to leave.

In one of the latest articles about job embeddedness, Arici et al. (2023) stated that job embeddedness theory is closely related to leadership approaches. Servant leadership theory is an important variable in job embeddedness researches. Additionally perceived organizational support is another concept referenced in relevant studies, empowerment theory are linked to job embeddedness. In the article's recommendation section for future studies, authors emphasized human resource management practices such as psychological support and psychological capital may be antecedents of job embeddedness.

Based on existing literature, research hypotheses have been determined as follows:

**H1:** Employees' servant leadership perceptions have an impact on their job embeddedness.

**H2:** Employees' perceptions of organizational support mediates the effect between servant leadership perceptions and job embeddedness.

**H3:** Employees' perceptions of empowerment mediate the effect between servant leadership perceptions and job embeddedness.

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## Ulaştırma Sektöründe Enerji Tüketimi Kaynaklı Karbondioksit Emisyonu

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**Özet:** Günümüz Dünyasında karşılaşılan temel sorunlardan birisi küresel ısınmadır. Küresel ısınmaya sebep olan en temel faktör sera gazı salınımlarıdır. Atmosferde salınan bu gazlar Dünya ısısının artışına neden olmaktadır. Küresel ısınmanın temel nedeni olan sera gazları içerisinde en büyük paya sahip olan karbondioksit gazıdır. Enerji talebini oluşturan üç ana sektör ulaşım, inşaat ve endüstri olarak ele alınmaktadır. Endüstride ve hammaddelerde enerji kullanımı, günümüzün nihai tüketiminin neredeyse yarısını oluştururken, ulaşım ve inşaat sektörü geri kalanın kabaca eşit payını oluşturmaktadır. Dolayısıyla ulaşım sektörü enerji kullanımında önemli bir yere sahiptir. Gerek Covid-19 pandemisinden kaynaklanan yaşam tarzı değişiklikleri gerekse enerjide yenilenebilir alternatif enerji arayışları ulaşım sektöründeki enerji tüketiminde dönüşümlere konu olmaktadır. Bunların dışında nispeten yüksek ham petrol fiyatları karayolu taşımacılığını da etkilemektedir. Bu çalışmanın amacı ekonomide önemli paya sahip olan ulaştırma sektöründe enerji tüketiminin neden olduğu karbondioksit emisyonunda şokların kalıcı etkiye sahip olup olmadığı araştırılmasıdır. Şoklarının geçici veya kalıcı etkiye sahip olup olmadığı, ekonomik büyümenin sürdürülebilirliği ve tutarlı enerji politikaları açısından önem arz etmektedir. Bu bağlamda, yapılan bu çalışma ile küresel ısınma ile mücadele kapsamında yapılacak olan enerji politikası değişikliklerinin değerlendirilmesi sürecine katkıda bulunulması hedeflenmektedir.

**Anahtar Kelimeler:** Karbondioksit Emisyonu, Doğrusal Olmayan Birim Kök, Ulaştırma Sektörü

### 1. GİRİŞ

Sera gazı salınımlarının temel nedenini oluşturduğu küresel ısınma günümüzde karşılaşılan sorunların başında gelmektedir. Küresel ısınmaya sebep olan başlıca sera gazları, karbondioksit, metan, nitroz oksit hidroflorokarbon, perflorokarbonur.

Endüstriyel dönem boyunca insan davranışları %25'lik karbondioksit emisyonu artışına neden olmuştur (Güriş, 2016). Dünyadaki toplam sera gazı salınımının yaklaşık yüzde seksenini karbondioksit gazı salınımı oluşturmaktadır. Küresel ısınma ile mücadele kapsamında Kyoto protokolü imzalanmış ve 2005 yılında yürürlüğe girmiştir. Bu protokol kapsamında atmosferde bulunan sera gazlarının salınımının azaltılması çevreye olumsuz etki oluşturmayacak seviyelere azaltılması hedeflenmektedir. Küresel ısınma ve iklim değişikliği ile mücadele kapsamında 2016 yılında yürürlüğe giren Paris İklim Anlaşması ile taraf ülkeler sera gazı salınımlarını sınırlamayı hedeflemiştir.

Enerji arz etmek için kullanılan fosil yakıtların yanması karbondioksit emisyonunun temel kaynağını oluşturmaktadır. Dünya ekonomilerinde yaşanan gelişme paralelinde enerji tüketimini arttırmakta, artan enerji tüketimi de, enerjiden kaynaklanan karbondioksit emisyonunun artmasına yol açmaktadır. Amerika Birleşik Devletleri başta olmak üzere Dünya ekonomisinde önemli paya sahip sanayileşmiş ülkelerde enerji üretiminin çok büyük kısmı kömür, doğal gaz gibi fosil kaynak olarak ifade edilen yakıtlardan elde edilmektedir. Fosil kaynaklara alternatif olarak, sera gazı salınımının azaltılması hedefinde yenilenebilir enerji kaynakları kullanılmaktadır.

Küreselleşmenin etkisi, ülkelerin ekonomilerinde ulaştırma sektörünün öneminin artmasına neden olmuştur. Ulaştırma sektörü, nihai enerji tüketimindeki önemli paya sahip sektörlerdendir. Aynı zamanda sektörler itibarı ile karbondioksit emisyonunda da önemli pay sahibidir. Enerji tüketimi ülkelerin büyüme ve kalkınma performanslarında önemli bir rol oynamaktadır. Enerji şoklarının geçici veya kalıcı etkilerinin varlığı, ekonomik büyümenin sürdürülebilirliği ve tutarlı enerji politikaları açısından önemlidir (Yaşgül, Güriş, Tiftikçigil, 2017). Bu açıdan değerlendirildiğinde sürdürülebilir kalkınma hedefinde olan ekonomilerde enerji şoklarının etkileri birçok araştırmaya konu olmuştur.

Bu çalışmada ulaşım sektöründe enerji tüketimi kaynaklı karbondioksit emisyonunda şokların geçici etkiye sahip olup olmadığı araştırılmıştır. Literatürdeki diğer çalışmalardan farklı olarak doğrusal olmayan birim kök testleri ile analiz gerçekleştirilmektedir. Çalışmanın takip eden bölümünde kullanılan ekonometrik yöntem açıklanacak sonraki bölümde ise ampirik bulgulara yer verilecektir.

## 2. EKONOMETRİK METODOLOJİ

Ulaşım sektöründe enerji tüketimi kaynaklı korbondiyoksit emisyonunda şokların geçici etkiye sahip olup olmadığı araştırıldığı bu çalışmada ampirik analiz birim kök testleri kullanılarak gerçekleştirilecektir. Dickey ve Fuller(1979) çalışmasını takip eden süreçte farklı test süreçlerinin modellenmesi amaçlanmış ve birim kök test sürecine yeni yaklaşımlar getirilmiştir. Perron(1989) çalışması yapısal kırılmaların varlığının birim kök testleri üzerindeki etkisini açıkça ortaya koymuştur. Benzer etkilerin varlığı doğrusal olmama durumunda da söz konusudur. Bu çalışmada Kılıç(2011) birim kök testi ile Chen ve Xie(2015) çalışmasında ileri sürülen birim kök testleri kullanılacaktır.

Kılıç(2011) çalışmasında geliştirilen birim kök testi üstel yumuşak geçişli eşik değerli otoregresif (ESTAR) model yapısına dayanılı dayanmaktadır. test sürecinde kullanılacak model aşağıdaki gibi gösterilebilir.

$$\Delta y_t = \phi y_{t-1} (1 - \exp(-\gamma z_t^2)) + \sum_{i=1}^p \delta_i \Delta y_{t-i} + u_t$$

Burada birim kökün varlığını ifade eden temel hipotezin ( $H_0: \phi = 0$ ) sınanması  $\gamma$  parametresi bilinmediğinden mümkün değildir. Bu durumun çözümü için Kılıç(2011) çalışmasında istatistik değerini minimum yapan iteratif yöntemin kullanımı önerilmiştir.

$$T_{ESTAR} = \inf_{\gamma \in \Gamma_T} \hat{t}_{\phi=0}(\gamma) = \inf_{\gamma \in \Gamma_T} \frac{\hat{\phi}_n(\gamma)}{\widehat{SE}(\hat{\phi}_n(\gamma))}$$

Burada  $\Gamma_T$  aşağıdaki şekilde gösterilebilir.

$$\Gamma_T = [\underline{\gamma}_T, \bar{\gamma}_T] = \left[ \frac{1}{100 s_{zT}}, \frac{100}{s_{zT}} \right] \in \mathbb{R}$$

Denklemdaki  $s_{zT}$ ,  $z_t$ 'nin standart sapmasını göstermektedir.

Chen ve Xie(2015) çalışmasında ileri sürülen birim kök testlerinde iki aşamalı bir test prosedürü ileri sürülmüştür. Birinci adımda Leybourne, Newbold ve Vougas(1998) tarafından ortaya atılan testte önerilen model yapıları kullanılmaktadır.

1. Adım: Leybourne, Newbold ve Vougas(1998) tarafından ortaya atılan model yapıları doğrusal olmayan en küçük kareler yöntemi kullanılarak tahmin edilir.

$$\text{Model A } y_t = \alpha_1 + \alpha_2 S_t(\gamma, \tau) + v_t$$

$$\text{Model B } y_t = \alpha_1 + \beta_1 t + \alpha_2 S_t(\gamma, \tau) + v_t$$

$$\text{Model C } y_t = \alpha_1 + \beta_1 t + \alpha_2 S_t(\gamma, \tau) + \beta_2 t S_t(\gamma, \tau) + v_t$$

Burada geçiş fonksiyonu  $S_t(\gamma, \tau) = [1 + \exp\{-\gamma(t - \tau T)\}]^{-1}$  olacaktır. Model tahmininden elde edilen kalıntılar aşağıdaki gibi gösterilebilir.

$$\text{Model A } \hat{v}_t = y_t - \hat{\alpha}_1 - \hat{\alpha}_2 S_t(\hat{\gamma}, \hat{\tau})$$

$$\text{Model B } \hat{v}_t = y_t - \hat{\alpha}_1 - \hat{\beta}_1 t - \hat{\alpha}_2 S_t(\hat{\gamma}, \hat{\tau})$$

$$\text{Model C } \hat{v}_t = y_t - \hat{\alpha}_1 - \hat{\beta}_1 t - \hat{\alpha}_2 S_t(\hat{\gamma}, \hat{\tau}) - \hat{\beta}_2 t S_t(\hat{\gamma}, \hat{\tau})$$

2. Adım: Birinci adımdan elde edilen kalıntılar kullanılarak Kılıç(2011) test prosedüründe anlatılan modelin tahmini ile test prosedürü gerçekleştirilir.

$$\Delta v_t = \phi v_{t-1} (1 - \exp(-\gamma z_t^2)) + \sum_{i=1}^k \delta_i \Delta v_{t-i} + u_t$$

### 3. AMPİRİK BULGULAR

Ulaşım sektöründe enerji tüketimi kaynaklı karbondioksit emisyonunda şokların geçici etkiye sahip olup olmadığı araştırıldığı bu çalışmada 1973 Ocak- 2023 Ekim dönemine ait aylık veriler kullanılmıştır. Çalışmada kullanılan veriler Amerika Birleşik Devletleri Enerji Bilgi İdaresi'nden alınmıştır.

İlk aşamada geleneksel birim kök testleri(Dickey ve Fuller(1981)(ADF), Phillipis Perron(1988)(PP), Elliott, Rothenbergand, Stock(1996) (DF-GLS) birim kök testi ve Kwiatkowski, Phillips, Schmidt ve Shin(1992) (KPSS) durağanlık testi) kullanılarak analiz gerçekleştirilmiş ve sonuçlar tablo 1 de sunulmuştur.

Tablo 1: Birim Kök Test Sonuçları

	Sabitsiz ve Trendsiz	Sabitli	Sabitli ve Trendli
ADF	1.0713	-1.6231	-2.1062
PP	0.5957	-4.949 <sup>a</sup>	-12.236 <sup>a</sup>
KPSS	-	2.7026	0.5306
DF-GLS	-	0.2879	-1.8921

<sup>a,b,c</sup> %1, %5 ve %10 seviyesinde durağanlığı göstermektedir.

Geleneksel testlerden elde edilen bulgulara göre sadece Phillips Perron testinde sabitli ve sabitli ve trendli model için durağanlık bulguları elde edilirken diğer testler durağan olmama yönünde bilgi vermektedir. Çalışmanın bu aşamasında doğrusal olmayan testler kullanılarak analiz gerçekleştirilmiş ve sonuçlar Tablo 2 de sunulmuştur.

Tablo 2: Doğrusal Olmayan Birim Kök Test Sonuçları

	Model A	Model B	Model C
Kılıç(2011)	1.071336	-1.603014	-1.866781
LNV-Kılıç	-3.260399	-3.485085	-3.714629

Kılıç(2011) için kritik değerler çıkış makalesinde tablolaştırılmıştır.(%5 için Model A: -1.90, Model B:-2.37, Model C: -2.57) LNV-Kılıç testi için ise kritik değerler Chen ve Xie(2015) çalışmasında tablolaştırılmıştır (%5 için Model A: -3.959, Model B: -4.391, Model C: -4.807).

Test istatistik değerleri ile kritik değerler karşılaştırıldığında serinin birim köklü olduğunu gösteren temel hipotezin kabulü yönünde bulgular elde edildiği söylenebilir.

Bu noktadan hareketle elde edilen bulgular ulaşım sektöründe enerji tüketimi kaynaklı korbondioksit emisyonunda şokların kalıcı etkiye etkiye sahip olduğu yönündedir.

### 4. SONUÇ

Günümüzde karşılaştığımız önemli sorunlardan olan küresel ısınmanın temel nedeni olan sera gazları içerisinde en büyük paya sahip olan karbondioksit gazıdır. Bu çalışmada ekonomide önemli paya sahip olan ulaştırma sektöründe enerji tüketiminin neden olduğu karbondioksit emisyonunda şokların kalıcı etkiye sahip olup olmadığı araştırılmıştır. Bu çerçevede uygulamalı çalışmalarda sıklıkla kullanılan birim kök test prosedüründe, doğrusal olmamanın varlığına izin veren testler kullanılarak analizler gerçekleştirilmiştir. Elde edilen bulgular ulaşım sektöründe enerji tüketimi kaynaklı korbondioksit emisyonunda şokların kalıcı etkiye etkiye sahip olduğu yönündedir.

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## Öteki Kavramından Hareketle Çokkültürlülük

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**Özet:** Toplumu oluşturan bireylerin, toplumsallaşma sürecinin sonucunda aidiyet oluşmaktadır. Toplumsal kimliğini kazanan bireyin, kendine göre, bu kimliğin dışında kalan kimse veya kimseler “öteki” olarak adlandırılmaktadır. Tarihsel süreç içerisinde yaşadığı toplum dışında yaşamak zorunda kalmış, farklı sosyo- kültürel kimlik taşıyan kimseler olmuştur. Bu kimseler, içinde buldukları topluma ait olmadıkları veya tam olarak konumlandırılmadıkları için çoğunlukla bir tehdit gibi algılanmıştır. Ötekin diğer bir anlamsal bağlamda kullanım şekli “yabancı”dır. Farklı yaşam tarzları olan ve yerleşik toplumun kendinden olmayanları nitelendirmek için kullandıkları “yabancı” sözcüğü, günümüz dünyasında oldukça sık kullanılan bir kavramdır.

Özellikle ikinci dünya savaşından sonra her alanda yaşanan hızlı teknolojik gelişmeler, uluslararası ortamda insan hareketliliğini artırmıştır ve farklı toplumların çeşitli amaçlar doğrultusunda kendinden olmayan toplumlarla birlikte yaşama zorunluğu doğmuştur. Öteki olarak adlandırılan farklılıkları buldukları toplumdan dışlanmadan aynı siyasi şemsiye altında ortak değerler etrafında birlikte çatışma ortamından yaşamalarını sağlamak için çokkültürlü toplum düzeni oluşturulmuştur.

Çokkültürlülük, yerel toplum için, öteki veya yabancı olan grup veya toplumların varlığını ve değerler sisteminin kabul edilerek oluşturulmuş toplumsal bir yapıdır. Çokkültürlülük, toplumların birbirlerine karşı düşmanlık düzeyinde önyargıların kırılması ve iletişim içerisinde birbirlerini anlayabilme ortamının oluşturulduğu yaşam alanıdır. Çokkültürlü oluşum “öteki”lere yasal eşitlik hakları sunmakta ve toplumlararası kaynaşma ve etkileşim süreci yaşayacakları bir ortam sunmaktadır.

Bu çalışmada, öteki kavramından hareketle “Çokkültürlülük” oluşumu, ilgili literatür taramaları yapılarak nitel araştırma yöntemi aracılığıyla betimleme şeklinde yorumlanacaktır.

**Anahtar Sözcükler:** Öteki, Çokkültürlülük, Uyum

### Multiculturalism Based on the Concept of the Other

**Abstract:** Belonging is formed as a result of the socialization process of the individuals who make up the society. According to the individual who has gained his social identity, the person or people who are outside this identity are called "others". Throughout the historical process, there have been people who had to live outside the society they lived in and had different socio-cultural identities. These people are often perceived as a threat because they do not belong to the society they live in or are not well positioned. Another usage of other in a semantic context is "stranger". The word "foreigner", which is used to describe those who have different lifestyles and who are not from the established society, is a concept used quite frequently in today's world.

Rapid technological developments in every field, especially after the Second World War, have increased human mobility in the international environment, and different societies have had to live together with societies that are not their own for various purposes. A multicultural social order has been established in order to ensure that the so-called "others" can live together in an environment of conflict around common values under the same political umbrella, without being excluded from the society in which they live.

Multiculturalism is a social structure created by accepting the existence and value system of other or foreign groups or societies for the local society. Multiculturalism is a living space where societies break down prejudices at the level of hostility towards each other and create an environment of understanding each other through communication. Multicultural formation offers legal equality rights to “others” and provides an environment in which they can experience a process of inter-communal cohesion and interaction.

In this study, based on the concept of the other, the formation of "Multiculturalism" will be interpreted as a description through qualitative research method by scanning the relevant literature.

**Key Words:** Other, Multiculturalism, Harmony

### 1. GİRİŞ

Toplumun varlığını sürdürebilmesi için bireyle, bireyin de toplumun var olmasına ihtiyacı vardır. Her toplum kendi üyelerini toplumsallaştırarak varlığını korumaktadır. Toplumun kültürel değerleri ve normları bireyin tutum ve davranışlarını belirlemektedir. Bu anlamda her toplum kendi kültürel değerlerini toplumsallaştırma kurumsal araçları ile bireylerine aktarmaktadır. Toplumsallaşan ve kültürel değerlerle donatılan bireyler,



kendi toplumuna aidiyet duygusu ile bağlanmaktadır. Birbirinden farklı toplumsal oluşumlara bağlı olan bireyler için, her bir farklılık ötekini belirlemektedir.

Belli bir topluma mensup olanlar, o toplumun kültürel kimliğini taşımaktadır. Bu anlamda aynı topluma aidiyeti olanlar, o toplumun gerçek üyeleri, onun dışında kalan kimseler de öteki yani kendinden farklı kimlikli kimseleri oluşturmaktadır. Öteki olan her zaman toplum dışında kalan ve toplum için tehdit gibi algılanan kimliğe sahip kimse olarak görülmektedir. Bu düşünce, her toplum için karşılıklı bir önyığı olarak varlığını sürdürmektedir. Özellikle ulusların, kendinden olmayanlar için, devlet sınırları belirlemeleri ve öteki yani farklı olanı dışlaması, farklılığı ortaya çıkaran bir uygulamadır. Ancak toplumlararası tarihsel süreç içerisinde kalıp yargıya dönüşmüş bu düşüncenin ortadan kaldırılması ve bir çözüm bulunması, çokkültürlü toplum yapılanması ile olası olacağı varsayılmaktadır.

Yabancı olanın tehdit olmaktan çıkaracak çokkültürlülüğün ortaya çıkmasında ekonomik, siyasal ve tarihsel olgular büyük rol oynamaktadır. Çokkültürlülük, farklı sosyo-kültürel yapısı olan toplumların birlikte yaşamasına olanak sağlayan bir siyasal düzenlemedir. Öteki olanın yok olmadan varlığını sürdürmesi, toplum modelinin uyum ve hoşgörü yönünde değiştirilmesi mümkün görülmektedir. Aksi halde öteki olanı, kendi içerisinde olsa bile yok saymak, çoklu yaşam için tehlike oluşturacaktır.

Bugün dünyada yaşanan uluslararası insan hareketleri, ulus devlet düşüncesinin değiştiği ve küreselleşmenin her alanda yaşandığı bir değişim süreci yaşanmasına neden olmuştur. Yaşanan değişimler, öteki kavramını düşman anlamından çıkarmış ve yabancı anlamı yüklemiştir. Bir yerde yabancı olmak, tehdit oluşturmaktan çok, çokkültürlülük bağlamında farklı kültürlerin oluşturduğu çeşitlilik gibi algılanmaktadır. Farklı kültürlerin bir noktada buluştuğu ve birbirlerini saygı çerçevesinde kabullendiği noktada, kültürlerarası etkileşim de söz konusu olmaktadır. Bu bağlamda öteki olarak tanınan farklı kültürel dokuya sahip toplumlar yok olmadan barış içerisinde korunmaktadır.

## 2. ÖTEKİ KAVRAMININ TANIMI

Birey, içinde yaşadığı toplumun üyesi olabilmek için, toplumsallaşma sürecinde ben kavramını oluşturmaktadır. Ben kavramından hareketle, başkalarında kendinde olmayan ya da farklı olan tarafları belirlemeye çalışmaktadır. Birey bir taraftan kendini tanıırken diğer taraftan kendi gibi olmayan ötekini de tanımaktadır (Akpınar & Şahin, 2017: 330). Bireyin ötekini belirlemesinin temel çıkış noktası kendisidir. Yani öteki, bireyin toplumsallaşma sürecinde kendisine öğrenmesi için dayatılan kültürel değerlerin dışında kalan olgulara sahip olandır. Birey ötekini kendinde var olan özelliklerle, kendinden farklı olan ötekini karşılaştırarak tanımaktadır. Kendisine benzemeyene öteki sıfatı yüklenmekte ve ötekini olumsuz anlamda algılamaktadır. Toplumsal kalıp önyargılarla birlikte süreç içerisinde öteki ile mesafe iyice açılmakta ve farklılaşma artmaktadır (Akpınar & Şahin, 2017: 331). Böylece birey, biz/ben ve öteki düşüncesinden hareketle; toplumda kabul edilmeyen tüm olumsuzluklar ötekine yüklemeye eğilimine girmektedir.

Öteki olan her zaman farklı olarak kabul edilmiş ve bu farklılık belli kavramsal belirlemeler üzerinden yapılmıştır. Öteki olarak adlandırılanları, özellikle ırk, etnik köken, din, cinsiyet, göçmenler gibi nedenlere bağlı ötekiler ve aynı toplumun üyesi olan ancak radikal yönlerinden ötürü ötekileştirilenler olarak ayırmak olasıdır. Öteki olanı kendinden biri olarak göremeyen kimse, onu yabancı olarak ve hatta düşman olarak da görmektedir. Ben ve öteki arasında yapılan sürekli karşılaştırmalar, birey ya da toplumlar arasında ayırmaya ve hatta çatışmaya neden olmaktadır (Özensel, 2020:373). Ötekileştirme, birbirlerine olumsuz anlamlar yükleyen toplumlar arasında gerilimi arttırmaktan öteye gidemeyen bir anlayıştır. Ben ve öteki kavramları düşünsel olarak birbirlerini yansıtmaktadır. Ötekini olumsuzlamak ve iletişim yolunu açık tutmak, farklı olarak görülen ötekini tanımak ve ben kavramındaki önyargıları yıkmak anlamına gelmektedir.

Aslında ben kimliğinin varlığı ötekinin oluşu ile yakından ilişkilidir. Ben olmaksızın ötekinin olması mümkün değildir. Bu anlamda bireyin kendini olumlu yönde geliştirmesi, öteki olanı nasıl değerlendirdiğine bağlıdır. Değerlendirme olumlu ya da olumsuz olmakta bu şekilde bireyin ötekine karşı davranış ve tutumlar da değişebilmektedir (Özensel, 2020: 373). “Ötekini” sürekli olarak uzakta tutmak, korkuları arttıracaktır ve “ben” de korkudan kaynaklanan tedirginliği giderme çabasına gidecektir. Halbuki ötekini tanımak için zaman ayırsa hem kendini düşünsel anlamda zenginleştirilecek hem de korkularından uzaklaşacaktır.

Ötekini tanımak ve bu yönde olumlu adım atmak, ötekileştirmenin ortadan kalkmasına ve iyi ilişkilerin kurulmasına kaynaklık edecektir. Özellikle kendisine yabancı bir toplum içerisinde yaşamak zorunda kalan göçmenlerin ötekileştirilmesi, birlikte yaşam sürecine olumsuz etkileri olacaktır. Azınlık durumunda kalan göçmenler, yerelde yaşayan çoğunluk tarafından tanımadan önyargılı yaklaşımlarla ötelendiği zaman belli

sınırlamalar içerisinde kendilerini ifade etme ve tanıtmaya olanağı bulamazlar. Ancak empati yoluyla yaklaşıldığı zaman ve karşılıklı iletişim kurarak ortak bir yaşam sınırı, hoşgörü çerçevesinde çizilebilecektir ((Onur, 2003:270). “Ben” ile “Öteki” nin birbirlerine yükledikleri anlamlar, kendi aralarında kuracakları iletişim yoluyla bertaraf edilebilecektir. Bu anlamda, hem öteki olan kimselere hem de ötekinin benlik düşüncesine yönelik zıtlıklar ortadan kalkacaktır.

### 3. ÇOKKÜLTÜRLÜLÜĞÜN TANIMI VE UYGULANMASI

Uluslararası alanda insan hareketliliğinin yoğun olarak yaşandığı bu yüzyılda, çeşitli nedenlerden ötürü farklı sosyo-kültürel yapısı olan toplumlar daha kolay ve hızlı bir araya gelmektedir. Teknolojik gelişmelerin insanlığa sunduğu hızlı iletişim ve ulaşım olanakları, dün birbirlerini öteki olarak bilen farklılıkları belli bir etkileşim içine sokmuştur. Hatta bu gelişmeler, ötekilerin sürekli olarak aynı yerde birlikte yaşamalarına zemin hazırlamıştır. Birden çok farklı kültürün bir arada bulunması ve karşılıklı hoşgörü içerisinde yaşaması, bugün çokkültürlü toplumların işlevselleştirdiği bir düzendir. Özellikle önyargılı olarak bakılan öteki yani farklı olanlardan korkmak yerine, eşit hakların ön plana çıkarılması amaçlanmıştır (Onur, 2003:273). Bu şekilde çok sayıda kültürün varlığını sürdürebilmesine olanak sağlayan çokkültürlülük, ötekilerin kültürel aidiyetlerinin aynı toplum içerisinde belirleyici olduğu siyasi bir ortak yaşam alanı oluşturmaktadır.

Toplumlar, kendilerine ait hissettikleri değer yargıları ve davranışlar çerçevesinde bir kimlik oluşturmuşlardır (Bağlı&Özensel,2013: 45). Kimlik oluşumu, her topluma özgü bir farklılık katmaktadır. Farklılıkların ortak bir toplum zemininde birlikte sürekli yaşam sürdürme istemeleri veya zorunluluğu, çokkültürlü toplumların oluşumunu sağlamaktadır. Çokkültürlülük kavramının ortaya çıkmasında ki en temel neden, küreselleşmenin beraberinde getirdiği uluslararası boyuttaki göç eylemleridir. Bu göçlerin sonucunda göçmenlerin farklı bir coğrafyada, kültürel, dilsel, dinsel ve etnik anlamda var olma istekleri çokkültürlü bir yapıyı gerektirmiştir (Yanık, 2013:43). Çokkültürlülük 1941 yılında İngilizcede bağımsız ve önyargısız bireylerden oluşan bir araya gelmiş insan toplulukları için kullanılan bir sözcük iken, ikinci dünya savaşından sonra kültürel çeşitliliği teşvik etmek amacıyla ortaya atılmış devlet politikası adı altında kullanılan bir fikir olmuştur (Doytcheva, 2013:15). Çokkültürlülük, sadece farklı kültürlere sahip toplumların eşit haklar bağlamında bulunduğu bir siyasi şemsiye değil, aynı kültüre sahip fakat farklı kimlikli (Feministler, eşcinseller gibi) ötekileştirilmiş kimselere de haklar sağlayan bir oluşum niteliği taşımaktadır.

Çokkültürlülük, farklılıkların tanınması düşüncesini taşıyan siyasi bir program olarak kültürel çeşitliliği destekleyen çağdaş bir yeniliktir (Doytcheva, 2013:25). Demokratik toplumlarda farklı kültürlere mensup toplumların, devlet kurumları nezdinde değişime neden olabilecek eşit haklara sahip olması ilkelerine sahip olmaları sağlanmaktadır. Bu bağlamda kültürel çeşitliliği yaşatan kültürlerarasılık, melezleşme gibi oluşumlara da zemin hazırlanmış olmaktadır. Bu tür oluşumların gerçekleşmesini sağlayan küreselleşme, ulus devletlerin merkezi kurum ve yapılarını zayıflatmış ve öteki kimlikli kimselere karşı ön yargılı tutumları ortadan kaldırmıştır. Bu tür sosyal dönüşümlere neden olan gelişmeler, ulus devletler içerisinde, öteki yani farklı kimliklerin tanınmasının önünü açmıştır (Yanık, 2013:61).

Çokkültürlülük, farklılıkların kendilerine özgün özellikleri ile var olmaları anlamına gelmektedir. Bu anlamda farklılıkların tanınması ve birbirlerini tanıırken kendilerinin anlaşılması için ifade edilmesi önemli bir unsurdur. Karşılıklı anlaşma zemininde kullanılacak ortak dil tabii ki çeviri dilidir. Çokkültürlülüğün var olduğu her yerde çeviri mutlaka gereklidir (Eruz, 2010: 13). Çokkültürlü siyasi yapı, çeviri dili ile varlığını sürdürebilmektedir, çünkü farklılıklar arasında iletişim ve anlaşma çeviri dili ile olanaklıdır. Aksi halde, çeviri dili olmadan farklılıklar arasında uzlaşma olmaz ve çatışma ortamı oluşur (Ateş & Yavuz, 2017:1292). Çatışma ortamı oluşmaması, karşılıklı olarak anlaşmaya ve uyum içerisinde olmak için eşitlik düzeyinde uygulamalara bağlıdır. Çokkültürlülük bugün gelişmiş birçok batı ülkesinde siyasi bir program olarak uygulanmaktadır. Aynı toplum içerisinde varlıklarını sürdüren farklılıkların, kültürel değerlerini ve aidiyetlerini yaşama isteklerinin hoşgörü çerçevesinde uygulamalarına izin verilmektedir.

### 4. ÖTEKİ KAVRAMI VE ÇOKKÜLTÜRLÜLÜK İLİŞKİSİ

Öteki, ben kavramından hareketle tanımlanabilen kavramdır. Ötekinin var olabilmesi, ben kavramının var olmasına bağlıdır. Ben ve öteki arasında çok yönlü bir ilişki bulunmaktadır. Ben ve öteki ilişkisi kendilik bilincini ortaya çıkarmaktadır. Ben kimim? Öteki Kim? Sorularından hareket edildiğinde, “ben” kendi bilicine ötekinin varlığı sonucunda varmaktadır. Kendini tanıma, ötekinin tanınması ile mümkün görünmektedir. Benin kendisini anlaması bir süreç gerektirmektedir. Ben kendini keşfederken ötekinin deneyimlerinden faydalanmak

durumundadır (Efil, 2016:53). Ben öteki ile iletişim içerisine girdiği zaman kendini ve kimliğini fark etmektedir. Çünkü duygu ve düşünceler karşılıklı iletişime geçtiği zaman açığa çıkmaktadır. İletişim sonucunda olumlu ya da olumsuz etkileşim söz konusu olabilir. “Ben”, öteki ile iletişim sonrası olayları daha geniş bir perspektif açısından değerlendirir bu olumludur. Ya da öteki algısını kendi kültürel önyargıları çerçevesinde etnosentirik davranışlar sergileyerek olumsuzlar ((Güllü, 2015). Ötekileştirici tutumlar sonucunda öteki ya da farklı olana tehdit eden, düşman gibi olumsuz anlamlar yüklenmektedir. Bu da ben ve ötekini birbirinden uzaklaştırmaktadır. Halbuki bugünün dünyasında farklılıklar daha kolay bir araya gelmekte ve hatta birlikte yaşam sürdürmektedir. Öteki olanı dışlamadan, farklılığından faydalanarak ortak düşünceler üretmek ve uzlaşma içerisinde yaşamak insanlığa çok kazanımlar sağlayacaktır. Bu bağlamda çokkültürlü toplum yapısı, uzlaşma zemininde farklı toplumların bir arada eşit haklar zemininde yaşamalarına olanak sunmaktadır.

Çokkültürlülük, ötekileştirilen ya da öteki olarak adlandırılan birey ya da toplumlara bir arada tutmayı amaçlayan bir siyasi programın adıdır. Çokkültürlülük, farklılıklara dayandırılarak uyum ve istikrara politikaları sunan bir toplumsal yaşam şeklidir. Çokkültürlülüğün olduğu her yerde ötekinin varlığını sürdürebileceği bir yaşam alanı vardır. Özellikle bu yüzyılda her alanda yoğun olarak kullanılan ve yaşanan küreselleşme, yerel kültürleri farklı kültürlerle bir araya getirerek, popüler kültürün şemsiyesi altına sokma çabasıdır (Vatandaş, 2002:7). Çokkültürlülük yapılanma düşüncesi, küreselleşme ile birlikte gelişmiş etnik/kültürel farklılıkların uyumunu oluşturmaktadır.

Çokkültürlülük, yerel toplum ile farklılıklar arasında oluşturulması planlanan hoşgörüyü beslemektedir. Ben ile öteki arasında oluşacak anlayış ve paylaşımları destekleyici politikalar, çokkültürlü düşüncenin ürünüdür. Özellikle çok yoğun göç alan batılı gelişmiş ülkelerde, farklı kültürel kimliklere mensup toplulukların, kendi özgün kimliklerini korumalarını onaylayan model olarak çokkültürlü toplum yaşamı hayata geçirilmiştir (Vatandaş, 2002:22). Ancak toplumların ötekine karşı daha önceki önyargılı düşünceleri, çokkültürlü yaşam için sorunlar oluşturmaktadır. Dışlanma ve kabullenilmeme gibi sorunların ortaya çıkması her iki taraf içinde çokkültürlü yaşamın uygulamasında sorunların ana kaynağını oluşturmaktadır. Ötekileşmenin beraberinde gelen iki taraflı mesafeli ve önyargılı yaklaşım ortak kültürel gelişmeleri engelleyecektir.

Ben ve ötekinin ortak yaşam içerisinde bulunmaları, farklı yaşam deneyimlerinin ortak amaç için birlikte kullanılması, toplum yaşamına zenginlik katacaktır. Farklı toplumların kültürleri ile yerel kültür arasında etkileşim, toplumsal gerilimlerin ortadan kalkmasına ve karşılaştırma yoluyla her iki tarafında kendilik bilincine ulaşmasını sağlayacaktır. Ben ve ötekinin varlığı, kendini ötekinde fark etme şansını verecektir. Gelecekte daha mutlu ve sağlıklı bir toplum için her iki taraf arasında tesis edilecek ilişkinin sağlam temellere oturtulması bir koşuldur (Efil, 2016:64). Çokkültürlülük politikası, farklılıkların birbirlerine katacakları faydalar için onlara uyumlu yaşam fırsatı sunmaktadır. Ben ve öteki kavramların söz konusu olduğu her yerde gerek iletişim gerekse ortak kültürel olguların oluşturulması açısından çokkültürlü uygulamalara her zaman ihtiyaç vardır.

## 5. SONUÇ

Toplumları oluşturan bireyler, toplumun kendine özgün idealleri, değerleri ve düşünceleri doğrultusunda kendilerine bir kimlik oluşturmaktadır. Bireyin toplumsallaşma sürecinde kendisine öğrenilmesi için sunulan kültürel olgular, bireyin dünyaya görüşünü belirlemektedir. Böyle bir şekillenme yaşayan birey, kendisi gibi olmayı dışlar veya aldığı uyumcul eğitim bağlamında kabullenir. Kendi benliği dışında kalanı ötekileştirir ve öteki olana olumsuz anlamlar yüklerse, birey, öteki ile iletişim yolunu kapatır ve dünyada yaşanan olayları kendi düşünsel bağlamında değerlendirir. Böyle bir değerlendirme şekli, toplumsal yaşam açısından tehlike ve tehdit oluşturacaktır. Ancak ötekine uzlaşmacı bir tutumla yaklaşmak, her iki tarafı da olumlu yönde etkileyecektir.

Çeşitli nedenlere dayalı olarak farklı bir coğrafyada sürekli yaşamak zorunluluğu olan göçmenler, zamanla hem kendi toplumunda hemde yeni geldiği toplumda öteki olarak tanımlanmaktadır. Bunun temel nedeni, topluma uyum konusunda gerekli politikaların oluşturulamamasıdır. Ötekileştirilen bu tür topluluklar, kendi içine dönerek, kapalı bir toplum yaşamı sürdürmeyi tercih ederler. Çokkültürlülük, bu tür her bir topluluklara, bir araya gelmelerini ve birbirleri arasında iletişim kurmalarını sağlamak için, çözüm yolları sunmaktadır. Çokkültürlülük düşüncesi, ötekine karşı oluşturulan önyargıları yıkmakta ve ötekini tehdit gibi görülmeğe çıkarmaktadır. Bu anlamda, çokkültürlülük farklılıkların eşit haklar temelinde, birbirleri ile etkileşim ve iletişim içerisinde bulunabilecekleri bir siyasi oluşumdur.

Öteki düşüncesinin olduğu yerde olumlu bir durumdan bahsetmek imkansızdır. Böyle bir durumda her iki tarafta birbirinin üzerinde hakimiyet kurmaya çalışacak ve aralarında çekişme çıkacaktır. Buda her ikisini de sonu anlamına gelmektedir. Karşılıklı çıkmaza giren ilişkilerde hem “ben” hem de “öteki” zarar görecektir ve

aralarında iletişim ortadan kalkacaktır. Çokkültürlü toplum yapısının temel amacı farklılıklar arasında iletişimi sağlamaktır. İletişim kanalının açık olmasından her iki tarafta olumlu olarak faydalanacaktır.

Öteki olarak görülen her farklılığa, farklı oluşundan ötürü saygı göstermek, toplum yaşamını renklendirecek ve zenginleştirecektir. Farklılıkları buldukları yerelde, insan hakları çerçevesinde hak ve özgürlüklerini kısıtlamadan kendi özgünlüklerini yaşama, çokkültürlü bir toplum yapısının gereğidir. Tüm farklılıkların uyumlu ve hoşgörü içerisinde yaşamaları, farklılıkları benimseyen ve onlarla iletişim kanalını sürekli açık tutan bir toplumsal anlayışla mümkündür. Farklılıkları birlikte barış içerisinde yaşayabileceği böyle bir yaşam biçimi çokkültürlü ülke yönetimi sağlayacaktır.

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## Kültürlerarası Buluşma Noktası: Toplum Çevirmenliği

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**Özet:** Hızlı teknolojik gelişmelerin beraberinde getirdiği küreselleşme, dünyada uluslararası insan hareketliliklerini arttırmıştır. Uzun süreli kalmaya yönelik hareketlilikler, farklı sosyo- kültürel yapıya ve amaçları olan birey ve toplumları, aynı coğrafyalarda bir araya getirmektedir. Toplumların, kendi topraklarını terk ederek geldikleri yerde, kültürel açıdan kabul görme arzuları ve kendilerinin de kabullenmek zorunda oldukları farklı kültürel değerler her zaman söz konusudur. Bu açıdan, daha önce farklılıklar arasında oluşmuş önyargıların ortadan kaldırılması, her kültürün kendi özgünlükleri çerçevesinde varlığını sürdürmesi ve ortak değerler çerçevesinde uyum içerisinde yaşaması kültürün buluşması ile gündeme gelecektir. Kültürlerarasılık düşüncesi, bu sorunların çözümünü amaç edinmiş farklı kültürler arasında etkileşimi savunan yaklaşımdır.

Kültürlerarasılık, kültürlerin kendilerini ayırtırmadan, birbirlerine saygı ve hoşgörü çerçevesinde ortak yaşam düşüncesidir. Bu bağlamda kültürlerarasılık, bir siyasi eğilim olarak farklı kültürler arasında iletişimin gerçekleşmesini desteklemektedir. Birlikte yaşam sürdüren farklı kültürler arasında etkileşim, toplumlararası bilgi alış veriş ve kültürlerarasılığın oluşması için, ortak iletişim dili tartışılmayacak kadar önemlidir. Kültürlerarasında iletişimin gerçekleşmesi çeviri dili ile olanaklıdır. Bu anlamda, özellikle sözlü çevirinin önemli bir türü olan toplum çevirmenliği üstlendiği görev nedeniyle önemli bir rol oynamaktadır.

Toplum çevirmenliği, bugünün dünyasında yaşanan çok hızlı gelişmelere paralel olarak, çalışma alanı gittikçe genişleyen bir sözlü çeviri türüdür. Bu açıdan bakıldığında özellikle uluslararası boyutta insan hareketliliklerinin beraberinde getirdiği sosyo- kültürel sorunların aşılmasında, dilsel iletişim aracıdır. Toplum çevirmenliği, farklı kültürler arasında dilsel iletişimi sağlarken, kültürlerarası etkileşimin gerçekleşmesine katkı sunmaktadır.

Bu çalışmada, farklı kültürlerin karşılaşması ve birlikte yaşamak zorunda olmaları nedeniyle, kültürlerarasında bir köprü işlevi olan toplum çevirmenliğinin önemine vurgu yapılacaktır. Çalışma, ilgili alanlarda üretilmiş bilimsel eserlerin (literatür) taraması şeklinde nitel bir araştırma yöntemi kullanılarak, betimleme şeklinde raporlandırılacaktır.

**Anahtar Sözcükler:** Kültürlerarasılık, Toplum Çevirmenliği, Küreselleşme

## Intercultural Meeting Point: Community Interpreting

**Abstract:** Globalization brought about by rapid technological developments has increased international human mobility around the world. Mobilities for long-term stay bring together individuals and societies with different socio-cultural structures and goals in the same geographies. Where societies leave their own lands and come to, there is always a desire for cultural acceptance and different cultural values that they have to accept. In this respect, the elimination of prejudices that have previously formed between differences, the survival of each culture within the framework of its own uniqueness and living in harmony within the framework of common values will come to the agenda with the meeting of cultures. The idea of interculturalism is an approach that advocates interaction between different cultures aimed at solving these problems.

Interculturalism is the idea of living together within the framework of tolerance and respect for each other, without separating cultures themselves. In this context, interculturalism, as a political tendency, supports communication between different cultures. A common communication language is indisputably important for interaction between different cultures living together, inter-societal information exchange and the formation of interculturality. Intercultural communication is possible through translation language. In this sense, community interpreting, which is an important type of interpreting, plays an important role due to the task it undertakes.

Community interpreting is a type of interpreting whose field of work is expanding in parallel with the rapid developments in today's world. From this perspective, it is a means of linguistic communication in overcoming the socio-cultural problems brought about by human mobility, especially on an international scale. Community interpreting provides linguistic communication between different cultures and contributes to intercultural interaction.

In this study, the importance of community translation, which functions as a bridge between cultures, will be emphasized, as different cultures meet and have to live together. The study will be reported in descriptive form, using a qualitative research method in the form of scanning scientific works (literature) produced in relevant fields.

**Key words:** Interculturality, Community Interpreting, Globalization

## 1. GİRİŞ

Bu yüzyılın beraberinde getirdiği iletişim ve ulaşım alanında hızlı yaşam biçimi, uluslararası arenada insan hareketliliğini arttırmış ve buna paralel olarak farklı kültürlerle sahip toplumların kolay buluşmasını sağlamıştır. Bu birliktelik farklı kültürlerin iletişim ve etkileşimini sağlamıştır. Her bir kültür kendini anlatmaya ve diğerlerini anlamaya yönelik eğilimler göstermektedir. Farklı kültürler arasında oluşan bu iletişim bağı, farklılıklar içerisinde ortak yaşam şeklini geliştirmiştir. Çoklu kültür yapısı içerisinde bu uyum süreci kavram olarak kültürlerarasılık olarak adlandırılmış karşılıklı hoşgörüyü dayanan bir yaşam biçimidir.

Farklı sosyo-kültürel yapıya sahip toplumların, kültürel olarak tanınma çabaları, kendilerini doğru ifade etmeleri ile olasıdır. Bu nedenle, kültürler arasında bir iletişim köprüsü oluşturacak ortak dil gerekmektedir. Farklılıkları buluşturan ve iletişim sağlayacak dil, çeviridir. Dünyada her alanda yaşanan hızlı gelişmeler, çeviri yakından etkilemiştir. Çeviri eyleminin diğer bilimsel disiplinlerle ilişkilerini arttırdığı gibi, bağımsız bir bilim dalı haline gelmesine de olanak sağlamıştır. Özellikle farklı kültürler arasında iletişim boyutunda sözlü çevirinin alt türü olan toplum çevirmenliği etkin şekilde rol oynamaktadır.

Farklı kültürlerin bulunduğu her yerde toplum çevirmenliği gereklidir. Kültürlerarası iletişimin sağlanması için sadece dilsel iletişim yeterli değildir. Bu anlamda, çoklu kültür bilgisine sahip ve toplum düzenini de tanıyan toplum çevirmenleri, farklı kültürlerle anlaşma zemini sağlamaktadır. Toplum çevirmenliği, bugün dünyada sadece uluslararası boyutta yaşanan insan kaynaklı olaylarda değil, afet boyutunda doğal olaylarda ve büyük kültür-spor organizasyonlarında da, uluslararası işbirliği anlaşmalar çerçevesinde de görev almaktadır. Toplum çevirmenliği, bu yüzyılın yapay zekaya dayalı kültürlerarası dilsel iletişiminin ötesinde, hoşgörü temelli kültürlerin bulunduğu bir iletişim hizmeti sunmaktadır.

## 2. KÜLTÜRLERARASILIĞIN TANIMI VE OLUŞUMU

Kültürlerarasılığın oluşumuna konu olan kültür kavramı, Latince "colere" den gelmektedir. Temel olarak bu sözcük, ekin, sipariş, bakım şeklinde anlamlandırılmaktadır. Bir dönem doğa kavramı ile birlikte kullanılmış olsa da kültür, insanoğlunun doğanın kendisine varlığını sürdürebilmesi için sunduğu olanaklarla yaşam deneyimleri oluşturması demektir (İlbuga 2013: 9). Oldukça çok tanımı olan kültür kavramının tanımı, sadece insanla inilti ve özgün deneyimlerin sonucu elde edilen deneyimlerdir. Bu anlamda kültür, doğal olaylar dışında insanoğlunun eli ve dili ile yaptığı tüm ürünleri kapsamaktadır. Dünyada çeşitli nedenlere dayalı insan hareketlilikleri, farklı coğrafyalarda yaşayan toplumları bir araya getirmiş ve onlara ait kültürlerin karşılaşmasına aracı olmuştur. Özellikle, teknolojik gelişmeler sonucu farklı kültürlerin karşılaşmaları daha kolay ve hızlı gerçekleşmeye başlamıştır.

Bugün dünyada yaşanan küreselleşme ile birlikte, uluslararası ilişkiler inanılmayacak dercede artmıştır. Bu bağlamda, toplumlararası iletişim ve etkileşim her alanda kendini göstermiştir. Böyle bir ortamda salt bir toplumun özgün kültürü çerçevesinde olayları ele almak ve değerlendirmek olası görünmemektedir. Kültür olgusuna belli sınırlar çizmek, farklı kültürlerin çok kolay biraraya geldiği bugünün dünyasında mümkün değildir. Kültürel değişim araçları (küreselleşme, göç ve medya), kültürlerarası iletişimi gerekli hale getirmiştir. Kültürlerarası iletişim, günlük yaşamın her alanında farklı kültürlerle mensup insanların birbirleri ile etkileşimdir (Kartarı, 2019:4).

İnsanoğlu var olduğundan beri sürekli olarak kendinden farklı olanı merak etmiş ve farklı olanı tanımak istemiştir. Bu nedenle, her dönem bazı kimseler farklı kültürlerin ve toplumların yaşadıkları bölgeleri gezerek, orada yaşayan insanlarla ilgili bilgi edinmişler ve bunları seyahatname adı altında kitaplaştırmışlardır. Sanayi devriminin oluşu ile birlikte ve özellikle II. Dünya Savaşı sonrası hızlı teknolojik gelişmeler, farklı toplumları hareketlendirmiş ve birlikte yaşamaya zorlamıştır. Farklı kültürlerin birlikteliği ve belli bir siyasi şemsiye altında farklılıkları bir araya toplayan çokkültürlülük düşüncesi (Doytcheva, 2013: 25) daha sonraları kültürlerarasılık düşüncesinin alt yapısını oluşturmuştur.

Kültür değişim gösteren bir olgudur. Bu açıdan, farklı kültürlerin bir araya gelmesi, kültürlerin farklı yaşam değerleri ile karşılaşmaları nedeniyle, belli bir değişim göstererek birbirinden farklı bir yapıya bürünmektedir. Çok çeşitli olan kültürler, o bölgeye hâkim ana üst kültürün bir alt kültürü biçimine dönüşürler (Kartarı, 2019:10). Farklı kültürlerin, birbirini tanımaları ve aralarında oluşacak etkileşimi destekleyen bir eğilimdir. Genelde siyasi olarak algılansa da bu süreç farklılıkların bir arada uyum ve barış içerisinde yaşamaları için bir koşul durumundadır. Kültürlerarasılık, farklı kültürlerin özgünlüklerini ön plana çıkarmakta ve bu çerçevede kültürlerarasında gelişecek iletişim sağlanmasını demektir.

Kültürlerarasılık, göç olgusu ile yakından inilti olarak ortaya çıkmış siyasi bir uyum aracıdır. Farklı kültürlere mensup toplumların, çeşitli nedenlere dayalı olarak gelişmiş ülkelere sürekli olarak kalmak için gitmeleri, toplumsal uyum konusunda yapılan çalışmalar, farklı uygulamaları da beraberinde getirmiştir. Farklı kültürlerin çokluğunda çeşitliliği yaşamak düşüncesiyle, kültürlerarasılık ilkesi çerçevesinde yeni bir dünya anlayışı çıkış noktası olmuştur (Schneider, 2012:13). Farklılıklar arasında kültürlerarasılık sanatsal bir köprü olmuştur. Böylece farklı kültürel yapıdaki önyargıların ortadan kaldırılması ve farklılıkların kaynaştırılması gerçekleştirilmesi planlanmıştır. Bu planlama içerisinde birbirini anlama yatmaktadır. Karşılıklı birbirini anlama ve kendini ifade etmek ortak bir dille olasıdır. Bu dil çeviri dilidir.

### 3. TOPLUM ÇEVİRMENLİĞİ TANIMI VE AMACI

Çeviri alanında bu yüzyılın son çeyreğinde yaşanan paradigma değişimleri, çeviri etkinliklerinin çeşitlenmesine neden olmuştur. Bilimsel nitelikte karşılaştırmalı dilbilimin bir alt kolu olarak faaliyet gösteren çeviri, farklı bilimsel disiplinlerle olan yakın işbirliği nedeniyle, kendine özgün bir bilimsel alan haline gelmiştir. Özgün bilimsel alan olarak çeviri için, alanla ilgili yapılan çalışmalarla ilgili yeni terminler üretmek zorunluluğu doğmuştur. Çeviri ile ilgili mevcut kuramların, çevirinin bugünkü durumunu yansıtmadığı için, çeviri alanında yapılacak çalışmaların, toplumsal yapıdan yana eğilim göstermiştir (Arı, 2014: 17). Çeviri araştırmaları kültür ve toplumsal odaklı daha geniş konulara yönelmiştir.

Çeviri etkinliği çeviribilim ana başlıklı bilimsel alan çalışmalarına başlamıştır. Diğer bilimsel alanlarla işbirliği içerisinde yapılacak çalışmalar, hem çeviribilim alanına hem de diğer alanlara büyük katkı sağlayacaktır (Gürçağlar, 2005:9). Çeviribilim alanında yapılan çalışmalar, etkinlik türüne göre yazılı ve sözlü çeviri olarak iki ana bölümden oluşmaktadır. İnsanlık tarihi kadar eski olan sözlü çeviri etkinliği, yapıldığı yer ve mekana göre büyük bir zenginliği içermektedir. İki veya daha farklı dünyanın birbirlerini anlamasını sağlayan sözlü çevirinin kuramsal boyutunu dilbilim ve çeviribilim sağlarken, çevirisi yapılan alanda uygulama boyutunu sağlamaktadır (Doğan, 2015:IX).Sözlü çeviri etkinliği çok farklı amaç ve uygulamaları söz konusudur. Bu anlamda sözlü çeviri alt türlerinden bir tanesi Toplum Çevirmenliğidir.

Toplum çevirmenliği, bugünün dünyasında yaşanan uluslararası kültürel değişim araçları ile (küreselleşme, göç ve medya). yakından ilişkilidir. Özellikle farklı sosyo- kültürel yapıya sahip toplumların bir araya geldikleri ortamlarda, ilk anlamda dilsel iletişim sonununu çözmek üzere toplum çevirmenliği gerekmektedir. Ancak toplum çevirmenliği uygulaması, farklılıklar arasında sadece iletişim düzeyinde bir anlaşma sağlamamaktadır, Toplum Çevirmenliği, farklı ülkelerde yaşayan kimselerin, o ülkede halka sunulan kamu hizmetlerinden faylanmasını sağlayan bir çevirmenlik türüdür. Hatta bir çok ülkede kamu hizmeti çevirmenliği adı altında adlandırılmaktadır (Doğan, 2015:62).

Çeviribilimin sosyo- kültürel odaklı çalışma alanlarının genişlemesi, toplum çevirmenliğinin önemli bir konuma gelmesini sağlamıştır. Uluslararası arenada insan hareketliliklerinin çoğalması, Wolf'a göre; sosyal bir eylem olarak toplum çevirmenliğinin kapsamı alanına girmektedir (Akt. Arı, 2014: 42). Gönüllülük esasına dayalı olarak yapılan toplum çevirmenliği, insan yaşamında ihtiyaç duyulan her alanda (Sağlık, Güvenlik, Afet, Çatışma Ortamı, Göç Hareketlilikleri, Yargı, Spor gibi) kullanılmaktadır (Doğan, 2015: 62-67). Toplum çevirmenliği, farklı dil ve kültüre mensup toplumlara buldukları yabancı ortamda iletişim hizmeti sunmamaktadır. Onların, hem kendilerini ifade etmelerini, hem de diğer farklılıkları tanımalarını sağlayacak tanıtımlar yapmaktadır. Ayrıca toplum çevirmenliği aracılığı ile, farklılıkların geldiği yerde ki yerel halkın yaşam biçimleri tanıtılırken, farklılıklarla birlikte nasıl uyum içerisinde yaşamaları gerektiği konusunda da bilgi verilmektedir. Aslında toplum çevirmenliği, farklılıkları hem sosyal hem de kültürel boyutta tanıdığı için, günlük yaşamda toplumsal düzenin sağlanmasında kamuya yardımcı olmaktadır.

### 4. KÜLTÜRLERARASILIK VE TOPLUM ÇEVİRMENLİĞİ İLİŞKİSİ

Kültür, toplumu bir arada tutan, zaman içerisinde oluşmuş değerler bütünüdür. Toplumsal bir miras olan, kültür ilgili toplumun ihtiyaçlarına göre değişim gösterilmektedir. Tüm insanlığın ortak yaşam alanı olan dünyada yaşanan tüm gelişmeler, toplumların kendi kültürünün ve yaşam tarzlarını yeniden değerlemeye almalarını gerektirmektedir (Doğan, 2002:67). Bunun nedeni, kültürlerin çağın gereği olarak iletişim içerisine girmek zorunda kalmalarıdır. Farklı kültürlerin anlaşılması ve kendini öz kültürünün başkaları tarafından anlaşılması için, iletişim yaşamsal bir önem taşımaktadır. Kültürlerin bir arada bulunması, beraberinde kültürel çeşitliliği de getirmektedir. Kültürlerarası iletişimin ve etkileşimin öncellendiği yaşam biçimi kültürlerarasılık, kültürel çeşitliliğin kendi aralarında bir bağ oluşmasını sağlamaktadır.

Kültürlerarasılık, hem kendi kültürünü hem de yabancı kültürü karşılıklı olarak anlamayı gerektirmektedir. Ancak böyle bir kültürlenme küçük yaşta mı yoksa yetişkin olarak mı olmalıdır? Bu bir tartışma konusudur. Gerçek odur ki, küreselleşen dünyada kültürlerarası iletişimin ve etkileşimin kaçınılmaz oluşudur. Bu anlamda kültürlerarasılık, bir kültürün başka bir kültüre üstünlüğü yerine, eşit zeminde kültürel çeşitliliğin uygulanması ve birlikte yaşanması anlayışının yerleştirilmesi demektir (Tosun, 2021: 1). Farklı kültürlerin bulunduğu mekanlarda, kültürlerin yok olmadan, kendi özgünlüğünü yaşması ve diğer kültürlerle bağ kurması için ortak iletişim dili kurulması gerekmektedir. Bu ortak dil, çeviri dilidir. Çeviri, sadece sözcükten sözcüğe çeviri değil, kültür ve toplum odaklı çeviri eylemidir. Bu tür çeviri eylemi, sadece farklı dilleri değil, aynı zamanda ilgili dillerin kültürleri ve toplum yapısını tanıyan çeviri türüdür. Bu da sözlü çeviri türlerinden “Toplum Çevirmenliğidir”.

Farklı kültürlerin çeşitli nedenlerle bir araya geldiği yerlerde mutlaka toplum çevirmenliğinin varlığı söz konusudur. Çeviri eylemi karmaşık bir olgu olduğu düşüncesinden hareketle (Gürçağlar, 2016:119).; sadece dilsel bir araç olarak değil, toplumsal ve kültürel iletişim bağlamı içerisinde ele alınması gerekmektedir. Bunun temel nedeni, dünyada yaşayan toplumlar, insanlık tarihinin hiç bir döneminde yaşamadığı bir kültür alışverişinde bulunmaktadır. Toplum çevirmenliği bu alışverişin gerek dilsel iletişim gerekse sosyo- kültürel yapılanmanın sağlanması açısından en önemli araçtır. Kültürlerarasılık, kültürlerarası saygı ve hoşgörüyü içermektedir. Böyle bir toplum yapısının gerçekleşmesi, farklılıkları yakından tanıyan ve bu alanda eğitim almış toplum çevirmenleri ile gerçekleşmektedir.

Toplum çevirmenliği, bugünün dünyasında oldukça gerekli ve ihtiyaç duyulan alanda donanım gerektiren bir çeviri türüdür. Farklı kültürlerin bulunduğu yerlerde, ortak bir yaşam oluşturulması, kültürlerarasılık düşüncesi altında uyum içerisinde olması, toplum düzenini sağlanması, toplum çevirmenliğinin sosyal uyum uzmanı olmasını gerektirmektedir. Bu anlamda kültürlerarasılık ile toplum çevirmenliği ayrılmaz bir bütünlük oluşturmaktadır.

## 5. SONUÇ

Çeşitli nedenlere dayalı dünyadaki insan hareketlilikleri, öteden beri farklı kültürlerin tarihsel süreç içerisinde karşılaşmalarını sağlamıştır. Özellikle her alanda yaşanan bu yüzyılda inanılmaz hızlı gelişmeler, farklı sosyo-kültürel yapıya mensup toplumların daha kolay ve çabuk biraraya gelmesine olanak sağlamıştır. Bu bağlamda kültürlerarası iletişim ve etkileşim, farklılıkların birbirlerini tanımalarına ve katı değer yargıları çerçevesinde oluşan kültürlerarası önyargıları ortadan kalkmasına yardımcı olmuştur. Ortak bir yaşam alanında, ortak kültürel olguların oluşturulmasının temelinde birbirini anlamak yatmaktadır. Karşılıklı birbirini anlamak da ortak dil ile olmalıdır. Yani çeviri farklı kültürler arasında kültürel iletişimi sağlayan olgudur.

Kültürlerarasılık , her alanda olan küreselleşmenin sonucunda geliştirilen siyasi bir düşüncedir. Çokkültürlülük, bir takım özel adiyetlerin kabul edilmesi anlamında kullanılan bir uyum politikası iken, kültürlerarasılık tüm farklılıkları kapsayan ve bir melez kültür oluşumuna olanak sağlayan düşünceye hakimdir. Kültürlerarasılık, farklı kültürlerin birlikte yaşamı konusunda anahtar bir düşünce olmuştur. Bu bağlamda, farklılıklar arasında iletişimin gerçekleşmesi ve farklılıkları tanıyan iletişim uzmanlarının kültürlerarası donanımlara sahip olması gerekliliği ortaya çıkmıştır. Çeviri, çalışma alanı çeşitliliği gittikçe aratan genel bir dilsel iletişim alanının adıdır. Farklılıklara yönelik çeviri çalışma alanı sözlü çevirinin bir türü olan toplum çevirmenliğidir. Toplum çevirmenliği farklı kültürlerin bulunduğu her yerde gerekli ve kültürlerarasılık ile ayrılmaz bir ikilidir.

İki farklı kültürün birbirine yaklaşması ve etkileşimi sonucunda ortaya çıkan kültürlerarasılık düşüncesi, melez bir kültürün ürünüdür. Kültürlerarasılığın sağlanması çevirinin özellikle de çevirinin toplumsal yönü ile inilti çalışmaları yürüten toplum çevirmenliğinin görevidir. Bu anlamda dünyada bu çağda her alanda yaşanan yoğun uluslararası ilişkiler, toplum çevirmenliğinin gerekliliğini göz önüne sermektedir. Toplum çevirmenliği, farklı kültürleri, varlıklarını sürdürme şansı buldukları yerde ortak değerler çerçevesinde buluşturma ve farklı kültürlerin uyum ve hoşgörü içerisinde yaşamalarını sağlamaktadır.

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## Yolsuzluğun Vergi Gelirleri Üzerindeki Etkisi<sup>1</sup>

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**Özet:** Yolsuzluğun vergi gelirleri ile ilişkili olduğunu literatürde yapılan birçok çalışmaya dayanarak söyleyebiliriz. Bu çalışmada yolsuzluğun vergi gelirleri üzerinde nasıl etki ettiğini görmek için GMM metodu ile 2000 ve 2020 yılları arasında bir analiz yapılmıştır. Yapılan bu analiz de OECD ülkelerine ait veriler kullanılmıştır. Vergi gelirleri ile yolsuzluk üzerinde beklenildiği gibi ters yönlü ve istatistiksel olarak anlamlı bir ilişki mevcuttur. Yolsuzluğun azaltılarak vergi gelirlerinin artması böylece ekonomiye katkı sağlanması beklenmektedir. Bu şekilde ekonomide önemli bir hacme sahip olan vergi gelirlerinden tam anlamıyla katkı sağlaması planlanmalıdır.

**Anahtar Kelimeler:** Yolsuzluk, Vergi Gelirleri, GMM

**Abstract:** We can say, based on many studies in the literature, that corruption is related to tax revenues. In this study, an analysis was made between 2000 and 2020 with the GMM method to see how corruption affects tax revenues. In this analysis, data from OECD countries were used. As expected, there is a negative and statistically significant relationship between tax revenues and corruption. It is expected that corruption will be reduced and tax revenues will increase, thus contributing to the economy. In this way, it should be planned to make a full contribution from tax revenues, which have a significant volume in the economy.

**Key Words:** Corruption, Tax Revenues, GMM

### 1. GİRİŞ

Küreselleşen dünya uluslararası bir sorun olarak kabul gören yolsuzluk kavramı son yıllarda daha da önem kazanmış ve pek çok çalışmaya konu edinilmiştir. 21. yüz yılda Uluslararası örgütlerin mücadele kapsamına aldığı yolsuzluğun tarihi bilinen sosyal yaşam kadar eskidir. M.Ö 4000 yılında Sümer tabletlerinde karşılaştığımız çıkmaktadır. Yolsuzluğun bir türü olan rüşveti konu edilen tabletler bulunmuştur. Günümüzden iki bin yıl önce yolsuzluğu konu edinen kitaplar yazılmıştır. Hint Kralının veziri Kathilya'nın yazdığı Arhastra adı verilen eser yolsuzluğu konu edinmiştir (Erkal, Akıncı ve Yılmaz 2014).

Yolsuzluk kavramı az gelişmiş ve gelişmekte olan ülkeler ait bir kavram olarak görülmüş ve az gelişmiş ülkelerin yararına pozitif bir etkisi olduğuna dahil yağlama hipotezi olarak bilinen yaklaşım gelişmiştir. Fakat son yıllarda yapılan çalışmalar yolsuzluk kavramının ekonomik ve sosyal yaşamı olumsuz etkilediği kayıt dışı ekonomiye yol açtığı, gelir adaletsizliği yarattığı ve kaynak israfına yol açtığı literatürdeki çalışmalarda göz önüne koyulmuştur. Özellikle son çeyrekte yüz yılda yapılan çalışmalarda küreselleşen dünyada farklı düzeyde etkileri olsa da gelişmiş ve gelişmekte olan ekonomilerin ortak sorunu olduğu kabul görmüş olup 1995 Financial Times tarafın yolsuzluk yılı olarak tanınmıştır.

Pek çok tanımlamaya sahip olan yolsuzluk kavramı genel kabul gören en dar kapsamlı tanımı Word Bank tarafından yapılan Yolsuzluk, kamu görevlilerinin kendilerine verilmiş olan yetkileri özel çıkarlarını arttırmak amacıyla görev alanları dışında ve hukuka aykırı olarak kullanmaları olarak tanımlanmıştır (Word Bank 1997:8). Sosyal ve iktisadi bir sorun olan yolsuzluk gelir adaletsiz yaratması ve devletin gelir gider dengesinde oluşturduğu sorunlar ile başlı başına bir ahlaki tehlike olduğu gözlenmektedir. Buna rağmen yolsuzluk tam olarak genel kabul gören geniş bir tanıma sahip değildir.

Göktan yolsuzluk olgusu temelde iki ye ayırarak bir tanımlama gitmiştir. Bunları küçük ve büyük yolsuzluk olarak tanımlamıştır. Küçük yolsuzluk ölçek ve miktar bakımından daha küçük olup daha sıklıkla karşılaşılmaktadır. Ücretlerini yetersiz olan ve yeterli görmeyen çalışanlar tarafından hayatlarını daha iyi idame etmek için yapıldığı çalışmada vurgulanmıştır. Büyük yolsuzluk ise üst kademelerde yer alan kamu görevlilerin ihalelerde ve önemli iktisadi kararlarda belirli cenahı veya kişi adına çıkar gözetmeleri bunun karşısında çeşitli hediyeler almaları olarak tanımlamıştır. (Göktan 2009:21)

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Yolsuzluk sadece kamu kesimi tarafından değil iki taraf üzerinden de ele alınarak tanımlama gidilmelidir. Buradan hareketle kamu dışında kalan bireylerin mevcut yasalar dan ve politikalarından yararlanarak kendi çıkarları doğrultusunda haksız yarar sağlamaları. Kamu kesimin de çalışan bireylerin ise dost, akraba ve çıkarlarını gözeterek ellerinde bulunan yetkileri kendi çıkarlarına kullanmaları olarak tanımlamıştır. (Aktan 1994:26)

Bir diğer tanımlama da ise yolsuzluğun gelecekte elde edilecek kazanımlar için yapı bileceğine değinilmiştir. En dar kapsamı ile yolsuzluk kamu gücünü özel çıkarlar için kullanılması olarak tanımlanmaktadır. Burada vurgulanan özel çıkarlar kavramı içerisinde para ve değerli mal elde edilmesinin yanında güç ve statü gibi çıkarlarda barındıra bilmektedir. Hatta bu çıkarlar üzerine gelecekte elde etmek amacı da barındıra bilir. Daha geniş kapsamda gelecekteki kazanç statü elde etmek beklentisi içerisinde oluna bilir.

Yolsuzluk tanımlamalarda farklı kapsamlarda ele alınsa da tüm tanımlar bulunduğu ortak payda yolsuzluğun elinde bulunan yetkileri haksız yarar sağlamak amacı ile kötüye kullanılması olmuştur.

## 2.YOLSUZLUK VE VERGİ GELİRLERİ

Devletlerin en temel gelir kaynakların başında vergi gelirleri gelmektedir. Devleti bu gelirinden mahrum eden olguların başında yolsuzluklar çekmektedir. Birçok alanda rastladığımız yolsuzluk temelde kamu kesiminin kendi içerisinde ya da kamu kesimi ile özel sektör arasında ki ilişkide ortaya çıkmaktadır. Kamu kesiminin yolsuzlukla karşılaştığı noktalar ise üretim süreci kamusal mal ve hizmet alımları, kamu ihaleleri ihracat ve teşvik düzenlemeleri ile vergi denetimleri başta gösterilmektedir. Yolsuzluğun en çok etkisi altına aldığı alan ise vergi tarh, tahakkuk ve tahsil süreci gelmektedir. Bu süreçteki yolsuzluklar kamu gelirinde kayıplara yol açmaktadır ( Bağdıgen , Dökmen 2006:25).

Kamunu vergiyi alma yöntemleri dolaylı ve dolaysız olarak temelde iki türde incelenile bilmektedir. Dolaylı vergiler yansıtılmaları kolay olarak nitelendirile bilir. Mal ve hizmetlerin satın alınması sırasında peşin olarak alınan dolaylı vergiler vergi kaybına yani yolsuzluğa daha az zemin oluşturmaktadır. Vergi tarh bilinen tahakkuku zamanı ve tahsilatı alım ile gerçekleşmesinden dolayı vergi idaresi ile birebir karşı karşıya gelinmemesi yolsuzluk olanağını daraltmaktadır. Fakat mal ve hizmeti arz eden ile mal ve hizmeti talep eden arasında daha fazla kar elde etmek daha ucuza ulaşmak amacı güderek kayıt dışı tutulmak sureti ile yolsuzluk karşılaşılmaktadır. Bu tip yolsuzluklar sık fakat daha az maliyetle sonuçlanmaktadır. Dolaysız vergi tarh tahakkuku ve tahsilat sürecinin vergi idaresi ile doğrudan karşı karşıya gelerek ve beyana dayanması çıkar amaçlı işlemlere kayırmalara yol açmaktadır. Bu tip yolsuzluklar da az görülse de maliyet bakımın dan çok daha fazladır. Nasıl olursa olsun vergi kayıpları sosyal ve ekonomik yapıyı derinden etkilemektedir.

Kamunun bu gelirindeki kayıplar devletin gelir gider dengesini bozmakta devletin ekonomik faaliyetleri sekteye uğratmaktadır. Tanzi ve Davoodi yaptığı çalışmada bu durumu açıklamaktadır. Yolsuzluk nedeni ile yatırımlardan istenilen verimin alınmadığını ve durumun getirisi olarak büyüme oranının düştüğün sonucuna varmıştır. Yolsuzluğun söz konusu olduğu kamu harcamalarında ki artışların büyüme hızını düşürdüğünü görülmüştür. Bu durumun hakim olması ile mevcut olan alt yapının da kalitesinin düşmesi büyümeye negatif etki göstermektedir. Yolsuzluk bunlarla birlikte özel sektör ve kamu maliyetlerinde artışa sebep olmaktadır. Ekonomik döngüyü bozan yolsuzluk ekonomik büyümenin kaynağı yatırımlar için gerekli olan kaynağın temelini oluşturan vergi gelirlerinde kayba yol açmakta ve büyüme hızında azalmaya sebep olmaktadır (Tanzi ve Davood 1997:7-9). Görüldüğü üzere yolsuzluk kamunun ve özel sektörün verimliliğini derinden etkilemektedir. Özellikle kamu üzerinde iktisadi kararların etkisini azaltmaktadır.

## 3.LİTERATÜR TARAMASI

Yolsuzluğun sosyal yaşam ve ekonomi üzerine etkilerini konu alan literatürde birçok çalışma yapılmıştır. Bu çalışmalar da görülmektedir ki devlet başta olmak üzere özel sektörde bile varlığını hissettirmektedir. Literatür yapılan çalışmalarda yolsuzluğun özellikle devletin gelir gider dengesini bozduğu, en büyük gelir kaynağı olan vergi gelirlerin de önemli kayıplara yol açtığı tespit edilmiştir.

DÖKMEN yaptığı çalışmada çeşitli vergi türlerinin yolsuzluk ile olan ilişkisini incelemiş vergi türlerinden hangilerinin yolsuzluğa daha fazla zemin oluşturduğunu tespit etmeye çalışmıştır.25 OECD ülkesi üzerine yaptığı analizde 1984-2007 yılları arası verileri ele alarak sistem GMM yöntemi ile analiz edilmiştir. Temel olarak yolsuzluğun vergi gelirleri üzerinde kayba yol açtığına sonucuna ulaşmıştır. Dolaysız vergilerin mükellefin beyanı esas olduğundan ve vergi tahsil darları ile yüz yüze getirmesi ile yolsuzluğa dolaylı vergilere göre daha

fazla zemin hazırladı tespitinde bulunmaktadır. Analiz sonucunda yolsuzluğun vergi gelirleri üzerinde negatif yönde istatistiksel bir ilişki tespit edilmiştir. (Dökmen 2012:41-51)

Yapılan çalışmada vergi politikaları arasında önemli bir yere sahip olan kurumlar vergisi ve yolsuzluk arasında da ki ilişki ele alınmıştır. Yolsuzluğun kurumlar vergisi üzerine olan etkisinin incelendiği çalışmada da GMM analiz yöntemi ile 16 OECD ülkesinin 1996-2010 verileri kullanılarak analiz edilmiştir. Yolsuzluğun oranında ki bir azalmanın kurumlar vergisi gelirlerinde artışa yol açtığı sonucuna ulaşılmıştır. (Örücü, Aysu ve Bakırtaş 2012)

BAKIRTAŞ yaptığı çalışmada öncelikle yolsuzluk kavramını açıklayıp nedenlerini ortaya koymuş ve Türkiye üzerine 1996-2010 verilerini kullanarak regresyon analiz yöntemi ile yolsuzluğun vergi gelirleri üzerine olan etkisini analiz etmiştir. Yapılan basit regresyon analizinde elde edilen bulgulara göre yolsuzluğun vergi gelirleri arasın da pozitif güçlü bir ilişki tespit edilmiştir. Bu ilişki yolsuzluğun vergi gelirleri üzerinde ciddi bir azalmaya yol açtığı sonucudur. (Bakırtaş 2012)

Turgut ve Uçan yolsuzluğun vergi oranlarına olan ilişkisini incelediği bu çalışmada alışılmışın dışında yardımcı değişken olan kişi olan geliri bağımsız değişken olarak modele dahil etmiştir. Analizi 36 OECD ülkesinin 1998-2017 verilerini kullanarak panel veri analizi uygulamıştır. Ancak değişkenlerin yatay kesit bağıllığı içerdiği anlaşılmış, ikinci nesil birim kök testi uygulanmıştır. Değişkenlerin hepsinin birinci varlığında durağan olduğu sonucu görülmüştür. Uzun dönem ilişkisini incelemek amacı ile eş bütünleşme analizi yapılmış bu analizin sonucun da değişkenlerin uzun dönem de ilişkili olduğu sonucuna varılmıştır. (Turgut, Uçan 2019)

27 AB ülkesi üzerine yapılan bu çalışmada 2011 verileri kullanarak yolsuzluğun kamu gelir gider dengesinin önemli bir ayağı olan kamu borcu ile arasındaki ilişki yatay kesit analizi ile incelenmiştir. Yapılan ampirik çalışmalar sonucunda yolsuzluk da oluşan her birim azalmanın kamu borcu üzerinde pozitif etki yarattığı sonucuna ulaşılmıştır. (Şahbaz, Koç ve Ata 2013)

Kırılgan ekonomiler üzerine yapılan çalışmada kırılıgı sekiz ülke (Arjantin, Brezilya, Endonezya, Güney Afrika, Şili ve Türkiye) ele alınmıştır. Bu ülkelerin vergi yükü, enflasyon oranı, ekonomik büyüme oranı, insani gelişmişlik düzeyi ve ekonomik özgürlük olarak belirlenen değişkenlerin yolsuzluk üzerine olan etkisi panel eş bütünleşme analizi kullanılarak incelenmiştir. Yapılan çalışmanın sonucun da ulaşılan ampirik sonuçlar kapsamında vergi yükü ve enflasyonun oranının yolsuzluk üzerinde istatistiksel olarak anlamlı pozitif bir ilişkiye rastlanırken, ekonomik büyüme oranı, insani gelişmişlik düzeyi ve ekonomik özgürlük olarak istatistiksel olarak anlamlı negatif ilişki tespit edilmiştir. (Topal ve Ünver 2016)

Yolsuzluğun iktisadi büyüme ile ilişkisinin araştırıldığı çalışmada iki temel yaklaşım ele alınmıştır. Birinci yaklaşım iktisadi büyümeyi olumlu yönde etkilediğini savunan etkin yağlama hipotezi olarak bilinen yaklaşımken, ikinci yaklaşım daha fazla kabul gören yolsuzluğun iktisadi büyümeyi olumsuz yönde etkilediği görüşüdür. Bu görüşlerden yola çıkarak oluşturulan modelde OECD ve AB ülkelerinin 1995-2012 yıllarında ki verileri kullanılmıştır. Yolsuzluk algı endeksinin iktisadi büyüme üzerine olan etkisinin PARDL kullanılarak incelenmiştir. Sınır testi sonucunda değişkenler arasında eş bütünleşme ilişkisi tespit edilmiştir. Yapılan bu analiz sonucunda uzun dönemde yolsuzluk endeksi kat sayısının pozitif ve istatistiksel olarak anlamlı olduğu tespit edilmiştir. Yolsuzluk endeksindeki artış sonucu buna dayalı iktisadi büyüme görülmüştür. (Erkal, Akıncı ve Yılmaz 2014)

#### 4. DATA VE METODOLOJİ

Çalışmada yolsuzluğun vergi gelirlerine olan etkisi, Genelleştirilmiş Momentler Metodunun (Generalized Methods of Moments-GMM) sistem yöntemi ile analiz edilmiştir. 2000-2020 yılları arasında OECD ülkeleri üzerinde yapılan çalışmada bazı ülkelerde veri eksikliği olduğu için 26 ülke çalışmaya dahil edilmiştir. Çalışmada kullanılan GMM yöntemi, dinamik modeldir ve bağımlı değişkenin gecikmeli değerlerinin bağımsız değişken gibi modelde yer almasıyla oluşur.

$$y_{it} = \gamma y_{it-1} + \beta_1 x_{it} + \eta_i + \lambda_t + \varepsilon_{it}, -1 \leq i = 1, \dots, N \text{ ve } t = 1, \dots, T$$

Bu denklemde  $x$ ,  $Ax_1$  boyutundaki bağımsız değişken parametresini;  $\beta_1$ ,  $Ax_1$  boyutundaki katsayılar matrisini;  $i, t-1$   $y$ ,  $it$   $y$  'nin gecikmeli ;  $\eta_i$ , gözlenemeyen bireysel etkileri;  $\lambda_t$ , gözlenemeyen zamana ait etkileri;  $\varepsilon_{it}$  ise hem yatay kesitler hem de zamana değişkenlerin etkisini (hata terimini) göstermektedir. Modelde  $\eta_i$  ile  $\lambda_t$  'nin sabit olduğu kabul edilmektedir.

Çalışmada yolsuzlukların, vergi gelirleri üzerindeki etkisini araştırırken kullanılan panel analizi dinamik paneldir. Bu analizi yapmadan önce durağanlık testi yapılarak GMM testinde yer alan durağanlık varsayımı sağlanmıştır.

Modelde yer alan değişkenler	
Topvergi	toplam vergi gelirleri
Dogvergi	doğrudan alınan vergi gelirleri,
Dolylivergi	dolaylı alınan vergi gelirleri,
FGDüzei	Fiyatlar genel düzeyi,
Dış_ açık	dışa açıklık değerini,
Yol_endx	yolsuzluk endeks değerini vermektedir. Veriler Dünya Bankası data bankasından(World Bank) elde edilmiştir.

Modelde yer alan değişkenlerin birim kök test sonuçları aşağıda gösterilmiştir.

Tablo 1. Birim Kök Testi Sonuçları

Değişkenler	PP(Fisher)
topvergi	<b>331,31(0,000)</b>
gdp	<b>267,45(0,000)</b>
Yolszlk_endx	<b>9,92(0,000)</b>
Dış_ açık	<b>201,38(0,000)</b>
FGDüzei	<b>69,57(0,020)</b>
Dogvergi	<b>338,12(0,000)</b>
Dolylivergi	<b>319,23(0,000)</b>

Tabloda parantez içindeki değerler olasılık değerlerini vermektedir. Yapılan çalışma da FGDüzei hariç diğer tüm değişkenler %1 için durağan olarak belirlenmiştir. Elde edilen bu sonuca göre GMM testi uygulanması için gerekli varsayımlar sağlanmaktadır. GMM analizinden elde edilen sonuçlar aşağıdaki tabloda gösterilmiştir.

Tablo 2.GMM test sonuçları

Değişken	Toplam vergi	Dolaylı Vergi	Doğrudan Vergi
Gecikmeli Değişken	<b>0,6700</b>	<b>0,6720</b>	<b>0,6600</b>
gdp	<b>0,2761</b>	<b>0,1879</b>	<b>0,2560</b>
Yolszlk_endx	<b>0,0223</b>	<b>0,0201</b>	<b>0,0225</b>
Dış_ açık	<b>0,0149</b>	<b>0,0167</b>	<b>-0,0210</b>
FGDüzei	<b>0,0011</b>	<b>0,0031</b>	<b>-0,0123</b>
Gözlem Sayısı	<b>456</b>	<b>456</b>	<b>456</b>
Wald Prob	<b>0,0000</b>	<b>0,0000</b>	<b>0,0000</b>
AR (1)	<b>-2,69(0,0030)</b>	<b>-2,23(0,0340)</b>	<b>-3,72(0,0250)</b>
AR(2)	<b>0,82(0,542)</b>	<b>0,83(0,547)</b>	<b>1,68(0,152)</b>

Tablo da görüldüğü üzere önce GMM testinin tutarlılığı incelenmiştir. Elde edilen sonuçlar beklentileri desteklemektedir. Beklentilerde olduğu gibi farklı bileşenden oluşan vergi gruplarının benzer tepkiler verdiği görülmektedir. Dışa açıklık ve hasıla değişkenleri hem istatistiksel olarak anlamlı hem de beklentileri destekleyen katsayılarla sahiptir.

Yolsuzluk ve vergi gelirleri ilişkisine bakıldığında yolsuzluk arttığında vergi gelirleri azalmaktadır. Bu durum yolsuzluğun ekonomik etkileşimi olumsuz etkilediğini göstermektedir. Özellikler toplam vergi geliri, yolsuzluktan büyük ölçüde etkilenmektedir. Vergi ve yolsuzluk arasında ters yönlü ve istatistiksel olarak anlamlı bir ilişki vardır.

## 5.SONUÇ

Teorik varsayıma dayanarak, bir ülkedeki yolsuzluk düzeyinin nasıl azaltılabileceğinin çeşitli yolları vardır. Yolsuzluğun vergi idaresi ve vergi denetimleri üzerinde olumsuz etkisi olduğu bir gerçektir. Aynı zamanda Kurumların güvenilirliğini de olumsuz yönde etkilemektedir. Çözüm yolları hem birey hem de kuruluşlar üzerinde planlanmalıdır. Vergi mükellefleri vergiye girmeye motive edilebilir. Kayıt dışı ekonomi ve ülkede yolsuzluk düzeyi yüksek olduğunda vergi ödememek ciddi sonuçlar doğurmaktadır. Bu sonuçların hükümetler üzerinde etkileri olabilir. Kamu sektöründe yolsuzluğun azaltılması bir zorunluluktur. Aynı zamanda kamu da yaşanan yolsuzluğu çözmek vergi gelirlerinin artırılmasına yönelik önemli adımlardan biridir. Vergi idaresindeki mali yolsuzluk büyük olasılıkla en yaygın olanıdır.

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## Muhasebe Alanında Yazılan Tezlerin İncelenmesi

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**Özet:** Tez yazımı oldukça uzun bir zaman ve detaylı çalışma gerektirmektedir. Konunun belirlenmesi aşamasında araştırmacılar hem daha önce çalışılmamış bir konu bulmayı hem de kaynak sıkıntısı çekmeden bu süreci bitirmeyi istemektedir. Araştırmacılar literatürü detaylı bir şekilde tarayarak amaçlarına ulaşabilir. Bu nedenle çalışmada muhasebe alanında yazılan tezler incelenerek araştırmacılara kaynak oluşturulmuştur. Çalışma Yüksek Öğretim Kurulu Başkanlığının (YÖK) tez merkezinde kayıtlı olan tezler içerisinde dizin terimi olarak "muhasebe" seçilerek gerçekleştirilmiştir. 2021,2022 ve 2023 yılları baz alınmıştır. Böylece en güncel tezler üzerinde yoğunlaşmıştır. Cinsiyet, yüksek lisans-doktora tezi ayrımı, yıl ve muhasebe alanındaki konu dağılımına bakılmıştır. Aynı zamanda bu değişkenler çalışmanın kısıtını oluşturmaktadır. Çalışma sonucunda 154 kadın, 159 erkek çalışmacının olduğu, 2021 yılında 160, 2022 yılında 98 ve 2023 yılında 45 tezin yazıldığı ve bu tezlerin 235'inin yüksek lisans, 78'inin doktora tezi olduğu tespit edilmiştir. Konu dağılımına bakıldığında en fazla "Muhasebe Standartları" konusunda tezin bulunduğu görülmektedir.

**Anahtar Kelimeler:** Muhasebe, Muhasebe Tezleri, YÖK Tez Merkezi.

**Abstract:** Writing a thesis requires a long time and detailed work. At the stage of determining the topic, researchers want to both find a topic that has not been studied before and complete this process without experiencing resource problems. Researchers can achieve their goals by scanning the literature in detail. For this reason, in the study, theses written in the field of accounting were examined and a resource was created for researchers. The study was carried out by selecting "accounting" as the index term among the theses registered in the thesis center of the Council of Higher Education. Based on the years 2021, 2022 and 2023. Thus, the focus is on the most current theses. Gender, master's and doctoral thesis distinction, year and subject distribution in accounting were examined. At the same time, these variables constitute the limitation of the study. As a result of the study, it was determined that there were 154 female and 159 male authors, 160 theses were written in 2021, 98 in 2022 and 45 theses in 2023, and 235 of these theses were master's degree and 78 were doctoral theses. When we look at the distribution of topics, there are mostly theses on the subject of "accounting standards".

**Key Words:** Accounting, Accounting Theses, Council of Higher Education Thesis Center.

### 1. GİRİŞ

Türkiye’de 2023 yılı aralık ayında 15 yaş üzeri kişilerdeki işsizlik sayısı 3 milyon 98 bin kişi olarak açıklandı. Bu sayı yaklaşık %8,8’ e denk gelmektedir (TÜİK, 2024). İşsizlik sorunu yaşayan gençlerin daha kolay iş bulabilmesi için de kendilerini geliştirmeleri ve uzmanlaşmaları önerilmektedir. Üniversiteler; yüksek düzeyde eğitim ve öğretim veren, bilimsel araştırmalar gerçekleştiren ve bu araştırmaları yayına dönüştüren, danışmanlık faaliyetlerini gerçekleştiren kurumlar olarak tanımlanmaktadır (Yüksek Öğretim Kanunu 3. Madde). Dolayısıyla uzmanlaşmanın gerçekleştiği temel kurumlardan birisi olan üniversitelerde alınan eğitim ve öğretim kişilerin gelişiminde önemli roller üstlenir.

Türkiye’de kurulan ilk üniversiteler; 1933 yılında İstanbul Üniversitesi, 1944 yılında İstanbul Teknik Üniversitesi ve 1946 yılında Ankara Üniversitesi olarak sıralanmaktadır. Bu üniversiteler Osmanlı döneminde kurulmuş olup daha sonra isim değişikliğine gidilmiştir. Cumhuriyet tarihinde kurulan ilk üniversiteler ise 1955 yılında Karadeniz Teknik Üniversitesi ve Ege Üniversitesi, 1957 yılında Atatürk Üniversitesi, 1959 yılında Orta Doğu Teknik Üniversitesi olarak sıralanır. 1960’lı yıllara kadar üniversite sayısı oldukça az iken günümüzde 200’den fazla üniversite bulunmaktadır (Kömürlü, 2019: 35). Lisans eğitiminin yanı sıra yüksek lisans ve doktora eğitimi de veren üniversiteler Türkiye’de ancak 1980’li yıllardan sonra yaygınlaşmıştır. 1980 yılında sadece 19 üniversite faaliyetine devam etmiştir (Hız, 2010: 60). Doktora düzeyinde eğitim veren Yüksek Ziraat Enstitüsü ise 1933 yılında Ankara’da kurulmuş ve 1948 yılında Ankara Üniversitesi’ne bağlanmıştır (Ankara Üniversitesi Ziraat Fakültesi). 1981 yılında yayımlanan Yüksek Öğretim Kanunu ile üniversitelerde değişim de başlamıştır.

Günümüzde üniversite sayısının artması ile üniversite mezunu kişi sayısı da artmıştır. Lisans eğitimi tamamlamış kişilerin ilgi duydukları alanlarda yüksek lisans ve doktora eğitimine devam etmeleri uzmanlaşmalarını sağlamaktadır. Lisans üstü eğitim alan kişi sayısında da artışlar görülmektedir. YÖK Tez Merkezi’nde 590.602 yüksek lisans tezi bulunmaktadır. Bunlardan 299.808 tanesi sosyal bilimler alanındadır. Doktora tez sayıları ise 66.565’i sosyal bilimler alanında olmak üzere toplam 147.091 adettir. Sayıların giderek artması araştırmacıları bu kez de güncel ve özgün çalışma yapmaları konusunda zorlamaktadır. Ayrıntılı ve uzun

bir süre literatür taraması yapılması, konuya hakim olunması, çalışmanın özgün değerinin ortaya konulması gerekmektedir. Bu nedenle araştırmacılara kaynak oluşturması amacıyla bu çalışma gerçekleştirilmiştir. Araştırmada dizin terimi muhasebe olan 313 tez incelenmiştir.

## 2. YÖNTEM

Araştırmada nitel araştırma yöntemlerinden doküman analizi yöntemi kullanılmıştır. Doküman analizi yazılı belge içeriklerini titiz ve sistemli bir şekilde analiz etmek için kullanılan nitel bir araştırma yöntemidir (Wach, 2013). 2021,2022 ve 2023 yıllarında YÖK Ulusal Tez Merkezi'nde yer alan tezlerden dizin kelimesi "muhasebe" olan tezler kullanılmıştır. 235 yüksek lisans, 78 doktora tezi olmak üzere 313 tez araştırmanın evrenini oluşturmuştur. Tezlerde araştırma konusu olarak belirlenen tüm ifadelere ulaşıldığı için 313 tez üzerinden bulgular elde edilmiştir.

## 3. BULGULAR

Çalışmanın bu bölümünde araştırmanın konusunu oluşturan ifadelerden; cinsiyet, yüksek lisans (YL)-doktora dağılımları, tez danışmanlarının unvanları, tezlerin tamamlanmış olduğu üniversiteler ile tezlerin konu dağılımları 2021, 2022 ve 2023 yılları baz alınarak yer verilmiştir.

Tablo 1'de tezlerin yıllara göre cinsiyet dağılımı yer almaktadır.

Tablo 1: Yıllara Göre Cinsiyet Dağılımı

	Yüksek Lisans		Doktora		Toplam (YL+Doktora)		Toplam (Kadın+Erkek)
	Kadın	Erkek	Kadın	Erkek	Kadın	Erkek	
2021	69	60	16	25	85	85	170
2022	40	34	10	14	50	48	98
2023	14	18	5	8	19	26	45
Toplam	123	112	31	47	154	159	313

Kaynak: YÖK Tez Merkezi (2024).

Tablo 1'e göre son üç yıldaki kadın ve erkeklerin tez yazım sayıları birbirine çok yakındır. 2021 yılında kadın ve erkek yazar sayıları eşit olup 85'tir. 2022 yılında 50 kadın 48 erkek ve 2023 yılında 19 kadın 26 erkek tez yazmıştır.

Tablo 2'de ise tezlerin yıllara göre yüksek lisans ve doktora tez dağılımları bulunmaktadır.

Tablo 2: Yıllara Göre Yüksek Lisans-Doktora Tezi Dağılımları

	Yüksek Lisans	Doktora	Toplam
2021	129	41	170
2022	74	24	98
2023	32	13	45
Toplam	235	78	313

Veriler incelendiğinde 2021 yılında 129 yüksek lisans 41 doktora tezi, 2022 yılında 74 yüksek lisans 24 doktora tezi ve 2023 yılında ise 32 yüksek lisans 13 doktora tezine ulaşılmaktadır. Son üç yılın toplamında ise 235 yüksek lisans ve 78 doktora tezinin bulunduğu görülmektedir. Üç yıllık periyoda bakıldığında tez yama sayılarının ve de oranlarının gittikçe azaldığı görülmektedir. Bunu nedenlerinin de ayrıca irdelenmesi gerekir.

Tablo 3'te tez danışmanlarının unvanları dikkate alınarak frekans değerleri araştırılmıştır.

Tablo 3: Tez Danışmanlarının Unvan Dağılımı

	Yüksek Lisans			Doktora			Toplam
	Dr. Öğr. Üyesi/DR.	Doçent	Profesör	Dr. Öğr. Üyesi	Doçent	Profesör	
2021	41	35	53	2	6	33	170
2022	25	21	28	0	5	19	98
2023	6	12	14	1	4	8	45
Toplam	72	68	95	3	15	60	313

Yukarıda yer alan verilere göre yüksek lisans tez danışmanlarından 2021 yılında 41 tanesi Dr. Öğr. Üyesi, 35 tanesi doçent, 53 tanesi ise profesördür. 2022 yılında 25 Dr. Öğr. Üyesi, 21 doçent ve 28 profesör bulunmaktadır. 2023 yılında ise 6 Dr. Öğr. Üyesi, 12 doçent ve 14 profesör danışmanlık etmiştir. Yüksek lisans tez danışmanlarına genel olarak bakıldığında en fazla 95 kişi ile profesörlerin danışmanlık ettiği tespit edilmiştir.



Doktora tez danışmanlarına bakıldığında ise, 2021 yılında 2 Dr. Öğr. Üyesi, 6 doçent ve 33 profesör görülmektedir. 2022 yılında 5 doçent ve 19 profesör, 2023 yılında 1 Dr. Öğr. Üyesi, 4 doçent ve 8 profesör görev almıştır. Toplam sayıya bakıldığında yine en fazla profesörlerin doktora tez danışmanlığı yaptığı görülmektedir.

Tablo 4'te anabilim dalı dikkate alınarak dağılımlar gerçekleştirilmiştir.

Tablo 4: Ana Bilim Dalı Dağılımı

Ana Bilim Dalları	Yüksek Lisans			Doktora			Toplam
	2021	2022	2023	2021	2022	2023	
Ağaç İşleri Endüstri Mühendisliği		1					1
Bankacılık	1					2	3
Bankacılık ve Finans	3						3
Biyomühendislik ve Bilimleri					1		1
Ekonomi Finans			1				1
Finans	1						1
Girişimcilik	1						1
İktisat	2						2
İnsan Kaynakları Yönetimi	1						1
İşletme	94	63	24	36	21	8	246
İşletme yönetimi		1		1			2
Maliye	3					1	4
Muhasebe	1						1
Muhasebe Denetim	6	3		2	1		12
Muhasebe Finans			3				3
Muhasebe ve Finansal Yönetim	9	1	1				11
Muhasebe ve Finansman	4						4
Muhasebe, Finans ve Bankacılık	1	1					2
Sağlık Kurumları Yönetimi				1			1
Sağlık Yönetimi						1	1
Sayısal yöntemler					1		1
Sermaye Piyasası	1						1
Sigortacılık						1	1
Siyaset Bilimi ve Kamu Yönetimi			1				1
Tarım Ekonomisi	1						1
Tarih		1	1				2
Turizm İşletmeciliği			1	1			2
Uluslararası Ticaret ve İşletmecilik		2					2
Uluslararası Ticaret ve Pazarlama		1					1
TOPLAM	129	74	32	41	24	13	313

Tablo 4 incelendiğinde 24 farklı anabilim dalında yüksek lisans tezinin bulunduğu ve en fazla yoğunluğun işletme anabilim dalında olduğu görülmektedir. Doktora tezlerinde ise 10 farklı anabilim dalında yine işletme anabilim dalında en fazla tez bulunmaktadır. Genel toplamlarına bakıldığında işletme anabilim dalında 244, muhasebe denetim anabilim dalında 12, muhasebe ve finansal yönetim anabilim dalında ise 11 tezin tamamlandığı tespit edilmiştir.

Tablo 5'te tezlerin üniversitelere göre dağılımları bulunmaktadır.

Tablo 5: Üniversite Dağılımları

Üniversiteler	Yüksek Lisans			Doktora			Toplam
	2021	2022	2023	2021	2022	2023	
Adıyaman Üniversitesi		1					1
Afyon Kocatepe Üniversitesi						1	1
Akdeniz Üniversitesi	4						4
Aksaray Üniversitesi		2	1				3
Alanya Alaaddin Keykubat Üniversitesi		1					1
Altınbaş Üniversitesi	1						1
Anadolu Üniversitesi				1			1

Ankara Üniversitesi		1		1			2
Artvin Çoruh Üniversitesi	1						1
Atatürk Üniversitesi			1	1			2
Atılım Üniversitesi			1	1			2
Avrasya Üniversitesi	1						1
Aydın Adnan Menderes Üniversitesi	1	1					2
Bahçeşehir Üniversitesi	1						1
Balıkesir Üniversitesi			1				1
Bartın Üniversitesi	2	1					3
Başkent Üniversitesi	4			2			6
Bilecik Şeyh Edebali Üniversitesi	2	4					6
Bitlis Eren Üniversitesi			1				1
Burdur Mehmet Akif Ersoy Üniversitesi	5		1				6
Bursa Uludağ Üniversitesi	3		1	1	1	1	7
Çanakkale Onsekiz Mart Üniversitesi	1						1
Çankırı Karatekin Üniversitesi		1					1
Çukurova Üniversitesi	3						3
Dicle Üniversitesi	1			1			2
Dokuz Eylül Üniversitesi	2	1		1	1		5
Dumlupınar Üniversitesi	1	1					2
Erciyes Üniversitesi	2						2
Erzincan Binali Yıldırım Üniversitesi			1				1
Eskişehir Osmangazi Üniversitesi			1				1
Fırat Üniversitesi	1						1
Galatasaray Üniversitesi				1	1		2
Gazi Üniversitesi	1	1		1			3
Gaziantep Üniversitesi			2		1		3
Gaziosmanpaşa Üniversitesi			1				1
Giresun Üniversitesi	1		1		2		4
Ankara Hacı Bayram Veli Üniversitesi	4	1		2	1	2	10
Harran Üniversitesi	1						1
Hasan Kalyoncu Üniversitesi	3	3		2		1	9
Hatay Mustafa Kemal Üniversitesi	2						2
Işık Üniversitesi	3	1					4
İnönü Üniversitesi	2	1		4	1		8
İstanbul Üniversitesi	3	1	1	3	2		10
İstanbul Arel Üniversitesi	6						6
İstanbul Aydın Üniversitesi	4	1	1				6
İstanbul Bilgi Üniversitesi	4	3					7
İstanbul Esenyurt Üniversitesi	1	1					2
İstanbul Gelişim Üniversitesi			1				1
İstanbul Kültür Üniversitesi	1						1
İstanbul Medipol Üniversitesi			1				1
İstanbul Nişantaşı Üniversitesi			2				2
İstanbul Okan Üniversitesi			3		1	1	5
İstanbul Ticaret Üniversitesi	5			2	1	1	9
İstanbul Yeni Yüzyıl Üniversitesi			1				1
İzmir Demokrasi Üniversitesi			1				1
İzmir Ekonomi Üniversitesi				1			1
İzmir Katip Çelebi Üniversitesi	1	1					2
Kafkas Üniversitesi	1						1
Karabük Üniversitesi	2					1	3
Karamanoğlu Mehmetbey Üniversitesi	2	2				1	5
Kastamonu Üniversitesi	1						1
Karadeniz Teknik Üniversitesi	2	2	1				5

Kayseri Üniversitesi	1								1
Kırıkkale Üniversitesi	4								4
Kırklareli Üniversitesi	1								1
Kırşehir Ahi Evran Üniversitesi	1	1							2
Kocaeli Üniversitesi	1	2	1		2				6
Kütahya Dumlupınar Üniversitesi	1		1		1				3
Manisa Celal Bayar Üniversitesi	1	3	1			1			6
Kahramanmaraş Sütçü İmam Üniversitesi	3	1				1			5
Marmara Üniversitesi	5	3	2		1	2	1		14
Mersin Üniversitesi					1				1
Muğla Sıtkı Koçman Üniversitesi	1								1
Munzur Üniversitesi	2	3							5
Necmettin Erbakan Üniversitesi			1						1
Nevşehir Üniversitesi		1				1			2
Niğde Ömer	2		2						4
Ondokuzmayıs Üniversitesi		1				1			2
Osmaniye Korkut Ata Üniversitesi	3				2	1			6
Pamukkale Üniversitesi	1					1			2
Recep Tayyip Erdoğan Üniversitesi	1		1		1				3
Sağlık Bilimleri Üniversitesi							1		1
Sakarya Üniversitesi	3	2				3			8
Selçuk Üniversitesi	2	4	1		4	1			12
Sivas Cumhuriyet Üniversitesi	4	2			2				8
Süleyman Demirel Üniversitesi			3				1		4
Tokat Gaziosmanpaşa Üniversitesi		1	1		1				3
Trakya Üniversitesi	3		3						6
Ufuk Üniversitesi	1								1
Uşak Üniversitesi		1							1
Yalova Üniversitesi	1	2							3
Yıldız Teknik Üniversitesi							1		1
Yozgat Bozok Üniversitesi	1	1							2
Zonguldak Bülent Ecevit Üniversitesi		2	1		1				4

Tablo 5 incelendiğinde en fazla Marmara Üniversitesi'nde (14), sonra Selçuk Üniversitesi'nde (12) dizin terimi muhasebe olan tez bulunmaktadır. 3. Sırada ise 10'ar tez ile Ankara Hacı Bayram Veli Üniversitesi ve İstanbul Üniversitesi yer almaktadır. Yüksek lisans tezleri 88 farklı üniversitede doktora tezleri ise 41 farklı üniversitede tamamlanmıştır.

Tablo 6'da tez konusu dağılımları yer almaktadır.

Tablo 6: Tez Konusu Dağılımları

Konular	Doktora				Yüksek Lisans				Genel Toplam (Dr.+YI)
	2021	2022	2023	Toplam	2021	2022	2023	Toplam	
Dijitalleşme	4	2	0	6	11	3	4	18	24
Muhasebe Standartları	8	5	6	19	34	16	2	52	71
Maliyet Muhasebesi	8	2	0	10	11	6	2	19	29
Blockchain	0	0	1	1	2	1	2	5	6
Denetim	1	3	0	4	12	2	2	16	20
Muhasebe meslek mensubuna yönelik çalışmalar	4	1	0	5	16	9	3	28	33
Diğer ülkelerdeki muhasebe uygulamaları	1	0	0	1	2	1	2	5	6
Adli Muhasebe	2	0	1	3	5	4	2	11	14
Muhasebe Bilgi Sistemi	1	1	1	3	3	4	1	8	11
Hile/hata/manipülasyon	2	3	2	7	11	3	4	18	25

Vergi	0	0	0	0	5	5	1	11	11
Etik	0	0	0	0	3	1	1	5	5
Muhasebe Eğitimi	3	1	1	5	2	6	1	9	14
Covid-19	0	1	0	1	1	2	1	4	5
Finansal Muhasebe	5	2	1	8	0	1	1	2	10
Finansal Performans	2	3	0	5	3	4	1	8	13
Davranışsal Muhasebe	0	0	0	0	0	1	1	2	2
Sigortacılık/Bankacılık	0	0	0	0	0	1	1	2	2
Diğer	0	0	0	0	8	4	0	12	12
TOPLAM	41	24	13	78	129	74	32	235	313

Tezler konuları bakımından incelendiğinde en fazla muhasebe standartları (71) konusunda tezin bulunduğu görülmektedir. İkinci sırada ise muhasebe meslek mensuplarına yönelik çalışmalar (33) yer almaktadır. Maliyet muhasebesi ise sıklıkla (29) çalışılan konu olarak tespit edilmiştir. En az çalışılan konular ise davranışsal muhasebe, sigortacılık/bankacılık konuları olmuştur.

#### 4. SONUÇ

Cumhuriyetin kurulduğu dönemlerde bir üniversite ile sürdürülen eğitim yerini, her ilde en az bir üniversitenin bulunduğu bir sisteme bırakmıştır. Okur yazar sayısı artmış, eğitim düzeyi yükselmiştir. Geçmişte eğitilmiş kişi bulma konusunda yaşanan zorlukların yerine günümüzde konusunda uzman kişi bulma gelmiştir. Bu nedenle uzmanlaşma konusunda önemli bir basamak olan lisansüstü eğitim önem kazanmıştır.

Türkiye’de lisansüstü eğitimini tamamlamış kişilerin tezleri YÖK Tez Merkezi’nde erişime açık bir şekilde bulunmaktadır. Yazarlar tezlerini yayınlayıp yayınlamama konusunda süre kısıtı olmakla birlikte özgürdürler. Araştırmacılar ilgi alanları doğrultusunda bu kaynaklara ulaşarak bilgi edinebilir.

Bu çalışmada da YÖK Tez Merkezinde dizin terimi olarak muhasebe kelimesi seçilmiş ve 2021-2023 yılları tezleri doküman analizi yöntemi kullanılarak incelenmiştir. Araştırma sonucunda kadın ve erkek yazar sayılarının birbirine yakın olduğu, yüksek lisans tez sayısının doktora tez sayısından fazla olduğu, tez danışmanlarının daha çok profesör unvanını taşıdığı, anabilim dalı olarak en çok işletme anabilim dalının ön plana çıktığı ve en fazla Marmara Üniversitesi’nde tez tamamlandığı tespit edilmiştir. Ayrıca son üç yıla bakıldığında lisansüstü tez yazım sayılarının her yıl düşerek devam etmesi dikkat çekmektedir. Bu düşüşün nedenlerinin ayrıca incelemesi gerekmektedir. Muhasebe alanında yazılan tezler konu dağılımları açısından incelendiğinde ise en fazla muhasebe standartları konusunda tez saptanmıştır. Bu sonuç Yeşil ve Akyüz’ün (2018) çalışması ile örtüşmektedir.

Yapılan çalışma güncel çalışmaları incelemek için son üç yıl baz alınarak yapılmıştır. Gelecekte yapılacak çalışmalarda yıl kısıtı daha kapsamlı tutulabilir. Araştırmada cinsiyet, anabilim dalı, üniversite, danışman unvanı ve konu dağılımları incelenmiştir. Çalışmaya ayrıntı katmak adına; üniversite türü, enstitü dağılımı, bilim dalı dağılımı, sayfa sayıları, erişim durumu, araştırma yöntemi gibi başlıklarda katılabilir.

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## Covid-19 Pandemi Krizine Karşı G20 Ülkelerinde Kamu Bankalarının Uyguladığı Politikalar

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**Özet:** Çin’de 2019 yılının sonuna doğru ortaya çıkan Covid-19 salgını 2020 yılının mart ayında pandemiye dönüşmüş ve tüm dünyayı etkisi altına almıştır. Pandeminin küresel çapta çok etkisinin en yıkıcı yanı yaşanan ölümler olmuş, küresel boyutta yaşanan salgın, belirsizlikler oluşturmuş ve Dünya’da birçok alanda çöküntüye yol açmıştır. Pandemiyle birlikte küresel ekonomilerde ortaya çıkan belirsizlik, korku ve panik havası üretimde, istihdamda ve milli gelirden düşüşe sebep olmuştur. Yaşanan bu olağanüstü olaylar küresel talebi azaltarak, üretimde aksamalara neden olmuş ve ekonomik durgunluğa yol açmıştır. Ekonomilerde yaşanan bu durum finansal sektörleri de etkilemiş, özellikle bankalar ve bankaların en önemli plasmanı olan krediler bu durumdan önemli derecede etkilenmiştir.

Dünya ekonomisindeki özellikle G20 ülkelerinin merkez bankaları ekonomilerindeki daralmaya karşı genişletici para politikası araçları kullanarak ekonomilerinin yavaşlamasına engel olamaya çalışmışlardır. Ayrıca ilgili ülkelerin merkez bankaları ve denetleyici ve düzenleyici otoriteleri bankacılık sektöründe ortaya çıkan/çıkacak olan tahsili gecikmiş alacakların artması ve zarar karşılıklarının yükselmesi gibi sorunlara karşı önlemler almaya çalışmışlardır. Ayrıca ülkemizde Türkiye Cumhuriyet Merkez Bankası (TCMB) özellikle kamu bankaları kanalıyla genişletici para politikası uygulayarak salgının ekonomik ve finansal etkilerini azaltma yönünde çaba sarf etmiştir. Bu çalışmada Covid-19 salgının küresel ekonomide daralmaya birlikte G20 ülkeleri ve ülkemizde bankacılık sektörüne etkileri ve buna karşı alınan tedbirler incelenmektedir.

**Anahtar Kelimeler:** Covid 19-Dönemi, Kamu Bankaları, Pandemi Dönemi Politikalar

**Abstract:** The Covid-19 epidemic, which emerged in China at the end of 2019, turned into a pandemic in March 2020 and took over the whole world due to its impact. Changes on a global scale have led to deterioration of economic activities and stagnation. This situation experienced by the financial sector has especially affected banks and credit processes.

The central banks and banks of the G20 countries in the world economy have used policy tools against growth and applied them against transactions such as the preference of credit volume in the banking sector, the increase in overdue receivables and the increase in loss provisions. Separately, the Central Bank of the Republic of Turkey and public banks implemented a series of policies, especially expansionary monetary policy, and the methods that could be applied economically and financially were analyzed. This influential Covid-19 epidemic, along with its growth in the global economy, was among the effects of the G20 countries and Turkey’s banking sector and the information received.

**Key Words:** Covid 19-Era, Public Banks, Pandemic Period Policies

### 1. GİRİŞ

2020'nin ilk yarısında, dünya ekonomisinin odağında, Çin'de başlayıp hızla küresel bir krize dönüşen Covid-19 salgını ve buna karşı alınan önlemler olmuştur. Salgının yayılmasını önlemek için ülkelerin sınırlarını kapatmasının yanında birçok sektörde faaliyetleri kısıtlamaları dünya çapında ekonomileri olumsuz etkilemiş, salgının küresel nitelik kazanmasıyla tüm ekonomilerde düşüşler gözlenmiştir. Küresel düzeyde bankacılık sektörleri, 2007-2008 finans krizi sonrasında uzun süredir toparlanma ve sermaye biriktirme evresinde olduklarından, salgına sağlam temellerle yakalanmışlardır. Bu dönemde küresel büyüme görünümü belirgin bir şekilde kötüleşmiş, ekonomik çöküntüyü önlemek için, Merkez Bankaları benzeri görülmemiş şekilde parasal genişleme politikaları uygulamışlardır. Birçok ülkede Merkez Bankaları, parasal genişlemenin yanında faiz indirimleri yaparak, likidite destekleri, varlık alımları ve kredi programları gibi önlemlerle salgından etkilenen sektörleri ve hanelere destek sağlamışlardır (TCCSBB, 2020: 3). Pandemi, küresel çapta büyük bir belirsizlik dalgası oluşturmuş ve ekonomi politikalarının uygulanmasıyla ortaya çıkan sonuçlarda da belirsizlikleri artırmıştır. G20 ülkelerinin salgınla mücadelede uyguladığı para politikası önlemleri çeşitli alanlarda yoğunlaşmıştır. Bu önlemler: Merkez Bankalarının finansal piyasalara likidite sağlaması, değeri hızla artan tahvilleri ve hisse senetlerini satın alması, faiz oranlarını düşürmesi, bankalara düzenleyici işlemler uygulanması ve Covid-19'dan etkilenen borçlulara ödeme ertelemeleri sağlanması şeklinde sayılabilmektedir.

Bu çalışmada, G20 ülkelerindeki bankacılık sektöründe Merkez Bankalarının aldığı önlemler ve bankaların bu finansal önlemleri nasıl uyguladığı değerlendirilmekte, Türkiye'deki kamu bankalarının pandemi sürecinde gerek hanehalkı gerekse işletmelerin finansal ihtiyaçlarını nasıl karşıladığı inceleme konusu olmaktadır.

## 2. KÜRESEL SALGIN: COVID-19

1960'larda matematikçi Edward N. Lorenz'in ortaya koyduğu "Kaos Teorisi", öngörülebilir bir sistem olsa dahi, tahmin edilemezlikten doğan bir sistem olduğunu ileri sürer. Bu teoriye göre, her şey birbirine bağlıdır ve birbirini etkiler; bu da hayatın içindeki döngüyü meydana getirir. "Kelebek etkisi" adı verilen kavram, küçük bir olayın bile nasıl büyük sonuçlara yol açabileceğini ifade eder. Bu metafor, bir kelebeğin kanat çırpışının nasıl bir fırtınaya neden olabileceğini ve büyük sonuçlara sebebiyet verebileceğini açıklamak için kullanılır. Covid-19 salgını da kaos teorisine benzer bir şekilde küçük bir yerden başlayıp kısa sürede tüm dünyayı etkisi altına almıştır. Sadece bir bölgede görülen bu salgın, hızla yayılarak küresel bir krize dönüşmüş, küçük bir virüsün nasıl büyük çapta etkilere ve beraberinde de değişimlere yol açabileceğini göstermiştir. 2019'un son çeyreğinde Çin'in Wuhan kentinde başlayan COVID-19 salgını, Dünya'yı etkisi altına almış, salgının başlamasıyla birlikte küresel ekonomi ve sosyal yaşam birçok olumsuzlukla karşılaşmıştır. COVID-19, öncelikle sağlık sektöründe büyük bir bunalıma neden olmuş, salgın hızla yayılarak küresel boyuta ulaşmış ve ölümcül etkisiyle Mart 2020'de Dünya Sağlık Örgütü (World Health Organization, WHO) tarafından resmen pandemi olarak ilan edilmiştir (Danacı, 2022: 102-103).

2020 yılının Mart ayında, COVID-19'un hızla yayılmasıyla birlikte ülkeler sokağa çıkma yasakları ve seyahat kısıtlamaları gibi önlemler uygulamaya başlamışlardır. Vaka sayıları arttıkça ve ölüm oranları ciddi boyutlara ulaştıkça, küresel sağlık sistemleri büyük bir baskı altına girmiştir. Ancak salgın sadece sağlık sektörünü etkilemekle kalmamış; ilerleyen zamanlarda eğitim, tarım, turizm, ulaşım ve finans gibi diğer sektörleri de olumsuz etkilemiştir. Bu sektörler, salgının getirdiği kısıtlamalar ve ekonomik belirsizlikler nedeniyle köklü güçlüklerle karşı karşıya kalmışlardır (Koç, 2020: 239).

Aniden ortaya çıkan COVID-19 salgını, dünya çapında olduğu gibi Türkiye'de de olağanüstü ekonomik sonuçlara yol açmıştır. Bu salgın, finans sektörünü dışsal yapısal bir ekonomik krizle karşı karşıya bırakmıştır. COVID-19 pandemisi, 1929'daki Büyük Ekonomik Buhran'dan sonra yaşanan en büyük ve yıkıcı ekonomik kriz olarak tarihe geçmiştir (Danacı, 2022: 104).

Pandemi, küresel talebi azaltarak ve ekonomik durgunluğa yol açmış, üretimde aksamalara neden olmuş ve arz ve talep dengesini bozmuştur. Bu yaşananlar ekonomik belirsizliklerin artmasına ve korku ortamının yayılmasına yol açmış, insanlar ve işletmelerin, geleceğe yönelik beklentilerini düşürerek harcamalarını kısma eğilimini artırmıştır. Bu durum istihdamı ve genel ekonomik aktiviteyi olumsuz yönde etkilemiştir (Kuzucu, 2020: 266).

Salgın döneminde, önceki küresel krizlerin aksine, hem reel sektördeki (hanehalkı ve işletmeler) hem de finansal sektördeki aktörler aynı anda doğrudan veya dolaylı olumsuz etkilere maruz kalmışlardır. Bu durum, sektörler arasındaki güçlü etkileşimlerden kaynaklanan şokların küresel büyüme görünümü üzerinde güçlü bir etkiye sahip olmasına neden olmuştur (TCMB, 2021: 3).

Salgına bağlı ekonomik ve finansal etkilerin en aza indirilmesi için, para ve maliye politikalarının birlikte uygulanması büyük önem taşımıştır. Salgın sürecinde, politika adımlarının belirlenen hedeflere odaklanması ve şokun süresiyle uyumlu olması, politikaların etkinliğini artırması hedeflenmiş, ekonomik ve finansal istikrarın sağlanması ve oluşacak krizin etkilerinin en aza indirilmesi için koordineli bir yaklaşım benimsenmiştir (TCMB, 2021: 8).

## 3. G20 ÜLKELERİ'NİN PANDEMİ KRİZİNE KARŞI UYGULAMIŞ OLDUKLARI FİNANSAL TEDBİRLER

Ekonomik küreselleşme beraberinde ulusların dünya ekonomisindeki sınırlarını ortadan kaldırarak bütünleşmelerini ön plana çıkarmıştır. Doğu Asya'daki finansal krizin ardından, küresel finansal sistemi etkileyen konularda iş birliğini artırmak için Kanada, Fransa, Almanya, İtalya, Japonya, Büyük Britanya ve Amerika Birleşik Devleti (ABD)'nden oluşan G-7 ülkeleri, yeni bir uluslararası grup olan G-20'yi oluşturma kararı almış, 1999'da Avrupa Birliği ve 19 ülkenin katılımıyla G-20 kurulmuştur. Bu grup, Türkiye, İngiltere, Güney Kore, Güney Afrika, Rusya Fed., Suudi Arabistan, Meksika, Japonya, İtalya, Endonezya, Hindistan, Fransa, Çin, Kanada, Brezilya, ABD, Almanya, Avusturya, Arjantin ve Avrupa Birliği'ni içermektedir (Işık & Çetenak, 2018: 103).

G-20, dünyadaki en büyük ve etkin ekonomiye sahip olan 20 ülkeyi temsil etmektedir. Bu ülkeler, Gayri Safi Yurtiçi Hasıla (GSYH) bakımından dünyadaki en yüksek rakamlara sahip olan ülkelerdir. G-20 ülkeleri, dünya ekonomisinin yaklaşık %85'ini oluşturmakta ve bu nedenle G-20 ülkelerinin aldıkları ekonomik kararlar, küresel ticaretin geleceği üzerinde büyük bir etkiye sahip olmaktadır. Covid-19 Pandemi Krizi, 1929 Ekonomik Buhrandan sonra diğer krizlerle kıyaslandığında en büyük şok etkisi ortaya çıkaran ekonomik ve finansal kriz olduğunu söylemek yanlış olmayacaktır (Danacı, 2022: 103).

Küresel ekonomide pandemi, dünya genelinde durgunluğa ve yavaşlamaya neden olmuştur, toplam talep seviyelerinde hızlı bir düşüş yaşanmış, iç ve dış ticaret hacmi daralmıştır. Ticaret hacminin daralmasında tedarik zincirlerinde meydana gelen aksaklıklar etkili olmuş ve üretim süreçleri zarar görmüştür. Sonuçta geniş çaplı istihdam kayıpları ve milli gelir seviyelerinde düşüşler ortaya çıktı. Özellikle ABD, İspanya, İtalya, Fransa, Almanya, Çin ve Rusya gibi gelişmiş ekonomiler, pandemi sürecinde ekonomik olarak en fazla olumsuz etkilenen ülkeler arasında yer almışlardır. Bu ülkeler, yüksek vaka sayılarıyla mücadele etmek zorunda kalmışlar ve bu durum ekonomik faaliyetleri olumsuz yönde etkilemiş, işletmelerin kapanması, iş gücü piyasasında belirsizliklerin artması ve ekonomik belirsizliklerin yayılması gibi sorunlarla karşılaşmışlardır (Danacı, 2022: 105).

2008 Küresel Finansal Krizi'nde olduğu gibi, pandemi krizi sırasında da Merkez Bankaları parasal genişleme politikalarına yönelerek hızla uygulamışlar, bu kez politika yapıcılar pandemi krizine daha hızlı ve etkili bir şekilde yanıt vermişlerdir. Merkez Bankaları faiz indirimleri, varlık alımları ve likidite sağlama önlemleri gibi bir dizi para politikası araçlarını kullanarak ekonomiyi desteklemişlerdir. Bu hızlı ve kapsamlı tepki, ekonomik istikrarı sağlamak ve toparlanmayı hızlandırmak için önemli bir adım olmuştur (Kuzucu, 2022: 265).

Yaşanan krizde, politika faizlerinin hızla indirilmesi gibi kararlarla para politikası gevşetilirken, likidite destekleri gibi geniş kapsamlı önlemlerle salgının finansal piyasalara ve reel sektöre etkileri en aza indirilmeye çalışılmıştır. Alınan tedbirler arasında, piyasalara ve bankalara çeşitli kanallardan likidite desteği sağlanması, Merkez Bankaları arasında para takası anlaşmaları, varlık alımları, sermaye ve likidite tamponlarının kullanılması için bankalara esneklik tanınması ve zorunlu karşılık indirimleri gibi önlemler bulunmaktadır. Atılan bu adımların amacı, finansal piyasalarda istikrarın sağlanması ve reel sektörün sürdürülebilir bir şekilde faaliyet göstermesini sağlamaktır (TCMB, 2021: 10).

Tablo 1: Pandemi ile Mücadelede Uygulanan Para Politikası Adımları

Para Politikası	Euro Bölgesi	ABD	Japonya	İngiltere	Kanada	Avustralya	G. Kore	Çin	Rusya	Hindistan	Endonezya	Brezilya	Türkiye
Faiz indirimleri		X		X	X	X	X	X	X	X	X	X	X
Tahvil alımları	X	X	X	X	X	X	X			X	X		X
Ek likidite desteği	X	X	X	X	X	X	X	X	X	X	X	X	X
ABD doları takas anlaşmaları	X	X	X	X	X	X	X					X	

Kaynak: Türkiye Cumhuriyeti Merkez Bankası (TCMB), 2021: 5.

### 3.1. Faiz İndirimleri

Ekonomik kaygıların etkisiyle birçok ülke ekonomik canlanmayı teşvik etmek ve finansal istikrarı korumak için faiz indirimlerini tercih etmiş, faiz indirimlerini ilk olarak Avusturalya, Kanada, Birleşik Krallıklar ve ABD sonrasında da Türkiye, Brezilya, Çin Hindistan, Endonezya, Rusya, Güney Afrika uygulamıştır. 2019 yılında ABD Merkez Bankası (Federal Reserve System, FED), ekonomiyi destekleme ve finansal istikrarı sağlamak amacıyla, ekonomik ve finansal şartlardaki değişimleri değerlendirerek üç kez faiz indirimine gitmiş ve toplamda 75 baz puanlık bir indirim uygulamıştır. Ancak, salgının ekonomik büyüme üzerindeki etkilerini değerlendiren FED, Mart 2020'de politika faizini 50 ve 100 baz puan olmak üzere toplamda 150 baz puan daha indirerek, politika faizini %0 ile %0,10 bandına çekmiştir. Ayrıca, zorunlu karşılık oranını sıfıra indirmiş ve reeskont oranını da düşürmüştür (Küçüköğlü, 2021: 1275).

2020'nin ilk çeyreğinde Çin ekonomisi, yıllık %6,8 oranında bir daralma yaşamış, bu dönemde, Çin Merkez Bankası (People's Bank of China, PBoC), finansal sisteme likidite desteği sağlayarak genişletici para politikası izlemiştir. PBoC, mart ayında 7 günlük ve 14 günlük ters repo faiz oranlarını %2,40'tan %2,20'ye geri çekerek 20 baz puanlık bir indirim gerçekleştirmiş, ayrıca, zorunlu karşılık oranlarını da indirerek kredi verme sürecini

kolaylaştırmıştır. Çin ekonomisi, salgın nedeniyle ciddi boyutta sarsılmış ve 2020'nin ilk çeyreğinde yıllık bazda %6,5 küçülmüştür. Bu süreçte, Çin ekonomik olarak zorlu bir dönemden geçmiş ve yetkili otoriteler duruma müdahale etmek için ciddi önlemler almıştır (TCCSBB, 2020: 17).

İngiltere Merkez Bankası (Bank of England, BoE), bu süreçte ülke ekonomisinin dengesini sağlamak ve finansal istikrar amacıyla 2016 yılından sonra ilk kez faiz indirimine gitmiş ve geçici bir süre için İngiltere Hazinesini doğrudan finanse edeceğini duyurmuştur. BoE, faiz oranını 65 baz puan azaltarak %0,10'a çekmiştir (TCMB, 2020: 5).

Salgının ekonomik etkilerini hafifletmek ve kredi koşullarını desteklemek amacıyla, Türkiye Cumhuriyeti Merkez Bankası'nın (TCMB) en yoğun şekilde kullandığı para politikası aracı faiz indirimleri olmuştur. 17 Mart 2020'de başlayarak ilk olarak politika faizini 100 baz puan indirerek %9,75'e çekmiş, ardından, 22 Nisan 2020'de %8,75'e, 21 Mayıs 2020'de de %8,25'e düşürmüştür. Ancak, TCMB fiyat istikrarını koruma hedefi doğrultusunda temel politika aracı olan bir hafta vadeli repo ihale faiz oranını (politika faizini) 2020 yılında Eylül ayında %8,25'ten %10,25'e, Kasım ayında ise %10,25'ten %15'e yükselterek parasal sıkılaştırma politikasını gerçekleştirmiştir. Kasım ayında ayrıca, şeffaflığı, öngörülebilirliği ve para politikasının etkinliğini artırmak amacıyla likidite yönetimi operasyonel çerçevesinde değişikliğe gidilmiş ve kısa vadeli fonlamanın tamamı politika faizinden gerçekleştirilmesine karar verilmiştir. 26 Temmuz 2019'da başlayan ve 22 Mayıs 2020'ye kadar devam eden politika faizindeki indirimlerin ardından, TL fonlama maliyetindeki düşüş, sektörün yurt içinden temin ettiği fonların payının artmasında aktif rol oynamıştır. Uygulanan bu faiz indirimleri, sektörün yurt dışı hareketliliğine karşı duyarlılığını sınırlamaya ve yurt içi piyasaların derinleşmesine katkı sağlamıştır. Bu durum, yerel kaynaklara dayalı finansmanın önemini vurgulayarak, ekonomik istikrarın sağlanmasına yardımcı olduğu değerlendirilebilmektedir (Karter, 2021: 686-687; www.tcmb.gov.tr).

2020 yılında Rusya Merkez Bankası (The Central Bank of the Russian Federation, CBR), Covid-19 salgınının ekonomi üzerindeki negatif etkisini en aza indirebilmek için politika faizini bir dizi indirimle rekor düşük seviyelere çekmiştir. Öncelikle, Mart 2020'de 50 baz puanlık bir indirimle %6'dan %5,5'e düşürmüş, daha sonra ise Nisan ayında 100 baz puanlık bir indirimle %5,5'ten rekor dip seviye olan %4,5'e çekilmiştir. Ancak, CBR daha fazla fiyat artışı ve iç talep iyileşmesi beklentilerine yanıt olarak, Mart ve Nisan 2021'de politika faizini artırmış, önce 25 baz puan sonra da 50 baz puan artışla %5'e yükseltmiştir. Düzenleyici destek tedbirleri, çoğu 1 Mart'tan 30 Eylül 2020'ye kadar yürürlükte kalmış, bazıları ise 2020'nin sonuna veya 2021'in ortasına kadar uzatılmıştır. KOBİ kredileri ve yeniden yapılandırılan kurumsal yapılar için tüm sektöre karşılık ayrılmasına izin verilmiş, bankalara ise 2020 yılı sonuna kadar menkul kıymetleri 1 Mart fiyatlarıyla değerlendirme olanağı sağlanmıştır. Döviz işlemleri, açık forex pozisyonlarında olanlar dışında, 1 Mart - 30 Eylül 2020 tarihine kadar olan döviz kuru baz alınarak değerlendirilmiştir. Mevduat Sigorta Fonu katkısı 2021'in ilk yarısına kadar %0,15'ten %0,10'e indirilmiş, ayrıca CBR, sistemik olarak önemli kredi kuruluşları için likidite sağlanmasını kolaylaştıracak önlemleri onaylamıştır. Parlamento, pandemi krizinden etkilenen KOBİ'lerin ve vatandaşların kredi ödemelerini altı aya kadar ertelemeyi garanti eden bir yasayı kabul etmiş, yeniden yapılandırılmış bireysel kredilerin tam provizyonununun 1 Temmuz 2021'e kadar uzatılmasını sağlamıştır. Sistemik işletmelere verilen sorunlu kredilerin sermayeye çevrilmesini sağlamak için özsermaye üzerindeki risk katsayısı %150'den %100'e indirilmiştir (Gökdemir, 2023: 19-20).

Brezilya, ABD'den sonra hem vaka sayısı hem de ölüm oranları bakımından küresel olarak ikinci ülke olmuştur. Brezilya Merkez Bankası (Banco Central do Brasil, BCB), ekonomiyi canlandırmak ve salgının finansal etkilerini hafifletmek için faiz oranını 2020 Haziran'da tarihi dip seviye olan %2,25 seviyesine çekmiştir. Politika yapıcılar Finansal sektörü desteklemek adına önemli adımlar atmış, kredi genişlemesi sağlanmış ve KOBİ'lerin bundan yararlanması hedeflenmiştir (TCCSBB, 2020: 19-20).

Hindistan Merkez Bankası (Reserve Bank of India, RBI), faizlerin yükselmesini önlemek ve likidite açığını azaltmak amacıyla hızlı bir şekilde hareket etmiştir. Bu çerçevede, Hindistan'ın ekonomik büyümesini desteklemek ve finansal istikrarı sağlamak amacıyla önemli bir adım atarak politika faizini 75 baz puanlık bir indirimle %4,4 seviyesine çekmiştir (Türkiye İhracatçılar Meclisi (TİM), 2020: 13).

Güney Kore Merkez Bankası (Bank of Korea, BoK), 17 Mart 2020'den itibaren geçerli olmak üzere politika faizinde 50 baz puanlık bir indirim yaparak faiz oranını %1,25'ten %0,75'e çekmiş, bankalar ve finansal kurumlar için bildirilen Banka Aracı Kredi Destek Tesisi faiz oranını %0,25'e indirmiştir. Bununla birlikte, ekonomik istikrarı korumak ve işletmeleri desteklemek amacıyla bankalar 1 Nisan 2020'den itibaren faiz ödemelerini erteyip geri ödemede zorlanan işletmelerden borç tahsil edilmesine ara vermiştir (Karakaya, 2022: 46).



### 3.2. Tahvil Alımları

G20 ülkelerinde, özellikle gelişmiş ekonomilerin para politikalarında genişleyici adımların atılması kararının alınması, tahvil getirilerine de yansımıştır. Pandemi sürecinin başladığı 2020 Mart ayından itibaren, Merkez Bankalarının faiz indirimleri ve diğer gevşek para politikalarının etkisiyle tahvil getirileri düşüş eğilimine girmiştir. ABD, bankacılık sektörünün kriz döneminde sağlamlığını desteklemek ve sürdürülebilirliğini sağlamak amacıyla Federal Bankacılık Denetçileri, sermaye ve likidite tamponlarını kullanarak mevduat kurumlarına kredi verme ve salgının etkilediği borçlularla işbirliği yapma kararı almıştır. Ayrıca, Banka Denetçileri Covid-19 ile ilgili kredi değişikliklerini sorunlu borç yeniden yapılandırılmaları olarak değerlendirmemeye karar vermişler ve bu kapsamda, düzenleyici raporlama süreçlerinde kolaylık sağlanması ve denetimlerin kapsamının geçici olarak durdurulması gibi faaliyetler de yer almıştır (Gökdemir, 2023: 12). Fed, mart ayında 500 milyar dolar değerinde tahvil ve 200 milyar dolar değerinde ipotek teminatlı menkul kıymet alımı yapacağını duyurmuş, bu alımların miktarının ise açık uçlu olacağını belirtmiştir. Bu adım, ekonomiyi desteklemek ve finansal piyasalarda likiditeyi artırmak amacıyla atılan önemli bir adım olmuştur (Kuzucu, 2022: 269).

Hindistan Merkez Bankası (RBI), 27 Mart tarihli kararında döviz işlemlerinde serbestleşme yönünde bir adım atmış ve bankalara offshore döviz piyasalarında işlem yapma izni vermiştir. RBI, bu adımla, Hindistan'ın döviz piyasalarında daha fazla likidite ve esneklik sağlamayı amaçlamıştır (TİM, 2020: 13).

Japon Merkez Bankası (Bank of Japan, BoJ), salgının yıkıcı ekonomik etkilerini azaltmak için devlet tahvili alımlarını artırmaya ve 10 yıllık getirilerini sıfır seviyesinde sabit tutacak kadar genişleteceğini duyurmuştu. Bu adım, ekonomik istikrarı korumak ve finansal piyasalarda belirsizliği azaltmak amacıyla atılmış önemli bir adım olmuştur (Kuzucu, 2022: 267). BoJ, sınırsız miktarda devlet tahvili alımına ve yıllık 12 trilyon yen değerinde borsa yatırım fonları (Exchange-traded fund, ETF) ile yıllık 180 milyar yen değerinde Japon Gayrimenkul Yatırım Fonları (Japan real estate investment trusts, J-REIT) alımına devam edeceğini duyurmuştur. Ayrıca, politika faizini negatifte tutmaya devam edeceğini ve Mart 2021 sonuna kadar her biri için 7,5 trilyon yen tutarında ek alım yapacağını açıklamıştır. Bu adımlar, BoJ'un bilançosunu belirgin bir şekilde artırarak, ekonomik istikrarı koruma ve finansal piyasalardaki likiditeyi artırma amacını taşımıştır (TCCSBB, 2020: 15).

Güney Kore, Covid-19 salgınının şokunu hafifletmek amacıyla piyasalara seri bir şekilde müdahale etmiş ve çeşitli politika tedbirleri almıştır. 24 Mart 2020'de, GSYH'nın %3'üne denk gelen 100 trilyon KRW (Kore Wonu) değerinde finansal istikrar planı kapsamında şirket teminatlı mali tahvil yükümlülükleri ve ticari senet satın almak için tahvil piyasası istikrar fonu kurulmuştur. Ayrıca, kamu kurumları tarafından doğrudan tahvil alımı yoluyla kurumsal tahvil ihracı için finansman sağlanmıştır. Bankalar, zaruri durumlarda mevcut fonu artırmak için tahvil piyasası istikrar fonuna katkıda bulunmuş, 22 Nisan 2020'de, KOBİ kredileri için ek fonlar sağlanmış ve özellikle ticari senet ve şirket tahvilleri satın almak için 10 trilyon KRW tutarında ek önlemler alınmıştır (Karakaya, 2022: 46).

BoE, Birleşik Krallık'ın devlet tahvillerini ve mali olmayan şirket tahvillerini 450 milyar sterline kadar genişletmiş, kamu ve özel sektör tahvilleri için 200 milyar sterlinlik bir alım başlatmış ve daha sonra bu miktarı 100 milyar sterlin daha artırma kararı almıştır. Diğer yandan, Brezilya'nın para otoritesi, geçmişteki yüksek enflasyon ve kırılgan mali yapı nedeniyle pandemi sırasında kendisine verilen geçici yetkiye rağmen devlet tahvili alımı yapmamıştır (Kuzucu, 2022: 269).

### 3.3. Ek Likidite Desteği

Pandemi kriziyle mücadele etmek için Merkez Bankaları, kredi ve borçların yeniden yapılandırılması, düşük faizli kredilerin sağlanması ve politika faiz oranlarında değişiklikler gibi çeşitli para politikalarını hızlı bir şekilde uygulamışlardır. Ayrıca, Uluslararası Para Fonu (International Monetary Fund, IMF), Avrupa Merkez Bankası (European Central Bank, ECB) ve Dünya Bankası (World Bank, WB) gibi uluslararası kuruluşlar da acil kredi destek paketlerini ilan ederek krizle mücadeleye katkıda bulunmuşlardır. Bu önlemler, ekonomik istikrarı korumak ve finansal sistemi desteklemek amacıyla alınmıştır (Küçüköğlü, 2021: 1278). Euro bölgesi ekonomilerinde de finansal istikrarın sağlanması ekonominin rahatlaması için küresel piyasalardaki gibi hisse senetleri, tahviller, döviz ve para piyasalarında beklenmedik ani fiyat hareketleri nedeniyle önemli derecede finansal ve mali sıkılaşıma yaşanmış, ECB, piyasalarda yaşanan olağandışı dalgalanma ve likidite daralmasıyla mücadele etmek için bankacılık ve finans sektöründe önlemler almıştır. Bu kapsamda, ECB Mart 2020'de 750 milyar Euro değerinde Pandemi Acil Durum Alım Programını (Pandemic emergency purchase programme, PEPP) başlatmış ve Haziran 2020'de programı 600 milyar Euro daha genişleterek toplamda 1 trilyon 350 milyar Euro'ya çıkarmıştır (Küçüköğlü, 2021: 1275).

FED, ECB, BoE ve BoJ gibi Merkez Bankaları, varlık alım programları başlatarak 2019 yılı sonuna kıyasla 2020 yılı itibarıyla toplamda 8,5 trilyon ABD doları büyüklüğünde bir bilanço genişlemesi gerçekleştirmiş, ekonomileri desteklemek ve finansal istikrarı sağlamak amacıyla uygulanan bu programlar önemli birer adım olmuştur (Karter, 2021: 681). FED, uluslararası piyasalarda geniş kapsamlı olarak kullanılan Amerikan dolarının, likidite daralmasını karşı önlem almak amacıyla diğer Merkez Bankalarıyla işbirliği sağlamış, bu çerçevede, döviz swap anlaşmalarını genişletmiş, swap faizlerini düşürmüş ve dolar borçlanma imkanını artırmıştır. Benzer şekilde, ECB de Euro'nun erişimini artırmak için Euro bölgesi dışındaki Merkez Bankalarına swap ve repo imkanları sağlamıştır (Kuzucu, 2022: 267).

TCMB, piyasa yapıcı bankalara sağladığı likidite imkanlarını artırmış, Açık Piyasa İşlemleri (APİ) ile sağlanan bu yeni likidite imkanları, bankaların reel sektöre sağladıkları ve sağlayacakları kredi miktarlarıyla ilişkilendirilmiştir. Sağlanan teşvikler ve artan işletme sermayesi talebiyle birlikte, reel sektörün Türk lirası borçlanma oranının 2020 yılından itibaren artış hızının devam etmesi öngörülmüştür (Karter, 2021: 687).

Güney Kore, finansal istikrarı sağlamak amacıyla önemli bir adım atmış ve 100 trilyon KRW değerinde bir finansal istikrar planını duyurmuştur. Bu plan çerçevesinde, kamu bankaları tarafından KOBİ'lere, küçük esnafa, orta ölçekli işletmelere ve büyük şirketlere genişletilmiş kredi imkanları sunulmuş, bu krediler arasında, kısmi ve tam acil krediler de yer almış, ayrıca kredi yükümlülüklerinin teminatlandırılması da sağlanmıştır. Esnaf ve KOBİ'lere düşük faiz oranı (%1.5) ile likidite desteğini artırmak için kredi imkanları sunulmuş ve bu segmentlere uygun finansman ürünleri hakkında bilgilendirme yapılmıştır. Ayrıca, bankalar ve Kredi Garanti Kurumları arasında yakın iş birliği içine girilmiş ve gerekli kredilerin hızlı bir şekilde sağlanması için aktif bir rol üstlenilmiştir. Bu iş birliği sayesinde, kredi başvurularının alınması ve kredilerin incelenmesi sürecinde Kredi Garanti Kurumlarına etkin bir şekilde destek sağlanmıştır (Karakaya, 2022: 46-49).

RBI, piyasada likidite açığını önlemek amacıyla uzun vadeli repo işlemleriyle GSYH'nin %4'üne kadar likidite sağlamıştır (TCCSBB, 2020: 20). Avrupa Birliği Komisyonu, ECB'nin pandemi kaynaklı ekonomik belirsizliklere karşı para politikasını desteklemek amacıyla mart ayında duyurduğu 750 milyar Euro'luk Pandemi Acil Durum Alım Programını (PEPP) genişletme kararı almış, daha sonra bu programın büyüklüğü 600 milyar Euro artırılarak toplamda yaklaşık 1,4 trilyon Euro'ya çıkarma kararı alınmıştır. ECB ayrıca, denetime tabi bankaların reel sektöre finansman sağlama kapasitelerini artırmak için geçici olarak sermaye ve likidite tamponlarını kullanmalarına izin vermiş, bankaların sermaye düzeyi, sermaye koruma tamponları ve likidite karşılama oranı uygulamalarında da esneklik sağlanmıştır (TCCSBB, 2020: 15).

Çin, bankacılık sektörüne likidite sağlamak ve finansal önlemler için APİ kapsamında ters repo ve orta vadeli borç verme imkanlarını kullanmıştır (Gökdemir, 2023: 8).

Salgından en çok etkilenen ülkelerden olan İtalya da koronavirüsle mücadele destek paketi açıklamış, bu paket kapsamında, tüm borç ve ödemeler salgın boyunca ertelenmiştir. Ayrıca iç piyasaya yönelik 200 milyar Euro ve ihracata yönelik 200 milyar Euro olmak üzere toplam 400 milyar Euro acil likidite kaynak ayrılmıştır (TİM, 2020: 9).

BoJ, yıllık enflasyonun %2 hedefinin üzerinde kalması ve istikrarlı bir tablo göstermesi durumunda parasal tabanı genişletmeye devam edeceğini duyurmuş, ayrıca, kurumsal borçlara teminat olarak kredi sağlamak amacıyla sıfır faiz oranıyla 1 yıla kadar vadeli yeni bir operasyon başlatma kararı almıştır (TİM, 2020: 14).

BoE, reel ekonomiyi desteklemek amacıyla özellikle KOBİ'lere yönelik ek teşviklerle beraber yeni bir Vadeli Fonlama Planı başlatmıştır. Uygulanan bu plan, 6 Nisan 2021'den itibaren Kurtarma Kredisi Planı ile değiştirilen Covid-19 Büyük İşletme Kesintisi Planı ve Geri Dönme Kredisi Planı ile işletmelere toplam 352 milyar Euro likidite destek ve kredi garantisi sağlamıştır. Ayrıca, banka mevcut sterlin likidite imkanlarını tamamlamak için bir Koşullu Vadeli Repo imkânı da etkinleştirmiştir (Karakaya, 2022: 38). Avusturalya, Covid-19 pandemisiyle mücadelede G20 ülkeleri arasında en başarılı performansa sahip ülke olarak dikkat çekmiş, ada ülkesi olmasının avantajını kullanarak sınırlarını erken kapatarak ve federal hükümet tarafından sağlanan desteklerle etkili bir mücadele yürütmüştür.

### 3.4. ABD Doları Takas (SWAP) Anlaşmaları

FED, finansal sistemin olası tahribatını önlemek amacıyla kapsamlı önlemler almıştır. Bu önlemler kapsamında, finansal piyasalardaki kredi aracılık faaliyetinin etkin bir şekilde sürdürülmesini sağlamak için hazine bonosu alımlarına başlamıştır. Ayrıca, Amerikan dolarının uluslararası piyasalarda yaygın olarak kullanılması nedeniyle likidite sıkıntısını önlemek için diğer Merkez Bankalarıyla döviz swap anlaşmalarını genişletmiş, swap faizlerini

düşürmüş ve repo imkanları sunarak Amerikan doları borç alma imkânı sağlamıştır. FED, daha önce 2008 ve 2011 krizlerinde olduğu gibi uluslararası swap hatlarını kullanma kararı almıştır (Kuzucu, 2022: 267). Ayrıca, FED, ABD doları cinsinden fon ihtiyacını karşılamayı hedefleyip bazı Merkez Bankaları ve uluslararası para otoritelerine geçici repo imkanı sunarak finansal sistemde likidite sağlamayı amaçlamıştır.

Güney Kore'de, finansal sistemdeki döviz likiditesini arttırmak ve ekonomik stabilitenin korunmasını sağlamak amacıyla FED ile altı aylık para takas anlaşması gerçekleştirilmiştir. Bu, bankaların döviz türev pozisyonlarında daha fazla esneklik sağlamak için alınan bir karar olmuştur. Ayrıca, bu anlaşma kapsamında mevduat dışı döviz vergisinin geçici olarak kaldırılması ve döviz likidite oranının geçici olarak düşürülmesi gibi önlemler alınarak döviz likiditesinin genişletilmesi amaçlanmıştır (Karakaya, 2022: 46-49).

Türkiye'de, para politikasında bankacılık sisteminin bilanço içi ve dışı döviz pozisyonu, genellikle bankaların Türk lirası fonlama ihtiyacına bağlı olarak belirlenmektedir. Bankacılık sistemi, genellikle döviz likiditesinin fazla olması sebebiyle Türk lirası likidite ihtiyacını çoğunlukla para takası işlemleriyle finanse edebilmektedir. Bankalar, TCMB ile ABD doları karşılığı swap ihaleleri yapmakta ve bu işlemler Euro ve altın karşılığı da düzenlenmektedir (Karter, 2021: 6898).

#### **4. SALGIN DÖNEMİNDE TÜRKİYE'DE KAMU BANKALARININ UYGULAMIŞ OLDUKLARI TEDBİRLERİN DEĞERLENDİRİLMESİ**

##### **4.1. TCMB ve Kamu Bankalarının Uygulamaları**

Covid-19 pandemisi hem arz hem de talep yönlü şokları içeren bir kriz olarak tanımlanabilmektedir. Bu krizle birlikte, Merkez Bankaları hızla harekete geçerek parasal genişleme politikalarını uygulamaya başlamışlar, bu politikalar çerçevesinde çeşitli para politikası araçları kullanılmıştır (Kuzucu, 2022: 265).

Covid-19 krizi sırasında TCMB de, kamu bankaları aracılığıyla salgından etkilenen bireylere ve işletmelere düşük faizli kredi sağlamak için para politikası araçlarını kullanmıştır. Bu politika, kamu bankalarının diğer özel bankalara göre daha hızlı bir şekilde kredi ve aktif büyümesine yol açmıştır. 2020'de, sektör aktiflerinin yaklaşık %40'ını oluşturan kamu bankalarının sermayelerinin artırılması ve BDDK'nın geçici olarak aldığı tedbirler, bankaların özellikle aktif kalitesi ve likidite açısından rahatlamasına yardımcı olmuştur (TCMB, Kasım 2020: 60).

Bu tedbirlerin arasında, finansal istikrarın desteklenmesi amacıyla bankalara Türk lirası ve yabancı para likidite yönetiminde esneklik sağlanarak öngörülebilirliğin artırılması, reel sektöre kredi akışının kesintisiz devamının temin edilmesi için bankalara hedefli ilave likidite imkanları tanınması ve ihracatçı firmaların nakit akışının desteklenmesi için reeskont kredi düzenlemeleri gibi önemli adımlar atılmıştır (TCMB, Kasım 2020: 4-8).

Ayrıca, Türk lirası cinsinden kredi kartı işlemlerinde uygulanacak aylık azami akdi faiz oranı %1,25, yabancı para cinsinden kredi kartı işlemlerinde uygulanacak aylık azami akdi faiz oranı %1,00 olarak belirlenmiştir. Türk lirası cinsinden kredi kartı işlemlerinde uygulanacak azami gecikme faiz oranı ise %1,55, yabancı para cinsinden kredi kartı işlemlerinde uygulanacak aylık azami gecikme faiz oranı %1,30 olarak tespit edilmiştir. Bu önlemlerle birlikte, bankalara kredi limiti olan firmaların ve bireylerin likidite ve nakit ihtiyaçlarının hızlı bir şekilde karşılanması ve kredi limitlerinin kullanılmasında kısıtlamaya gidilmemesi kararlaştırılmış, ayrıca kredi geri çağırma ve mevcut kredi limitini kullandırmama gibi uygulamalardan kaçınılması tavsiye edilmiştir (BDDK, 2020: 20-21).

Bankacılık sektöründe mali yapıyı daha şeffaf hale getirmek ve riskleri etkin bir şekilde yönetmek amacıyla BDDK çeşitli politikalar uygulanmıştır. Özellikle, kredi ödemelerindeki gecikmelere esneklik sağlanarak sorunlu kredilerin sınıflandırmasındaki süre 90 günden 180 güne çıkarılmış, bankaların sermaye yeterlilik oranlarının hesaplanmasında ve yabancı para net genel pozisyon oranlarının belirlenmesinde alternatif yöntemler kullanılmıştır (Kuzucu, 2022: 274). Bu süreçte, nakit akışı sıkıntısı çeken bireyler ve işletmelere kredi ödemelerinde kolaylık sağlanmış ve kredi kartı borçlarının ötelenmesine imkan sağlanmıştır. Türkiye, pandemi krizi sırasında ekonomik faaliyetleri desteklemek için öncelikle kredi genişlemesi gibi mekanizmalara ağırlık vermiş, doğrudan mali transferlerden daha az ölçüde yararlanma yoluna gitmiştir.

Kamu bankaları, pandeminin olumsuz ekonomik etkilerini azaltmak ve ekonomik daralmayı engellemek amacıyla çeşitli kredi kampanyaları düzenlemiş, bu kampanyaların sonucunda nakdi kredi hacminde önemli bir artış yaşanmıştır. Ayrıca, BDDK tarafından 1 Mayıs 2020'de bankalara aktif rasyosu yükümlülüğü getirilmiş, bu yükümlülük, bankaların toplam mevduatlarını kredi olarak kullanarak ekonomiye likidite sağlamayı amaçlamıştır (Beybur & Çetinkaya, 2021: 187-188). Özellikle kamu bankaları genişleyici para politikasını

benimseyen TCMB'yi desteklemiş, talebin artırılması politikası çerçevesinde, kamu bankalarının kredi verme kapasiteleri genişletilmiş ve bunun sonucunda kredi miktarlarında artışlar gözlenmiştir. Bu adımlarla, ekonominin canlanması ve talebin artması yoluyla pandeminin olumsuz etkilerinin azaltılması hedeflenmiştir. Bu şekilde, finansal sistem aracılığıyla ekonomiye daha fazla likidite sağlanarak işletmelerin ve bireylerin kredi erişimlerinin kolaylaştırılması sağlanmıştır.

#### 4.2. Pandemi Sürecinde Türkiye’de Dijital Bankacılıkta Yaşanan Gelişmeler

2000'li yılların başında Türk Bankacılık Sektöründe borcun vadesini öteleme eğilimi artmış ve özellikle 2001 krizinin ardından bu eğilim belirleyici hale gelmiştir. Bu dönemde, müşteri talepleri göz önünde bulundurularak, bankalar kurumsal yapılarını yeniden şekillendirmişlerdir. Banka müşterilerinin artan iş hacmi ve talepleri, yeni ödeme sistemlerinin ortaya çıkmasına neden olmuş, bu durum, internet ve diğer elektronik ortamlar aracılığıyla yapılan ödemelerin artmasını tetiklemiş ve daha cazip hale gelerek bankaları yeni iletişim teknolojilerine yatırım yapmaya yönlendirmiştir. İnternet bankacılığı, hesap bakiyesi ve takibi, para transferleri, ödemeler, kredi kartı işlemleri, döviz alım/satımı, yatırım işlemleri, hisse senedi alım/satımı, hesap açma ve talimat verme gibi yaklaşık 200 farklı işlemi gerçekleştirmek için müşterilere kolaylık sağlamışlardır. Bu şekilde, bankacılık hizmetlerine erişim daha hızlı ve daha kolay gerçekleşmiştir (Fırat, 2013: 604-605).

Küresel Covid-19 salgını, Türkiye’de dijital bankacılık uygulamalarını da etkilemiştir. Dijital bankacılık uygulamaları, internet bankacılığı ve mobil bankacılık gibi finansal ve finansal olmayan uygulamaları kapsamaktadır. Salgının etkisiyle birlikte, 2020’den sonra dijital uygulama kullanımında belirgin bir artış gözlemlenmiştir (Atukalp, 2023: 157).

Türkiye Bankalar Birliği (TBB) verilerine göre, 2019’un son çeyreği ile 2020’nin üçüncü çeyreği arasındaki dönemde Türkiye’deki banka sayısı, şube sayısı, çalışan sayısı ve internet ile mobil bankacılığı kullanan aktif müşteri sayısındaki değişimler çeyreklik bazda incelenmiştir (Küçüköğlü, 2021: 1258).

Tablo 2: Türk Bankacılık Sektöründe Banka, Şube, Çalışan ve Online Müşteri Sayısı

Online Bankacılık	Aralık 2019 (4. Çeyrek)	Mart 2020 (1. Çeyrek)	Haziran 2020 (2. Çeyrek)	Eylül 2020 (3. Çeyrek)
Banka Sayısı	47	48	48	48
Şube Sayısı	10.199	10.161	10.132	10.079
Çalışan Sayısı	188.837	188.164	187.490	186.654
Online Bankacılık (Aktif Müşteri)	Aralık 2019 (4. Çeyrek)	Mart 2020 (1. Çeyrek)	Haziran 2020 (2. Çeyrek)	Eylül 2020 (3. Çeyrek)
Bireysel Müşteri Sayısı	51.014	53.981	59.076	60.038
Kurumsal Müşteri Sayısı	2.143	2.343	2.611	2.702
Toplam Müşteri Sayısı	53.157	56.324	61.687	62.741

Kaynak: Küçüköğlü, 2021: 1285.

COVID-19 önlemleri kapsamında, kamu çalışanlarının uzaktan çalışabilmesi için gerekli teknolojik altyapı sağlanmış ve bakımı düzenli olarak takip edilmiştir. Ayrıca, personelin uzaktan erişim sertifikaları güncellenerek güvenli bir şekilde uzaktan çalışmaları sağlanmıştır. Kurum çalışanlarının uzaktan iletişim ve işbirliği yapabilmesi için video konferans uygulamaları kullanılmış ve bu uygulamaların toplantı, eğitim ve webinar gibi modüllerinin kapasiteleri artırılmıştır (BDDK, 2020: 69).

#### 5. SONUÇ

2019 yılının son çeyreğinde ortaya çıkan ve 2020 yılının mart ayında pandemiye dönüşen Covid-19 salgını Dünya genelini etkilemiştir. Pandeminin küresel çapta şok etkisinin en yıkıcı yanı yaşanan ölümler olmuştur. Bu yaşanan olumsuz durum önemli belirsizlikler ortaya çıkarmış ve Dünya’da birçok alanda çöküntüye sebep olmuştur. Pandemiyle birlikte ortaya çıkan olumsuz seyir küresel ekonomilerin üzerinde önemli belirsizliklere yol açmış, bu belirsizlik korku ve panik havasına evrilmiş, tüm bu olumsuz gelişmeler ülkelerin ekonomilerinde

üretimde, istihdam ve milli gelirden düşüş olarak kendini göstermiştir. Yaşanan bu olağanüstü olaylar küresel talebi azaltmış, üretimde aksamalara neden olmuş ve ekonomileri durgunluğa sürüklemiştir.

G20 ülkelerinin salgınla mücadelede uyguladığı para politikası önlemleri çeşitli alanlarda yoğunlaştı. Salgının tüm dünyada pandemi durumuna dönüşmesinden sonra, ekonomik koşulların bozulmasıyla ekonomilerde ortaya çıkan daralmalar ülkelerin para politikalarında tahminleri zorlaştırmıştır. Ekonomide otaya çıkacak durumu tahmin etmek zorlaşmış, belirsizlik ortamı kendini iyiden iyiye göstermiştir. Belirsizliğin artması sermaye hareketlerini güvenli liman arayışlarına itmiş, her ülkenin ekonomisi büyük zorluk yaşadığı için güvenli liman bulmak pek kolay olmamıştır. 2020 yılının başlarından itibaren birçok ülkede hisse senedi ve tahvil piyasalarında düşüş ve kredi riskinde artış ortaya çıkmıştır. Varlık fiyatlarındaki düşüşle birlikte varlık satışı artmış, likidite ihtiyacı salgın boyunca devam etmiştir. Önce insan hayatını koruma amacıyla alınan tedbirlerin ortaya çıkardığı olumsuzluk ve finansal koşullardaki sıkışma, büyük ölçekli kamu müdahaleleri ile ortadan kaldırılabilecek noktaya gelmiştir. Finansal koşullardaki sıkışmayı aşma noktasında hükümetler mali teşvik paketleri uygularken Merkez Bankaları da daha önce pek görülmemiş önlemlere başvurmuşlardır. G20 ülkelerinin Merkez Bankaları pandemi krizine ilk tepki olarak genişleyici para politikaları olanağı sunarak faiz oranlarında indirime gitme kararı almışlardır. Uygulanan faiz indirimini, varlık alımları, likidite sağlanması ve kredi destekleri gibi bir dizi politika araçları takip etmiştir. FED, likidite sıkıntısını önlemek için diğer Merkez Bankalarıyla döviz swap anlaşmalarını genişletmiş, swap faizlerini düşürmüş ve repo imkanları sunarak Amerikan doları borç alma olanağını artırmıştır. ECB, piyasalarda yaşanan olağandışı dalgalanma ve likidite daralmasıyla mücadele etmek için bankacılık ve finans sektöründe önlemler alma yoluna gitmiştir. Bu kapsamda, ECB, Euro değerinde Pandemi Acil Durum Alım Programını (PEPP) başlatmış, bununla birlikte Euro'ya kolay ulaşım imkanını arttırmak için diğer Merkez Bankalarına swap ve repo imkanı sunmuştur. Pandeminin başlamasıyla birlikte G20 ülkeleri içerisinde yer alan gelişmekte olan ülkeler de finansal hareketliliklerinde azalış gözlemlenmiştir. Türkiye, genişletici para politikasında çok fazla gevşeme yöntemi denemiştir ve bu sayede pandemiye rağmen 2020'de pozitif büyüme sağlamıştır. TCMB, para politikası kurulu kararları neticesinde yaşanan politika faizindeki artışlar ve ABD doları, Euro'da yaşanan düzenli artışlara bağlı olarak altın baskı altına alınmıştır. Merkez Bankasının, politika faizini %15 düzeyine çıkarması sonucunda sıkılaştırıcı para politikası uygulamasına karar verilerek genişletici para politikasından vazgeçilmiştir. Bu adımlar, ekonomik istikrarı korumak ve finansal piyasalarda belirsizliği azaltmak amacıyla atılmış önemli adımlardır.

Ülkeler genel olarak değerlendirildiğinde, pandemiyle mücadelede en başarılı G20 ülkesi olarak Avustralya ve ikinci olarak Japonya olmuş, bu ülkeleri Almanya ve Güney Kore takip etmiştir. Covid-19 pandemi krizi ile mücadelede de en başarısız G20 ülkeleri ise Brezilya, Meksika ve Güney Afrika olarak belirlenmiştir. Diğer krizlerde olduğu gibi pandemi krizi de, Merkez Bankalarının zamanında normalleşmeye yönelik olağanüstü önlemler alarak uygulamalarının önemini bir kez daha göstermiştir. Para politikası uygulamaları ekonominin toparlanması için önemli katkı sağlasa da tek seferlik özel kararlar yerine para politikasının gerçek bir orta ve uzun vadeli politikalarla desteklenmesi finansal istikrar için piyasalara daha fazla güven verecektir.

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## Havayolu Taşımacılığı ve Ekonomik Büyüme: E7 Ülkeleri Örneği

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**Özet:** Havacılık sektörü, dünyada önemli sektörlerden biridir. Havacılık sektörü, ülkelerde ekonomik büyümede kilit rol oynamaktadır. Bu çalışmada 1995-2021 dönemine ilişkin E7 Ülkelerinde (Çin, Hindistan, Brezilya, Meksika, Endonezya, Rusya ve Türkiye) yıllık veriler kullanılarak havayolu taşımacılığı ile ekonomik büyüme arasındaki ilişki panel veri yöntemi ile araştırılmıştır. Çalışmada havayolu taşımacılığını temsilen yolcu sayısı ve yük miktarı verileri bağımsız değişken olarak ele alınmıştır. Çalışma sonucunda havayolu ile taşınan yük miktarının ekonomik büyümeye katkısının istatistiksel açıdan anlamsız olduğu belirlenmiştir, yolcu sayısının ekonomik büyümeye katkısı ise pozitif ve istatistiksel olarak anlamlıdır. Çalışmanın sonucuna göre E7 ülkeleri için 1995-2021 döneminde yolcu sayısındaki % 1'lik artış ekonomik büyümeyi % 0.75 oranında arttırmıştır.

**Anahtar Kelimeler:** Havayolu taşımacılığı, ekonomik büyüme, panel veri analizi.

**Abstract:** The aviation industry is one of the important sectors in the world. The aviation sector plays a key role in economic growth in countries. In this study, the relationship between air transportation and economic growth was investigated with the panel data method, using annual data in the E7 Countries (China, India, Brazil, Mexico, Indonesia, Russia and Turkey) for the period 1995-2021. In the study, the number of passengers and the amount of cargo data representing air transportation were considered as independent variables. As a result of the study, it was determined that the contribution of the amount of cargo transported by air to economic growth was statistically insignificant, while the contribution of the number of passengers to economic growth was positive and statistically significant. According to the results of the study, a 1% increase in the number of passengers in the 1995-2021 period for E7 countries increased economic growth by 0.75%.

**Key Words:** Airline transportation, economic growth, panel data analysis.

### 1. GİRİŞ

Havayolu taşımacılığı; emniyet ve güvenlik, hız, konfor, imaj ve ulaşılabilir nokta sayısı bakımından diğer taşımacılık modlarına göre önemli avantajlar sunabilmektedir. Ayrıca, ulusal ve uluslararası piyasalarda görülen yoğun rekabet, bilgi ve iletişim teknolojisi altyapısındaki gelişmeler, tüketici davranışlarındaki farklılaşmalar ve yeni rekabet gücü arayışları havayolu taşımacılığının önemini gittikçe arttırmaktadır. Bu sebeple arz ve talep noktasında etkili olan faktörler, havayolu taşımacılığına olan ilgiyi artırmakta olup, sektörün ekonomik anlamda yarattığı katma değeri pozitif bir biçimde etkilemektedir (Altuntaş ve Kılıç, 2020: 188).

Havayolu taşımacılığını makro düzeyde değerlendirdiğimizde bu sektörün önemli çarpan etkileri olduğu bilinmektedir. Bu açıdan küresel istihdama ve GSYH'ye genel katkısının doğrudan etkisinden daha fazla olduğu görülmektedir. Havacılık sektöründeki şirketler, çeşitli nitelikteki meslek gruplarını barındıran çok sayıda istidam yaratabilmektedir. Havayolu taşımacılığı ve ekonomik büyüme ilişkisi havacılığın ekonomiye doğrudan ve dolaylı katkıları sebebiyle ve ekonomik faaliyet döngüsünü arttırabilmesi için birbiriyle etkileşim halindedir (Dimitriou vd., 2017: 5252). Havacılık sektörü ekonomik büyüme açısından kilit sektörlerden biridir.

Bu çalışmanın amacı, E7 ülkelerindeki hava taşımacılığının ekonomik büyümeye etkisini araştırmaktır. Bu amaçla, çalışmanın kalan kısmı şu şekilde devam etmektedir. İkinci bölümde literatüre yer verilmiştir. Üçüncü bölümde veri seti, metodoloji ve bulgular yer almaktadır. Son kısımda ise sonuç ve değerlendirme sunulmuştur.

### 2. LİTERATÜR

Havayolu taşımacılığı ve ekonomik büyüme ilişkisine dair seçilmiş çalışmaların özeti Tablo 1'de sunulmuştur. Tablolar aşağıda görüldüğü gibi çalışmada yer alacaktır. Literatürde havayolu taşımacılığı ve ekonomik büyümeye ilişkin çalışmaların farklı dönemler, farklı yöntemler ve ülke/ülke grupları ile gerçekleştirildiği görülmüştür.

Tablo 1: Seçilmiş Literatür Özeti

Yazar/Yıl	Ülke/Ülke Grubu	Dönemi	Yöntem	Sonuç
Irwin ve Kasarda (1991)	ABD	1950-1980	Regresyon Analizi	Havayolu genişlemenin istihdam üzerindeki etkisi pozitifdir.
Ishutkina ve Hansman (2008)	139 Ülke	1975-	Yatay kesit analiz	Hava seyahati ile GSYH

2005				arasında korelasyon vardır.
Chang ve Chang (2009)	Tayvan	1974-2006	Granger nedensellik	Hava kargo genişlemesi ile ekonomik büyüme arasında uzun vadeli bir denge ve çift yönlü bir ilişki olduğunu göstermektedir.
Fernandes ve Pacheco (2010)	Brezilya	1966-2006	Granger nedensellik	Brezilya’da ekonomik büyümeden hava taşımacılığına doğru kısa vadede tek yönlü Granger nedensellik ilişkisi vardır.
Marazzo vd. (2010)	Brezilya	1966-2006	Johansen eşbütünleşme ve Granger nedensellik	Ekonomik büyüme ile havayolu yolcu sayısı büyümesi eşbütünlüktür. Ekonomik büyümedeki olumlu değişiklik yolcu sayısı üzerinde olumlu etki yapmaktadır.
Yao ve Yang (2012)	Çin	1995-2006	Genelleştirilmiş Momentler	Havayolu taşımacılığı ile ekonomik büyüme arasındaki ilişki pozitifdir.
Button ve Yuan (2013)	ABD	1990-2009	Granger nedensellik	Havayolu taşımacılığında ekonomik büyümeye doğru tek yönlü nedensellik ilişkisi vardır.
Chi ve Baek (2013)	ABD	1996-2011	ARDL	Hem havayolu hem de hava kargo miktarı ile ekonomik büyüme arasında uzun dönemde pozitif ilişki vardır.
Mukkalo ve Tervo (2013)	13 Avrupa ülkesi	1991-2010	Granger nedensellik	Çevre bölgelerde hava trafiğinden bölgesel büyümeye doğru nedensellik tespit edilmiştir.
Stephans vd. (2014)	Nijerya	1985-2012	Regresyon analizi	Havacılık sektörünün ekonomik büyümeye katkısı azdır.
Van De Vijver vd. (2014)	Asya Pasifik	1980-2010	Granger nedensellik	Hava yolcu trafiği ticarete katkı sağlamaktadır. Ticaretin de hava yolcu trafiğine katkısı mevcuttur.
Anfofum vd. (2015)	Nijerya	1981-2012	Granger nedensellik	Hava taşımacılığının ekonomik büyüme üzerinde olumlu etkisi bulunmaktadır. Hava taşımacılığında ekonomik büyümeye doğru tek yönlü nedensellik ilişkisi vardır.
Baker vd. (2015)	Avustralya	1985-2011	Eşbütünleşme ve Granger nedensellik	Ekonomik büyüme bölgesel havayolu taşımacılığı üzerinde etkilidir.
Baltacı vd. (2015)	Türkiye	2004-2011	İki aşamalı EKK	Aktif hava alanlarının sayısı ve trafik sıklığının artması ekonomik büyüme üzerinde olumlu etkisi bulunmaktadır.
Hu vd. (2015)	Çin	2006-2013	Panel eş bütünleşme, sistem genelleştirilmiş moment yöntemi ve panel vektör hata düzeltme modeli	Havayolu yolcu trafiğindeki % 1’lik artış ekonomik büyüme üzerinde % 0.943’lük artış yarattığını göstermiştir.
Mehmood vd. (2015)	Asya ülkeleri	1970-2014	Granger nedensellik	Havayolu taşımacılığı ülkelerin ekonomik büyümesinde önemli bir role sahiptir.



Hakim ve Merkert (2016)	Güney Asya ülkeleri	1973-2014	Pedroni/Johansen eş bütünleşme	Ekonomik büyümeden hem havayolu yolcu hem de kargo trafiğine doğru tek yönlü Granger nedensellik ilişkisinin varlığına rastlanmıştır.
Kibritçi Artar vd. (2016)	Türkiye	1980-2014	OLS	Ekonomik büyüme ile hava taşımacılığı arasında anlamlı ilişki bulunmuştur.
Bal vd. (2017)	Türkiye	1967-2015	Granger nedensellik, Vektör hata düzeltme modeli	Uzun dönemde havacılık sektörünün ekonomik büyümeyi tek yönlü ve pozitif etkilediği sonucuna ulaşılmıştır.
Küçükönal ve Sedefoğlu (2017)	28 OECD Ülkesi	2000-2010	Panel Veri Analizi	Ekonomik büyümeden hava taşımacılığına doğru tek yönlü nedensellik ilişkisi tespit edilmiştir.
Brida vd. (2018)	Uruguay ve Arjantin	1970-2011	Hata düzeltme modeli ve Granger nedensellik	Her iki ülke için de ekonomik büyümeden hava taşımacılığına doğru tek yönlü nedensellik ilişkisi söz konusudur. Her iki ülkede de hava taşımacılığı ile ekonomik büyüme arasında uzun vadeli bir ilişki tespit edilmiştir.
Kiracı (2018)	Türkiye	1960-2015	Toda ve Yomamoto nedensellik ve Hatemi-J asimetrik nedensellik analizi	Havayoluna olan talep ile ekonomik büyüme arasında anlamlı nedensellik ilişkisinin olduğu tespit edilmiştir.
Lögün vd. (2018)	20 Ülke	1993-2016	Dumitrescu ve Hurlin panel nedensellik	Ekonomik büyümenin hava yolcu sayısı ve hava yük hacminin nedeni olduğu tespit edilmiştir.
Nasution vd. (2018)	Endonezya	1990-2017	Vektör Hata Düzeltme Modeli Granger nedensellik	Hava taşımacılığı vergisi ile ekonomik büyüme arasında bir ilişki vardır.
Sezer (2018)	BRICS-T	1993-2017	Dumitrescu ve Hurlin panel nedensellik ve Bootstrap Granger nedensellik analizi	BRICS ülkeleri ve Türkiye için havayolu yük taşımacılığı ve ekonomik büyüme arasında nedensel bir ilişkinin olmadığını ortaya koymuştur.
Gümüş Akar vd. (2019)	Türkiye	1980-2015	Kaldıraçlı Bootstrap Analizi	Havacılık Liberalizasyon İndeksinden ekonomik büyümeye doğru 2005, 2008 ve 2012 yıllarında nedensellik ilişkisi bulunmuştur.
Adedoyin Balsalobre-Lorente (2020)	ABD	1981-2017	Johansen Eş Bütünleşme ve DiksPanchenko nedensellik analizi ve FMOLS, DOLS ve CCR testleri	Hava taşımacılığı milli geliri doğrudan ve dolaylı olarak önemli bir katkı sağlamaktadır.
Eren vd. (2020)	Türkiye	1980-2018	Johansen eş bütünleşme ve Granger nedensellik	Ekonomik büyümeden hava yolu yolcu sayısı talebine doğru tek yönlü bir nedensellik ilişkisi mevcuttur. Uzun dönemde değişkenler arası pozitif bir ilişkinin

				varlığına da rastlanmıştır.
Altuntaş ve Kılıç (2021)	Türkiye	1960-2017	ARDL ve Toda-Yamamoto nedensellik	Uzun dönemde yolcu ve yük trafiğinin ekonomik büyüme üzerinde istatistiksel olarak anlamlı bir etkisi bulunmamıştır. Kısa dönemde ise yolcu trafiğinin ekonomik büyümeyi artırıcı yönde bir etkisi bulunmaktadır. Nedensellik analizi sonuçları yolcu trafiği ile gayrisafi yurtiçi hasıla arasında çift yönlü bir nedensellik ilişkisi olduğunu ortaya koymuştur.
İslamoğlu (2021)	Türkiye	1960-2019	Hatemi-J (2008) çift kırılmalı eş bütünleşme	Havayolu taşımacılığı ile ekonomik büyümenin eş bütünleşik olduğu yani uzun dönemde birlikte hareket ettiği sonucuna ulaşılmıştır. Uzun dönem katsayı tahmini sonucuna göre; yolcu sayısındaki %1'lik artışın ekonomik büyümeyi %0.249 arttırdığı, yük taşımacılığındaki %1'lik artışın ise ekonomik büyümeyi %0.440 arttırdığı sonucu elde edilmiştir.
Ali vd. (2023)	BRICS	1993-2019	Panel vektör hata düzeltme modeli ve Dumitrescu ve Hurlin panel nedensellik	Hava yolcularından ve hava taşımacılığında ekonomik büyümeye doğru uzun vadeli tek yönlü nedensellik tespit edilmiştir. Hava taşımacılığında ekonomik büyümeye doğru tek yönlü kısa vadeli nedensellik ilişkisi bulunmuştur.
Uçar vd. (2024)	BRICS-T	1993-2021	Genelleştirilmiş en küçük kareler yöntemi	Havayolu ile taşınan yük miktarının ekonomik büyüme üzerinde pozitif, havayolu ile taşınan yolcu sayısının ise ekonomik büyüme üzerinde negatif etkili olduğu bulunmuştur.

### 3. VERİ SETİ, METODOLOJİ VE BULGULAR

#### 3.1. Veri Seti

Bu çalışmada havayolu taşımacılığı ile ekonomik büyüme arasındaki ilişki E7 ülkeleri için analiz edilmiştir. E7 ülkeleri şeklinde ifade edilen ülkelerin (Çin, Hindistan, Brezilya, Meksika, Endonezya, Rusya ve Türkiye) 1995-2021 yıllarına ilişkin veri seti Dünya Bankası veri tabanından elde edilmiştir. Çalışmada bağımlı değişken olarak ekonomik büyüme için kişi başına düşen GSYH (cari ABD \$) ele alınmıştır. Bağımsız değişkenler olarak yük miktarı (Havayolu ile taşınan yük miktarı, milyon ton/km) ve yolcu sayısı (Havayolu ile taşınan yolcu sayısı, milyon kişi) değişkenleri ele alınmıştır. Çalışmada kullanılan analizler STATA ekonometrik analiz paket programı ile yapılmıştır. Değişkenlerin doğal logaritmaları alınmıştır.

Araştırmada tahmin edilen model aşağıdaki şekilde kurulmuştur:

$$LGSYH_{it} = \alpha_{it} + \beta_1 LYUK_{it} + \beta_2 LYOLCU_{it} + u_{it} \quad (1)$$

Burada  $i$ ; çalışmanın yatay kesitlerini ve  $t$ ; zamanı ifade etmektedir.

**Tablo 2:** Tanımlayıcı İstatistikler

Değişken Adı	Gözlem Sayısı	Ortalama	Standart Sapma	Minimum	Maksimum
LGSYH	189	8.2517	1.0088	5.9232	9.6787
LYUK	189	7.2234	1.1536	5.0492	10.1422
LYOLCU	189	17.6381	0.9589	15.8630	20.3071

### 3.2. Metodoloji ve Bulgular

Panel veri modeli, panel veri ile tahmin edilen regresyon modelidir. Bu yüzden regresyon modeli ile ifade edildiğinde söz konusu olan testler, fonksiyonel şekil, varsayımlar vb. durumlar panel veri modelleri için de ifade edilebilir (Güriş, 2015: 4). Mevcut çalışmada ekonomik büyüme ile hava taşımacılığı arasındaki ilişkinin tespiti için panel veri analizi kullanılacaktır.

Ekonometrik analizler gerçekleştirilirken değişkenler arasındaki yatay kesit bağımsızlığının göz önünde bulundurulması gerekmektedir. Yatay kesit boyutunun (N) küçük, zaman boyutunun (T) büyük olduğu panel modellerinde kesitler arasında önemli korelasyonlar oluşabilmektedir (Pesaran, 2004: 1). Yatay kesit bağımlılığını araştıran öncü test olarak, Breusch ve Pagan (1980) tarafından geliştirilen ve zaman boyutunun, yatay kesit boyutundan büyük olduğu (T>N) durumlarda kullanılan LM testi kullanılabilir.

Sabit etkiler modelinde birimler arası korelasyonu sınamaya yarayan bu test, her bir birim için kurulan eşbütünleşme ya da hata düzeltme modelinin kalıntıları arasında korelasyon olup olmadığını sınamak için kullanıldığı görülmektedir. Temel hipotez (Yerdelen Tatoğlu, 2020: 238):

$H_0: cov(u_{it}, u_{jt}) = \rho_{ij} = 0$  (tüm t'ler için  $i \neq j$ ) iken LM test istatistiği,

$$LM = \sum_{i=1}^{N-1} \sum_{j=i+1}^N (T\hat{\rho}_{ij}^2 - 1) \sim N(0,1) \quad (2)$$

**Tablo 3:** Yatay Kesit Bağımlılığı Test Sonuçları

CD Test	Test İstatistiği	Olasılık Değeri
LM <sub>1</sub> (Breusch-Pagan 1980)	78.44	0.0000
LM <sub>2</sub> (Pesaran 2004)	23.57	0.0000
LM Bias Adj.	6.671	0.0000

Tablo 3'ten elde edilen bulgular ışığında yatay kesit bağımlılığı test sonuçlarına göre temel hipotez reddedilmektedir, yatay kesit bağımlılığının olduğu sonucuna varılmaktadır. Yatay kesit bağımlılığının sınanmasından sonraki aşamada modelin homojenliği test edilmiştir.

Delta testi ile katsayıların homojen olup olmadıkları test edilmektedir. Çünkü, heterojen olan katsayıların homojenlik varsayımı üzerinden yapılması halinde elde edilen sonuçlar yanıltıcı olabilmektedir (Pesaran ve Yamagata, 2008: 51). Pesaran ve Yamagata (2008) homojenlik testine göre;

$H_0$ : Eğim katsayıları homojendir.

$H_1$ : Eğim katsayıları heterojendir.

**Tablo 4:** Modele Ait Homojenlik Testi Sonuçları

	İstatistik Değeri	Olasılık Değeri
Delta_tilde	11.168	0.0000
Delta_tilde adj	12.100	0.0000

Elde edilen sonuca göre, eğim parametreleri yatay kesitler arasında değişmekte olup katsayılarının heterojen olduğu belirlenmiştir.

Değişkenler arasında yatay kesit bağımlılığı tespit edildiğinden birim kök analizi ikinci nesil birim kök testlerinden Pesaran (2006) tarafından geliştirilen CADF (Cross-sectionally Augmented Dickey-Fuller) birim kök testi ile gerçekleştirilmiştir. Buna ilişkin sonuçlar Tablo 5'te sunulmuştur. Elde edilen sonuçlara göre tüm değişkenler düzey değerinde anlamlıdır.

Tablo 5: CADF Panel Birim Kök Testi Sonuçları

Değişkenler	Düzye Değeri Test İstatistikleri
LGSYH	-2.832**
LYUK	-2.869**
LYOLCU	-2.348*

Not: \*, \*\*, \*\*\* sırasıyla yüzde 10, yüzde 5 ve yüzde 1 anlamlılık düzeyini göstermektedir. Kritik değerler şunlardır: Yüzde 10; -2.210, yüzde 5; -2.330, yüzde 1; -2.570.

E7 ülkelerine üzerine yapılan bu çalışmada, ki-kare olasılık değerinin 0,05'ten büyük olduğu görülmektedir. Bu testin temel hipotezi "Birim etkili modeldeki açıklayıcı değişken korelasyonsuzdur" şeklindedir. Buna göre temel hipotezin reddedilmesi, regresyon modeli için tesadüfi (rassal) etkiler modelinin geçerli olduğu anlamına gelmektedir.

Tablo 6: Hausman Test Sonuçları

Değişkenler	Katsayı (FE)	Katsayı (RE)	Standart Hata	Ki-Kare Olasılık Değeri
LYUK	0.0133	0.0167	0.0047	0.2521
LYOLCU	0.7513	0.7519	0.0060	0.2521

Tesadüfi (rassal) etkiler modelinde tahminlere güvenilebilmesi için heteroskedasite, otokorelasyon gibi temel varsayımlardan sapmaların var olmaması beklenmektedir. Tablo 7'den elde edilen sonuçlara göre; Levene, Brown ve Forsythe'nin test sonuçları incelendiğinde olasılık değerleri %1'den küçük olup  $H_0$  hipotezinin reddedildiği tespit edilmiştir ve heteroskedasite probleminin olduğu görülmektedir. Durbin-Watson istatistiği ve Baltagi-Wu LBI istatistiğinin 2'den küçük değer alması nedeniyle tesadüfi etkiler modelinde birinci mertebeden otokorelasyon sorunu olduğu belirlenmiştir. Tesadüfi etkiler modelinde değişen varyans ve otokorelasyon olması durumunda dirençli hataların elde edilmesi için uygun bir tahminci kullanmak gerekmektedir.

Tablo 7: Varsayım Testlerine İlişkin Sonuçlar

Varsayım	Uygulanan Test	Test İstatistiği
Değişen varyans sorunu	(Levene, Brown, Forsythe)	W0: 7.6900, df(6,182)
		Pr > F = 0.0000
		W50: 6.2730, df(6,182)
		Pr > F = 0.0000
Otokorelasyon sorunu	(Bhargava, Franzini ve Narendranathan)	W10: 7.5835, df(6,182)
		Pr > F = 0.0000
		Durbin Watson: 0.3373 Baltagi-Wu LBI: 0.4649

Tablo 8'de yer alan tahmin sonuçları incelendiğinde E7 ülkelerinde havayolu taşımacılığı ile ekonomik büyüme arasındaki ilişkiyi incelemek amacıyla 1995-2021 dönemindeki verileri kullanılarak oluşturulan modelde bağımlı değişken olarak ekonomik büyüme değişkeni ele alınmıştır. Bağımsız değişkenler havayolu yolcu sayısı ile havayolu ile taşınan yük miktarı değişkenleridir. Arellano (1987), Froot (1989) ve Rogers (1993) tarafından geliştirilen tesadüfi (rassal) etkiler tahmincisi ile dirençli tahminciler elde edilmiştir. Elde edilen bulgulara göre, havayolu ile taşınan yük miktarının ekonomik büyümeye katkısının istatistiksel açıdan anlamsız olduğu görülmüştür. Yolcu sayısının ekonomik büyümeye katkısının ise pozitif ve istatistiksel olarak anlamlı olduğu tespit edilmiştir. Çalışmanın sonucuna göre E7 ülkeleri için 1995-2021 döneminde yolcu sayısındaki % 1'lik artış ekonomik büyümeyi % 0.75 oranında arttırmıştır.

Tablo 8: Arellano, Froot ve Rogers Dirençli Tahmin Sonuçları

Bağımsız Değişkenler	Katsayı	Dirençli Standart Hatalar	Olasılık Değeri
LYOLCU	0.7513	0.0857	0.000***
LYUK	0.0133	0.1836	0.942

Not: R<sup>2</sup>: 0.76, \*\*\*%1 anlamlılık düzeyinde eğim katsayılarının heterojen olduğunu ifade etmektedir.

## SONUÇ VE DEĞERLENDİRME

Bu çalışmada havayolu taşımacılığı ve ekonomik büyüme arasındaki ilişki 1995-2021 dönemi için yıllık veriler kullanılarak E7 ülkeleri için gerçekleştirilmiştir. Çalışmada havayolu taşımacılığı için havayolu yolcu sayısı ve

havayolu yük taşımacılığı verileri dikkate alınmıştır. Ekonomik büyüme değişkeni olarak bağımlı değişken için GSYH verileri kullanılmıştır. Uygulamalı analizde panel veri yönteminden yararlanılmıştır. Arellano (1987), Froot (1989) ve Rogers (1993) tarafından geliştirilen tesadüfi (rassal) etkiler tahmincisi ile dirençli tahminciler bulgularına göre havayolu ile taşınan yük miktarının ekonomik büyümeye katkısının istatistiksel açıdan anlamsız olduğu görülmüştür. Yolcu sayısının ekonomik büyümeye katkısının ise pozitif ve istatistiksel olarak anlamlı olduğu sonucuna varılmıştır ve E7 ülkeleri için 1995-2021 döneminde yolcu sayısındaki % 1'lik artışın ekonomik büyümeyi % 0.75 oranında arttırdığı bulgusu elde edilmiştir.

Çalışmada yapılan analizler neticesinde havayolu taşımacılığının ekonomik büyüme üzerindeki etkisi açıklanmıştır. E7 ülkeleri özelinde küresel rekabette havayolu taşımacılığına dair avantajlar ve dezavantajlar göz önünde bulundurulup, havayolu taşımacılığını geliştirecek politikalar uygulanabilir. Bu konuya ilişkin yapılacak çalışmalar farklı yöntemler ve ülke grupları için uygulanabilir ve ülke bazında karşılaştırmalar yapılabilir.

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# A Study on the Use of Distance Education Platforms in Foreign Language Teaching in Türkiye

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**Abstract:** The development of technology in recent years has brought many innovations. Developments in technology have led to changes in many areas, from education to health, from entertainment to shopping. These developments constitute current topics for new research. Particularly in the field of education, issues such as taking advantage of technological innovations and providing new tools for the use of learners and teachers attract attention. The day by day development of distance education platforms has enabled them to replace traditional environments in the field of education. In this sense, it finds a working title in disciplines such as educational sciences, engineering and management information systems. As in many disciplines, distance education platforms are developing rapidly in language teaching. In Türkiye, distance education platforms are used in foreign language teaching both in formal education and in lifelong learning environments. These environments have been developing in a wide range since the development of computer-assisted teaching until today. Especially the Covid-19 Pandemic process, which has an impact all over the world, and even the subsequent major earthquake disaster in 11 provinces in Türkiye, has made the use of distance education in education mandatory. This study focuses on foreign language teaching and the use of distance education in foreign language teaching. In the study, a case study was conducted, one of the qualitative research methods. Detailed research has been done on the subject and the subject has been defined broadly. It is envisaged that the study will guide researchers in new studies by using distance education platforms used in foreign language teaching in Türkiye and comparing these platforms.

**Keywords:** Management Information Systems, Distance Education, Foreign Language Education

## 1. INTRODUCTION

The rapid development process of science and technology has dragged humanity into an economic and social race. In this process, developing societies are aware that progress is possible depending on the quality of education offered to individuals. It is obvious that technology should be used with all its possibilities in education to raise individuals who can produce solutions to the problems they encounter and have free and creative thinking (Baz, 2010, p.1). It seems that taking advantage of the advantages provided by technology is also important in language education, as in other areas of education.

The issue of language has become a subject that has made many scientists, social scientists, and especially linguists think about from past to present (Demirel, 2021).

Işık (2008) lists the necessary regulations in foreign language teaching as follows:

- ✓ Establishing a coordination board,
- ✓ Planning foreign language education,
- ✓ To prepare a new foreign language syllabus,
- ✓ Methodological arrangement,
- ✓ Training foreign language teachers,
- ✓ Organizing the in-service training system.

The current situation of foreign language teaching is revealed through studies. Soner (2007) lists the reasons for some failures in foreign language teaching as follows:

- ✓ Lack of enough teachers,
- ✓ Teachers are not well trained, their knowledge of foreign languages and methods is inadequate,
- ✓ Classes are too crowded,
- ✓ Students cannot devote enough time to foreign language lessons due to the intensity of other courses,
- ✓ Lack of equipment, lack of use of modern methods in education,

- ✓ The majority of students do not understand the importance of learning a foreign language, do not have a real interest in foreign languages, lack motivation, and perceive foreign language lessons as an obligation that can be forgotten after the exam, just like other courses.
- ✓ Lack of opportunities to use a foreign language outside of school,
- ✓ It is listed as whether the student reinforces or improves what he has learned at school by reading a lot of books in a foreign language with his own effort.

Distance education applications seem to be a solution to continue education under pandemic conditions. When the perspective is expanded a little, these practices will be a necessity in people's personal and professional development and in their societies (Baz and Koca, 2021; Gümüşel and Dölen, 2022, p.163).

Although there are many languages in the world, increasing international relations make it insufficient for nations to communicate with their own native languages, and therefore the need to learn the languages of other countries arises (Demirel, 2021). Information technologies are used against some difficulties encountered in learning a foreign language.

Unlike traditional education, distance education goes beyond the stereotyped structure and creates a flexible, rich and interactive educational environment. Thus, individuals can be offered a more effective education opportunity. In addition, in distance education, different elements such as buildings, classrooms, teachers and educational materials that limit the capacity of students to participate in education are prevented. In this way, it plays an important role in reducing the cost of education. Considering all these, it seems that distance education is important (Özbay, 2015, p.392).

Kırık (2014) expresses the difference between distance education environments and traditional education environments as shown in Table 1.

Table 1: Comparison of Traditional Education and Internet-Based Distance Education

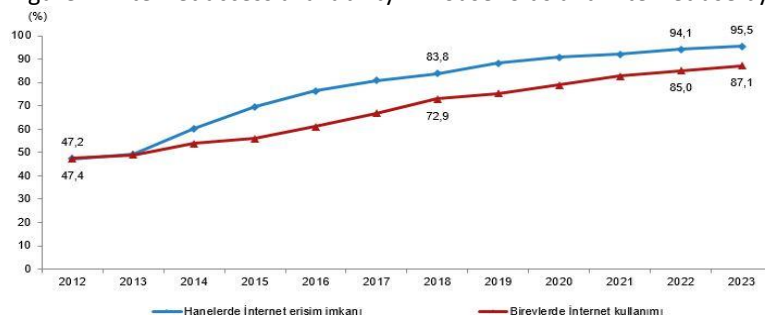
Traditional Education Environment	Internet Based Distance Education Environment
Lecture-based	Discussion-based
Structural	Flexible
Purpose-oriented	Result-oriented
Independent student	mostly teacher-centered
Large classes	Small classes
The teacher is a source of knowledge. The teacher directs to knowledge.	The teacher is a source of knowledge. The teacher directs to knowledge.

In this study, case study, one of the qualitative research methods, was used. Case studies enable a complex situation to be studied longitudinally by defining it broadly and determining its components in its natural environment (Subaşı and Okumuş, 2017, p.425).

## 2. DISTANCE EDUCATION IN TÜRKİYE

Türkiye is a country that was introduced to distance education later than developed countries. However, with the developments in Türkiye today, it has come to the fore in the field of distance education. A rapid acceleration was experienced with the establishment of Anadolu University Open Education Faculty (Kırık, 2014, p.85).

Figure 1: Internet access availability in households and Internet use by individuals, 2012-2023.



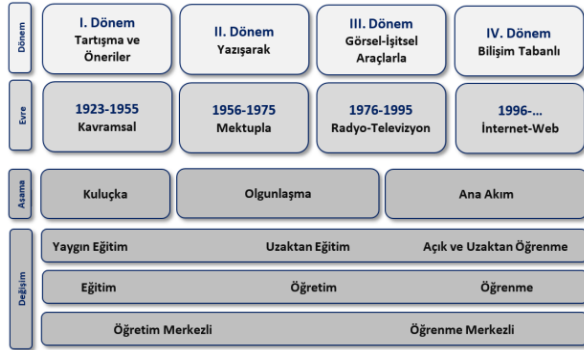
Source: TUIK, 2023



According to the results of the household information technologies usage survey; In 2023, the proportion of households with access to the Internet from home increased by 1.4 points compared to the previous year and reached 95.5%.

The internet usage rate among individuals in the 16-74 age group was 85.0% in 2022 and 87.1% in 2023. Internet usage rate in 2023 by gender; It was observed as 90.9% in men and 83.3% in women.

Figure 2: Periods and Phases of Distance Education in the Context of Türkiye



Source: Bozkurt, 2017

While determining the development periods and stages of distance education in Türkiye, common technologies used in distance education processes and important events affecting the field were taken into account. Distance education and risks during the coronavirus period in Türkiye are listed as follows (Emin and Altunel, 2021):

- ✓ Inequality of Opportunity in Education and the Deepening of Inequalities
- ✓ Increased Learning Loss
- ✓ Risk of Increase in Absenteeism and School Dropouts

### 3. FOREIGN LANGUAGE TEACHING WITH DISTANCE EDUCATION

The concept of distance education is a form of education in which the learner and the teacher are physically distant from each other. The history of distance education dates back to the 19th century. Distance education, with its current definition, emerged in the 1920s (Adıyaman, 2002, p.92).

Some developments in recent years have made the use of distance education mandatory. Coronavirus disease (Covid-19), which emerged in the Wuhan region of China in 2019, was seen in Türkiye with the first case detected on March 11, 2020. Immediately after the first case, schools were closed all over Türkiye. Distance education, which was initially thought to be available for a short time, has become mandatory at all levels of education, including universities.

Immediately after the Covid-19 pandemic outbreak, a large-scale earthquake occurred in 11 provinces in Türkiye on February 6, 2023 and caused great destruction. Distance education was switched to avoid any disruption in education after the earthquake.

Due to the difficult processes experienced in Türkiye in recent years, the use of distance education platforms has occurred at all levels of education. Foreign language teaching has also been carried out through distance education as formal or informal education.

#### 3.1. Türkiye Safe Schooling and Distance Education (SSDE) Project

Türkiye Safe Schooling and Distance Education (SSDE) Project is a project planned to be carried out with World Bank (WB) financing, aiming to support Türkiye's education sector in order to provide safe education with distance education during the COVID-19 pandemic and to come out of this situation strongly.

The SSDE project aims to respond to COVID-19 needs in safe and interactive distance education and to create a more resilient system for education technology. In this project, implemented by applying the World Bank's

environmental and social framework, a significant contribution is made to Türkiye's education technology investments and a strengthening of the education system is expected in crisis situations (MEB, 2023).

### 3.2. What Programs Does Türkiye Use in Distance Education?

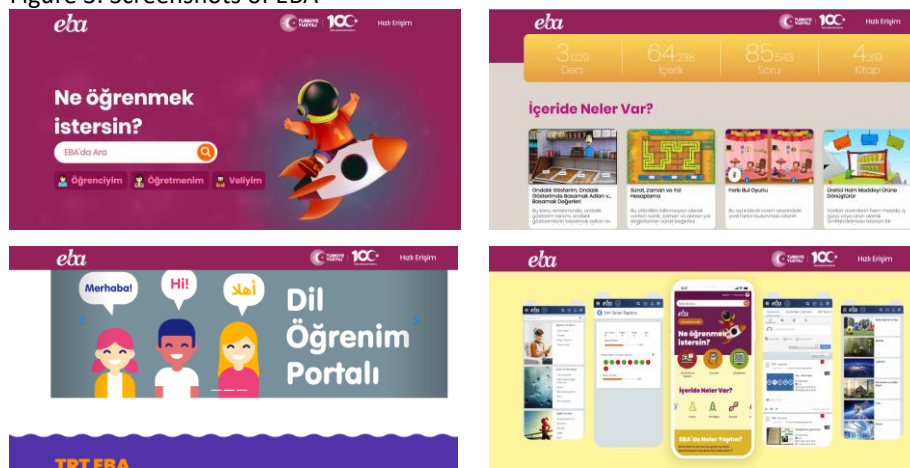
Türkiye has made rapid progress in distance education, especially in recent years. It can be stated that the following programs are used in distance education in Türkiye.

- ✓ EBA (Education Information Network)
- ✓ LMS (Learning Management System)
- ✓ Zoom
- ✓ Programs used in universities

#### 3.2.1. EBA (Education Information Network)

Education Information Network, which is the gateway of education to the future, is an online social education platform offered free of charge to each individual by the General Directorate of Innovation and Educational Technologies (Sancaktepe MEM, 2024).

Figure 3: Screenshots of EBA

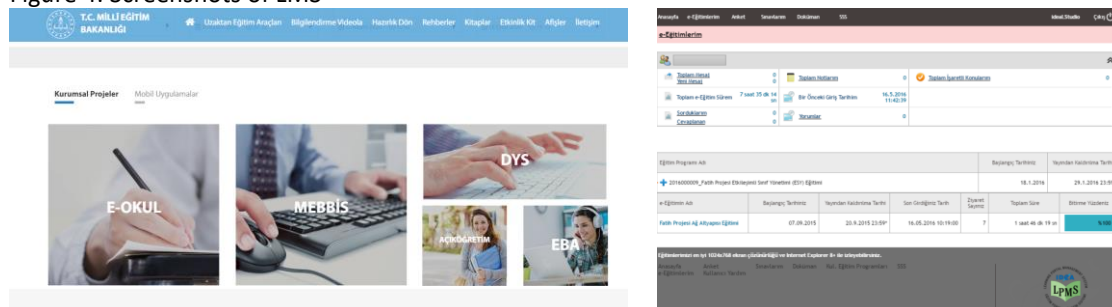


Education Information Network (EBA) is an education portal that is open to students, teachers and parents. EBA has thousands of courses and content and also includes books. EBA is developed within the Ministry of National Education in Türkiye. EBA serves students effectively in foreign language teaching. There are also desktop versions and mobile versions of EBA. It has a user-friendly interface that is very easy to use. In this sense, it can be stated that it offers effective learning opportunities to students.

#### 3.2.2. LMS (Learning Management System)

Learning Management System is used within the Ministry of National Education. In this way, students, teachers and parents benefit from e-school, Mebbis, DYS and many applications.

Figure 4: Screenshots of LMS



Thanks to LMS, services are provided to administrators as well as students. Issues concerning managers' document management systems and other management information systems are handled by LMS.

### 3.2.3. Zoom

Zoom is a computer program and mobile application that enables video conference calls via internet connection (Bircom, 2024). Zoom is a video conferencing platform that uses end-to-end encryption developed by Zoom Video Communications. Provides video chat service. It allows joining meetings for free on up to 100 devices simultaneously, with a 40-minute time limit for free accounts with three or more participants (Wikipedia, 2024).

Figure 5: Screenshots of LMS

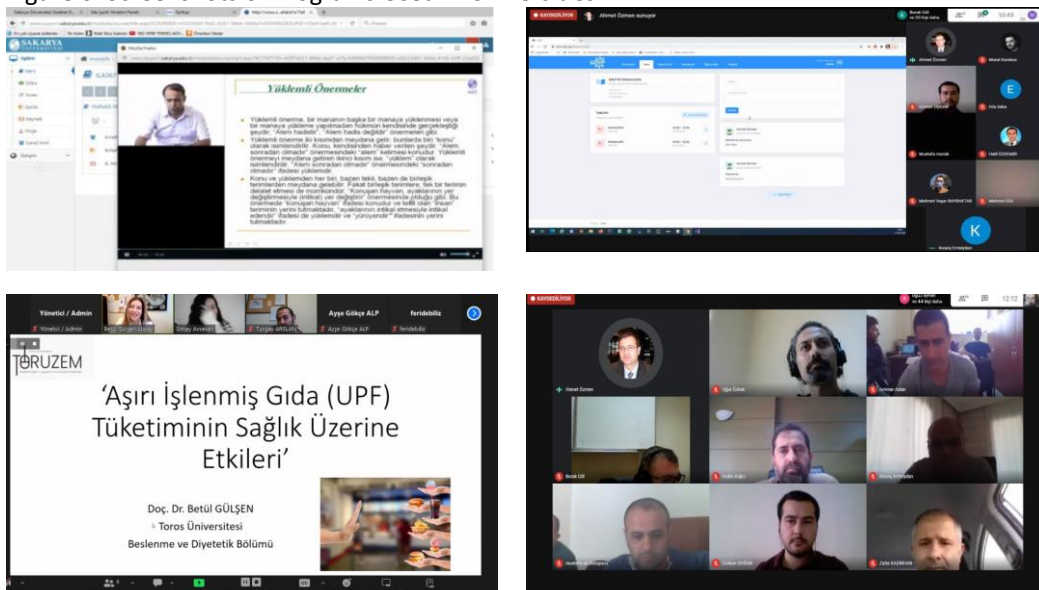


As in many areas in Türkiye, Zoom is preferred in the field of education. It is known that Zoom is at the forefront among distance education portals in foreign language education.

### 3.2.4. Programs Used in Universities

Many distance education platforms are used in universities in Türkiye. While some of these universities use platforms created by them, some prefer to use platforms they have purchased. The use of distance education platforms, which started especially during the COVID 19 pandemic period, is used in different courses, especially in education in foreign languages.

Figure 6: Screenshots of Programs Used in Universities



#### 4. CONCLUSION

Türkiye's strengthening of its communication infrastructure and increasing the amount of investment in this field has enabled distance education to become widespread. In Türkiye, a conscious learning policy is ensured by the developing structure of the internet and the use of web-based applications in the field of distance education (Kırık, 2014, p.85).

Due to the difficult processes experienced in recent years, the use of distance education platforms has occurred at all levels of education in Türkiye. Foreign language teaching has also been carried out through distance education as formal or informal education. Some difficulties encountered in this sense are included in the literature (Özbay, 2015; Gümüşel and Dölen, 2022; MEB, 2023).

There has been an acceleration in distance education in Türkiye in recent years. It can be stated that the rapid development of the use of distance education was caused by the COVID-19 pandemic and the earthquake disaster that had devastating effects in 11 provinces. These developments are seen in foreign language teaching as well as in many areas of education. Studies are carried out with different distance education platforms at all levels of education, from pre-school education to universities. The main platforms used in Türkiye are Education Information Network (EBA), Learning Management System (LMS), Zoom and programs used in universities.

It is seen that different programs are used in universities, especially in foreign language teaching. The reason for this may be the need for different teaching programs in different disciplines. In addition, it can be said that universities that design and use their own programs prefer this method for economic reasons. It has been observed in the study that Zoom and similar programs that allow free use in foreign language teaching are used by a wide range of audiences. The reason for this is the cost, considering the large number of students in Türkiye, which has a young population.

Foreign language teaching requires experience and talent. At the same time, teaching foreign languages through distance education platforms will create new study subjects. The use of the distance education platform, which started especially during the COVID 19 pandemic period, has become a necessity in different courses, especially in education in foreign languages. In new research, research on different distance education programs used in different courses and studies in multidisciplinary fields, including the field of management information systems, can be suggested.

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## Değişen Dünya İçin Sürdürülebilir Çözümler: Döngüsel Ekonomik Sistem

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**Özet:** İnsanlık tarih boyunca doğadaki kaynakları bilinçsizce kullanarak doğayı kirletmiş ve çevre sorunlarının ortaya çıkmasına yol açmıştır. Dünya genelinde bakıldığında yaşanan temel sorunların hep "ekonomik nitelikli" olduğu görülmektedir. Bu temel sorunların ekonomik nitelikli olmasının ardında da aslında doğadaki kaynakların kıt oluşu yatmaktadır. Dolayısıyla bir taraftan artan nüfus diğer taraftan da tükenmekte olan bu doğal kaynakların varlığı insanlığı yeni çözüm yolları arayışına itmiştir. Bu noktada ortaya konulan çözüm, doğal kaynakların sınırlı olduğu ve tükenebileceği gerçeğinden hareketle çevrenin korunması gerekliliği ve bu durumun sürekliliğinden hareketle de doğal kaynaklar hor kullanılmadan yani tamamen tüketilmeden gelecek nesillere de aktarımının sağlanabileceği sürdürülebilirlik çerçevesinde bir ekonomik sistem oluşturulmasına dayanmaktadır. Günümüzde hâkim olan doğrusal ekonomi modelinin alternatifi olarak geliştirilen döngüsel ekonomi ve sürdürülebilirlik, her ikisi de çevresel zorlukları ele almayı ve sorumlu kaynak yönetimini teşvik etmeyi amaçlayan, iç içe geçmiş kavramlardır. Döngüsel ekonomi, "al-yap-at" modelini izleyen geleneksel doğrusal üretim ve tüketim modelinin ötesine geçmektedir. Bunun yerine, rejeneratif bir sistem oluşturmak için geri dönüşüm, yeniden kullanım ve atık azaltma ilkelerini vurgular. Özünde döngüsel ekonomi; kaynak verimliliği, atık azaltma, iklim değişikliğinin azaltılması, ekonomik dayanıklılık, biyoçeşitlilik ve ekosistemin korunması konularına öncelik vererek sürdürülebilirlik hedefleriyle uyum sağlar. Sürdürülebilir kalkınma ekolojik dengeyi korumayı amaçlar ve döngüsel ekonomi de bu hedefle uyumlu hareket eder. Özetle döngüsel ekonomi, toplumsal kaynakları üretme, tüketme ve yönetme biçimlerini yeniden şekillendirerek sürdürülebilirliğe ulaşmak için pratik bir çerçeve sunmaktadır. İlkeleri yalnızca çevresel etkiyi azaltmakla kalmayıp aynı zamanda ekonomik ve sosyal refaha da katkıda bulunarak onu daha geniş sürdürülebilirlik gündeminin önemli bir bileşeni haline getirmektedir. Dünya küresel sorunlara çözüm ararken, döngüsel ekonomi ve sürdürülebilirlik arasındaki ilişki, daha dayanıklı ve uyumlu bir gelecek yaratmak için güçlü bir strateji olarak ortaya çıkmaktadır.

**Anahtar Kelimeler:** Döngüsel Ekonomi, Sürdürülebilir Kalkınma, Yeşil Ekonomi, Karbon Emisyonu

### Sustainable Solutions For A Changing World: Circular Economic System

**Abstract:** Throughout history, humanity has unconsciously used natural resources, polluting nature and causing environmental problems. When looked at throughout the world, it can be seen that the main problems experienced are always of an "economic nature". The reason why these basic problems are economic in nature is actually the scarcity of resources in nature. Therefore, on the one hand, the increasing population and on the other hand, the existence of these depleting natural resources have pushed humanity to search for new solutions. The solution put forward at this point is based on the necessity of protecting the environment, based on the fact that natural resources are limited and can be exhausted, and on the continuity of this situation, on the creation of an economic system within the framework of sustainability, in which natural resources can be transferred to future generations without being misused, that is, without being completely consumed. Developed as an alternative to the linear economy model that dominates today, circular economy and sustainability are intertwined concepts that both aim to address environmental challenges and promote responsible resource management. The circular economy goes beyond the traditional linear model of production and consumption that follows the "take-make-dispose" model. Instead, it emphasizes the principles of recycling, reuse, and waste reduction to create a regenerative system. In essence, circular economy; it complies with sustainability goals by prioritizing resource efficiency, waste reduction, climate change mitigation, economic resilience, biodiversity and ecosystem protection. Sustainable development aims to preserve ecological balance, and the circular economy acts in line with this goal. In summary, the circular economy offers a practical framework to achieve sustainability by reshaping the way we produce, consume and manage social resources. Its principles not only reduce environmental impact but also contribute to economic and social well-being, making it a key component of the broader sustainability agenda. As the world searches for solutions to global problems, the relationship between the circular economy and sustainability is emerging as a powerful strategy to create a more resilient and harmonious future.

**Key Words:** Circular Economy, Sustainable Development, Green Economy, Carbon Emission

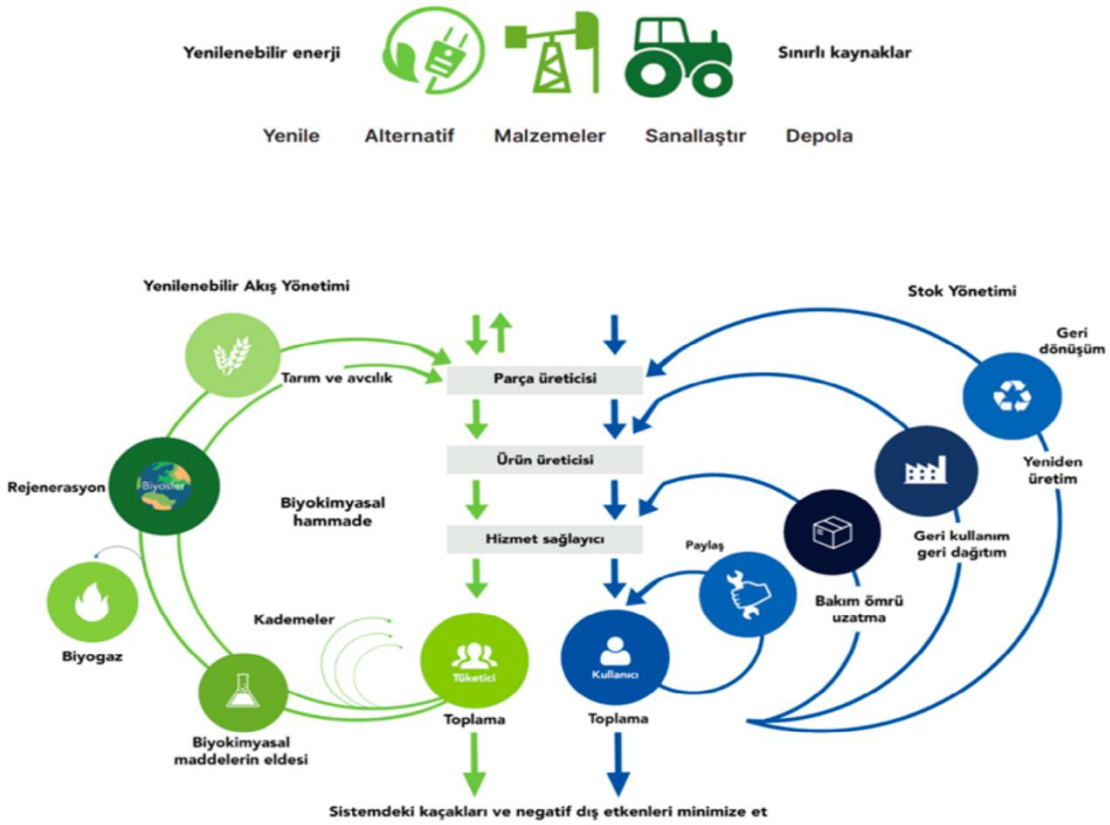
### 1. GİRİŞ

Günümüzde hâkim olan "al-yap-at" ekonomisi, büyüme ve istikrar koşullarını yaratabilmek için uzun yıllardır ucuz ve mevcut kaynak girdileri ile sürdürülmeye çalışılmaktaydı. Ancak son on yıl içinde işletmeler, emtia

fiyatlarındaki artışlardan ciddi oranlarda etkilenmiştir. Sonraki süreçte de zaten sınırlı olan bu kaynaklara yönelik arz taleplerindeki benzeri görülmemiş artışlar bu mevcut olan doğrusal ekonomik sistemin sorgulanmasına yol açmıştır. İşte bu noktada yeni bir ekonomik yaklaşım olarak ortaya çıkan döngüsel ekonomiye, dünyanın birçok yerinde artan bir ilgi söz konusu olmuştur. Dünya Ekonomik Forumu'nun (The World Economic Forum) 2014 yılında Ellen MacArthur Vakfı ile McKinsey & Company iş birliği sonucunda hazırlanan Towards the Circular Economy: Accelerating the Scale-up Across Global Supply Chains (Döngüsel Ekonomiye Doğru: Küresel Tedarik Zincirlerinde Büyümenin Hızlandırılması) adlı raporunda döngüsel ekonomi (circular economy) kavramı; restoratif (onarıcı) veya rejeneratif (yenileyici) bir yaklaşımla tasarlanan endüstriyel bir sistemi tanımlamaktadır. Mevcut iş modellerindeki önemli değişikliği temsil eden ve doğrusal ekonomi modelinin bir alternatifi olarak geliştirilen döngüsel ekonomi modeli bu bağlamda bütünsel bir süreci kapsayıcı, ürün ve hammaddelerin yeniden kullanımını mümkün kılacak, atığın geri kazanıldığı, enerji ve tüm kaynakların verimli kullanıldığı ve neredeyse hiç atık üretmeyecek şekilde temiz üretimin yapıldığı bir model olarak sürdürülebilirliğe dayalı önemli bir araçtır (Sapmaz Veral, 2021).

Doğrusal ekonomik sistemde bir ürün üretmek için doğal kaynak yerinden alınır, işlenerek ürün haline getirilir ve ürünün kullanılması sonucunda atık haline dönüşen bir yapı mevcuttur. Dolayısıyla sürecin kendisi zaten bir atık oluşturma sistemi üzerine kurulmuştur denilebilir (al-yap-at modeli). Ancak değişen dünya koşullarına paralel olarak bu sisteme alternatif olarak geliştirilen "Yeşil Ekonomi, Mavi Ekonomi ve son olarak da Döngüsel Ekonomi" sistemlerinin mevcut düzende ön plana çıktığı görülmektedir (Önder, 2018). Şekil 1'de döngüsel ekonomi modelinin ise yapısı gösterilmeye çalışılmıştır.

Şekil 1: Döngüsel Ekonomi Modeli



Kaynak: Ellen MacArthur Foundation, Growth Within: A Circular Economy Vision For A Competitive Europe, 2015.

Çalışmada temel olarak döngüsel ekonomik yaklaşımın incelenmesi amaçlanarak öncelikle döngüsel ekonomiye ilişkin ilkeler, avantajlar ve dezavantajlara yer verilerek sonrasında döngüsel ekonomik sistem için hazırlanan SWOT analizi paylaşılmış ve bu sisteme yönelik yaşanan gelişmelerden de bahsedilerek sonuç kısmında bir takım çözüm önerileri sunulmuştur.



## 2. DÖNGÜSEL EKONOMİ: İLKELERİ, AVANTAJLARI VE DEZAVANTAJLARI

Döngüsel ekonominin ilkeleri; malzeme akışlarını izleme, ürün tasarımında sürdürülebilirliği gözetme, geri dönüşüm sistemlerini güçlendirme gibi yöntemleri içerir. Bu yaklaşım hem ekonomik kalkınmayı desteklemeyi hem de çevresel sorunları azaltmayı amaçlayan bir sürdürülebilirlik perspektifi sunmaktadır.

- Uzun Ömür için Tasarım: Döngüsel ekonomide ürünler dayanıklılık ve tamir edilebilirlik göz önünde bulundurularak tasarlanır. Uzun ömürlülüğün vurgulanması, sürekli değiştirme ihtiyacını azaltır ve üretimle ilişkili çevresel etkiyi en aza indirir.

- Malzeme Geri Dönüşümü ve İleri Dönüşüm: Döngüsellik, malzemelerin sürekli geri ve ileri dönüşümünü içerir. Döngüsel ekonomi, etkili atık yönetimi sistemleri uygulayarak ve geri dönüştürülmüş malzemelerin kullanımını teşvik ederek doğal kaynaklar üzerindeki yükü azaltır.

- Kapalı Döngüsel Sistemler: Döngüsel ekonomiler, ürünlerin yeniden kullanıldığı, yeniden üretildiği ve geri dönüştürüldüğü kapalı döngü sistemler yaratmaya çalışır. Bu yaklaşım, yeni hammaddelerin çıkarılmasını en aza indirir ve daha sürdürülebilir bir üretim döngüsünü teşvik eder.

Döngüsel ekonominin benimsenmesi, bir dizi önemli faydalar sağlamaktadır. Bu yaklaşım, atıkların azaltılması ve geri dönüşümün teşvik edilmesiyle doğal kaynakların daha etkin ve sürdürülebilir bir şekilde kullanılmasını sağlar. Bu durum, çevresel etkileri azaltarak ekosistemlere olan olumsuz etkileri azaltır. Aynı zamanda, döngüsel ekonomi modeli, iş dünyasına yeni iş fırsatları yaratırken, kaynakların daha verimli bir şekilde kullanılmasıyla maliyet tasarrufları sağlar. Bu yaklaşım, ekonomik büyümeyi destekleyen bir çerçeve sunarken, aynı zamanda çevresel sürdürülebilirlik ve toplumsal refahı gözetmeyi hedefler. Döngüsel ekonominin yaygın olarak benimsenmesi, uzun vadeli ekonomik ve çevresel faydaların elde edilmesine katkı sağlayabilir. Bu noktada döngüsel ekonominin avantajları aşağıdaki şekilde sıralanabilir.

- Kaynak Verimliliği: Döngüsel ekonomi, malzemelerin sürekli kullanımını, geri dönüşümünü ve yeniden kullanımını vurgulayarak kaynak verimliliğini teşvik eder. Bu, sınırlı kaynaklar üzerindeki baskıyı azaltarak uzun vadeli sürdürülebilirliği teşvik eder.

- Atık Azaltımı ve Yönetimi: Döngüsel ekonominin başlıca faydalarından biri atıkların önemli ölçüde azaltılmasıdır. Toplumlar, ürünleri geri dönüştürülebilirliği göz önünde bulundurarak tasarlayarak ve etkili atık yönetim sistemleri uygulayarak çevresel etkiyi en aza indirebilir.

- İş Yaratma ve Ekonomik Büyüme: Döngüsel iş modelleri genellikle onarım, yeniden üretim ve geri dönüşüm gibi faaliyetler için daha fazla el emeği gerektirir ve bu da istihdam yaratılmasına yol açar. Ayrıca döngüsel ekonomi, inovasyonu teşvik ederek ve yeni pazar fırsatları yaratarak ekonomik büyümeyi teşvik edebilir.

- İklim Değişikliğinin Azaltılması: Hammaddelerin çıkarımının azaltılması ve üretim süreçlerinde enerji tüketiminin düşürülmesi, döngüsel ekonominin iklim değişikliğinin azaltılması üzerindeki olumlu etkisine katkıda bulunur. Bu, geleneksel doğrusal üretim sistemleriyle ilişkili sera gazı emisyonlarının azaltılmasıyla elde edilir.

- İnovasyon ve Tasarım Fırsatları: Döngüsellik, ürün tasarımında yenilikçi yaklaşımları teşvik ederek çevre dostu malzeme ve teknolojilerin geliştirilmesini sağlamaktadır. Ürünlerin geri dönüştürülebilirlik ve dayanıklılık odaklı tasarlanması, sürdürülebilir çözümler için yollar açmaktadır.

- Ekonomik Dayanıklılık: Döngüsel iş modelleri yeni iş fırsatları yaratarak, inovasyonu teşvik ederek ve kaynak verimliliğini artırarak ekonomik büyümeyi teşvik edebilir. Döngüsel ekonomi sadece çevre dostu değil aynı zamanda ekonomik olarak da uygulanabilirdir.

Döngüsel ekonominin dezavantajlarıyla ilgili birtakım görüşler bulunmaktadır. Birincisi, döngüsel ekonominin uygulanması ve geçiş süreci için başlangıç maliyetlerinin yüksek olmasıdır. Yeni teknolojilere ve altyapıya yatırım yapma gerekliliği, başlangıçta bazı sektörler için ekonomik zorluklar doğurabilir. Ayrıca, geri dönüşüm süreçlerinin etkin olmaması veya bazı malzemelerin geri dönüşümünün teknik olarak zor olması gibi sorunlar da ortaya çıkabilir. Bu durum, döngüsel ekonominin pratikte uygulanabilirliğini sınırlayabilir. Ayrıca, döngüsel ekonominin farklı ülkelerdeki ekonomik, kültürel ve yasal farklılıkların etkisiyle küresel ölçekte benimsenmesi ve koordinasyonu zor olabilir. Bu nedenle, döngüsel ekonominin dezavantajları, uygulama zorlukları ve başlangıç maliyetleri gibi faktörlerle ilişkilidir. Bu noktada döngüsel ekonominin dezavantajları aşağıdaki şekilde sıralanabilir.



- Teknolojik Engeller: Döngüsel ekonomiye geçiş, teknolojik hazırlıkla ilgili zorluklarla karşılaşabilir. Etkili geri dönüşüm ve yeniden üretim süreçlerinin uygulanması, hazırda bulunmayan veya uygun maliyetli olmayan ileri teknolojiler gerektirir.
- İlk Uygulama Maliyetleri: Doğrusal bir modelden döngüsel bir modele geçiş, işletmeler ve sektörler için önemli ön maliyetler içerebilir. Yeni teknolojilere yatırım yapmak, işgücünü yeniden eğitmek ve üretim süreçlerini yeniden yapılandırmak, özellikle küçük işletmeler için mali zorluklar yaratabilir.
- Değişime Direnç: Döngüsel ekonomi hem tüketiciler hem de işletmeler açısından temel bir zihniyet değişimi gerektirmektedir. Kökleşmiş alışkanlıklar veya döngüsel uygulamaların uygulanabilirliğine ilişkin endişeler nedeniyle değişime karşı gösterilen direnç, döngüsel ilkelerin yaygın bir şekilde benimsenmesini engelleyebilir.
- Karmaşık Tedarik Zincirleri: Döngüsel bir ekonominin uygulanması genellikle karmaşık tedarik zinciri ayarlamalarını içerir. Malzemelerin toplanması, ayrıştırılması ve geri dönüştürülmesini koordine etmek çeşitli sektörler arasında iş birliği gerektirir ve bu karmaşık tedarik zincirlerini yönetmek lojistik bir zorluk olabilir.
- Politika ve Düzenleyici Boşluklar: Açık ve destekleyici politikaların yokluğu, döngüsel uygulamaların başarılı bir şekilde uygulanmasını engelleyebilir. Hükümetler, düzenlemeler, teşvikler ve destekleyici çerçeveler yoluyla elverişli bir ortam yaratılmasında önemli bir rol oynamalıdır.

### 3. SWOT (GÜÇLÜ YÖNLER, ZAYIF YÖNLER, FIRSATLAR, TEHDİTLER) ANALİZİ

SWOT analizi, bir kuruluşun, projenin veya iş girişiminin iç güçlü ve zayıf yönlerinin yanı sıra dış fırsat ve tehditlerini değerlendirmek için kullanılan stratejik bir planlama aracıdır. "SWOT" terimi Güçlü Yönler, Zayıf Yönler, Fırsatlar ve Tehditler anlamına gelmektedir. Bu analiz, analiz edilen varlığın mevcut durumunu anlamaya yardımcı olur ve genellikle iş dünyasında ve stratejik yönetimde kullanılır. SWOT analizi döngüsel ekonomi bağlamında çok önemli bir rol oynar ve sürdürülebilir uygulamaların başarısını etkileyebilecek iç ve dış faktörler hakkında değerli bilgiler sağlar. Döngüsel ekonomide SWOT analizinin önemli olmasının birkaç nedeni aşağıda maddeler halinde özetlenmeye çalışılmaktadır:

- Sürdürülebilir Uygulamalar için Güçlü Yönlerin Belirlenmesi: SWOT analizi, kuruluşların döngüsel ekonomi ilkelerini etkili bir şekilde uygulamak için yararlanılabilecek iç güçlü yönlerini belirlemelerine yardımcı olur. Bu, mevcut atık azaltma girişimlerini, geri dönüştürülebilirlik için yenilikçi ürün tasarımlarını veya çevresel sorumluluğa güçlü bir bağlılığı içerebilir.
- İyileştirme için Zayıflıkların Vurgulanması: Kuruluşlar, iç zayıflıklarının farkına vararak döngüsel ekonomi uygulamalarının benimsenmesinde iyileştirilmesi gereken alanları ele alabilir. Bu, geri dönüşüm altyapısının geliştirilmesini, ürün yaşam döngüsü değerlendirmelerinin iyileştirilmesini veya iş operasyonları içinde döngüsellüğün önündeki engellerin aşılmasını içerebilir.
- Döngüsel Çözümler için Dış Fırsatları Tespit Etme: SWOT analizi, kuruluşların döngüsel ekonomi ile ilgili dış fırsatları belirlemelerini sağlar. Bu, sürdürülebilir ürünleri destekleyen pazar eğilimlerini, geri dönüşüm için yeni teknolojileri veya döngüsel uygulamaları teşvik eden düzenlemelerdeki değişiklikleri içerebilir.
- Sürdürülebilirliğe Yönelik Dış Tehditlerin Fark Edilmesi: Analiz, döngüsel ekonomi ilkelerinin başarılı bir şekilde uygulanmasını engelleyebilecek dış tehditlerin tanınmasına da yardımcı olur. Bu tehditler arasında değişken emtia fiyatları, düzenleyici zorluklar veya döngüsel iş modellerinin ekonomik uygulanabilirliğini zayıflatan piyasa dinamikleri yer alabilir.
- Stratejik Karar Alma: SWOT analizi stratejik karar alma için bir temel oluşturur. Sürdürülebilir uygulamaların entegrasyonunun çok önemli olduğu döngüsel ekonomide, iç yeteneklerin ve dış faktörlerin anlaşılması, kuruluşların yatırımlar, ortaklıklar ve genel iş stratejileri hakkında bilinçli kararlar almasına yardımcı olur.
- Dayanıklılığı Artırmak: Döngüsel ekonomi genellikle çevresel zorluklar karşısında dayanıklılıkla ilişkilendirilir. SWOT analizi, zayıflıkları ele alarak ve tehditleri azaltarak dayanıklılık oluşturmaya yardımcı olur ve kuruluşların potansiyel aksaklıklara karşı daha hazırlıklı olmasını sağlar.
- Sürekli İyileştirmeyi Teşvik Etmek: Döngüsel ekonomi uygulamaları sürekli bağlılık ve sürekli iyileştirme gerektirir. SWOT analizi, periyodik yeniden değerlendirme için bir araç olarak kullanılabilir ve kuruluşların değişen koşullara uyum sağlamasına ve döngüsel ekonomi stratejilerini sürekli olarak iyileştirmesine olanak tanır.

Sonuç olarak, SWOT analizi hem iç kabiliyetlerin hem de dış faktörlerin kapsamlı bir şekilde anlaşılmasını sağlayarak döngüsel ekonomide değerli bir araç olarak hizmet sunmaktadır. Bu analiz stratejik karar alma süreçlerini bilgilendirir, sürdürülebilirliği teşvik eder ve kuruluşların döngüsel iş uygulamalarının karmaşık ortamında yol almalarına yardımcı olur. Bu bağlamda döngüsel ekonomik sistem için hazırlanan SWOT analizi aşağıda tablo 1’de paylaşılmaktadır.

Tablo 1: SWOT Analizi

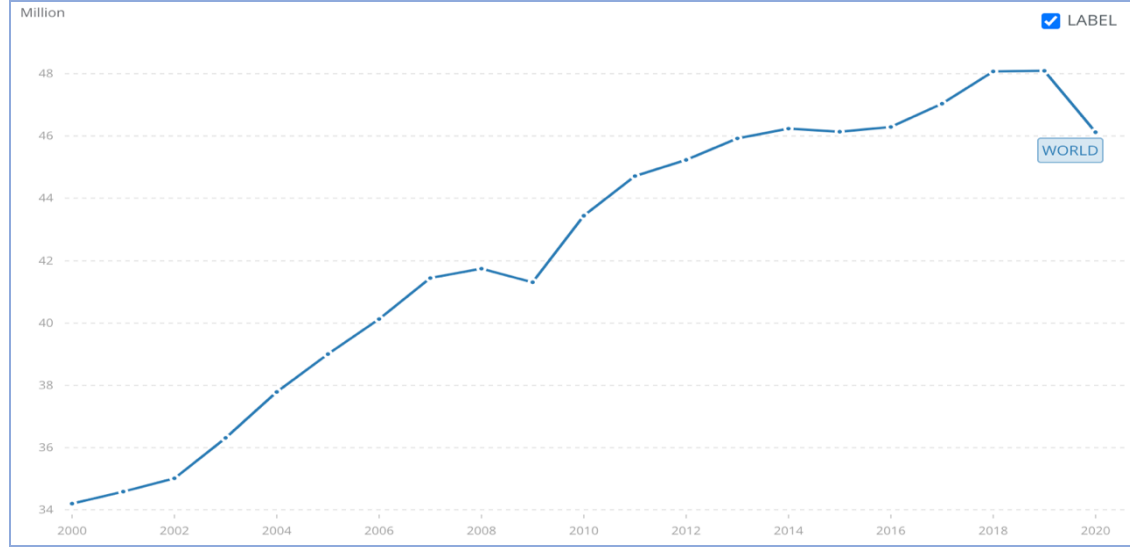
Güçlü Yönler	Zayıf Yönler
<p><b>Kaynak Verimliliği:</b> Döngüsel ekonomi, geri dönüşüm, yeniden kullanım ve yeniden üretim yoluyla kaynak kullanımını en üst düzeye çıkararak sürdürülebilir kaynak yönetimini teşvik eder.</p> <p><b>Çevresel Faydalar:</b> Atık üretimini en aza indirerek, doğal kaynakları koruyarak ve daha düşük karbon emisyonları yoluyla iklim değişikliğini azaltarak çevresel etkiyi azaltır.</p> <p><b>İnovasyon ve Tasarım:</b> Ürün tasarımında yenilikçiliği teşvik eder, çevre dostu malzemeleri destekler ve sürdürülebilir çözümler yaratmada yaratıcılığı teşvik eder.</p> <p><b>İş Yaratma:</b> Döngüsel iş modelleri, özellikle geri dönüşüm, onarım ve yeniden üretim gibi alanlarda istihdam artışı için fırsatlar yaratır.</p> <p><b>Ekonomik Dayanıklılık:</b> Yeni pazarlar yaratarak, girişimciliği teşvik ederek ve kıt kaynaklara bağımlılığı azaltarak ekonomik büyümeye katkıda bulunur.</p>	<p><b>Teknolojik Engeller:</b> Döngüsel ekonomi, verimli geri dönüşüm ve yeniden üretim için ileri teknolojiler gerektirir; bu teknolojiler maliyetli olabilir ve evrensel olarak mevcut olmayabilir.</p> <p><b>İlk Uygulama Maliyetleri:</b> Döngüsel bir modele geçiş, işletmeler, özellikle de küçük işletmeler için önemli ön maliyetler içerebilir.</p> <p><b>Değişime Direnç:</b> Geleneksel doğrusal modellerden döngüsel uygulamalara geçişe karşı toplumsal ve ticari direnç, yaygın benimsemeyi engelleyebilir.</p> <p><b>Karmaşık Tedarik Zincirleri:</b> Döngüsel uygulamaların hayata geçirilmesi genellikle karmaşık tedarik zinciri ayarlamalarını içermekte ve lojistik zorluklara yol açmaktadır.</p> <p><b>Politika ve Düzenleyici Boşluklar:</b> Yetersiz veya net olmayan politikalar ve düzenlemeler, döngüsel uygulamaların başarılı bir şekilde uygulanmasını engelleyebilir.</p>
Fırsatlar	Tehditler
<p><b>Pazar Genişlemesi:</b> Sürdürülebilirlik konusunda artan tüketici bilinci, işletmelerin kendilerini farklılaştırmaları ve yeni pazarlara girmeleri için fırsatlar yaratmaktadır.</p> <p><b>Teknolojik Gelişmeler:</b> Teknolojide devam eden ilerlemeler, daha uygun maliyetli ve verimli döngüsel süreçlere yol açabilir.</p> <p><b>İş Birliği ve Ortaklıklar:</b> Endüstriler, hükümetler ve topluluklar arasında iş birliğine dayalı ağlar oluşturmak döngüsel uygulamalara daha yumuşak bir geçişi kolaylaştırabilir.</p> <p><b>Tüketici Eğitimi:</b> Tüketicilerin döngüsel ekonominin faydaları konusunda eğitilmesi, sürdürülebilir ürünlere yönelik talebi artırabilir ve satın alma davranışını etkileyebilir.</p> <p><b>Devlet Desteği:</b> Hükümetlerin destekleyici politikaları, teşvikleri ve düzenlemeleri döngüsel uygulamalar için elverişli bir ortam yaratabilir.</p>	<p><b>Ekonomik Kısıtlamalar:</b> Ekonomik gerileme ve mali kısıtlamalar, özellikle ekonomik belirsizlik dönemlerinde döngüsel uygulamalara yönelik yatırımları engelleyebilir.</p> <p><b>Sınırlı Farkındalık:</b> Tüketiciler ve işletmeler arasında döngüsel ekonomi ilkelerine ilişkin sınırlı farkındalık ve anlayış, yaygın benimsemeyi engelleyebilir.</p> <p><b>Küresel Tedarik Zinciri Aksaklıkları:</b> Doğal afetler, jeopolitik olaylar veya salgın hastalıklar gibi dış faktörler küresel tedarik zincirlerini kesintiye uğratarak döngüsel ekonominin uygulanmasını etkileyebilir.</p> <p><b>Rekabet Zorlukları:</b> Geleneksel doğrusal modellere bağlı kalan endüstriler, döngüsel uygulamaları benimseyen işletmeler için rekabet zorlukları oluşturabilir.</p> <p><b>Düzenleyici Belirsizlik:</b> Yönetmelik ve politikadaki sık değişiklikler veya belirsizlikler, döngüsel ekonomi ilkelerine uyum sağlamaya çalışan işletmeler için zorluklar yaratabilir.</p>

#### 4. DÖNGÜSEL EKONOMİYE YÖNELİK YAŞANAN GELİŞMELER

Sanayi devrimi sonrasında ortaya çıkan kitlesel üretim süreci sonunda ülke ekonomileri sanayileşerek kalkınma prensibini benimsemişlerdir. Ancak bu kalkınma prensibi beraberinde de pek çok çevre sorununu ortaya çıkarmıştır. Çünkü sanayi sektörünün üretim süreçleri içerisinde genellikle fosil yakıtlara bağlı bir çalışma şekli söz konusudur. Dolayısıyla üretim süreci sonunda ortaya çıkarılan ürün ile birlikte de atık maddeler oluşmaktadır. Nitekim çevre kirliliğine bu atık maddelerin neden olduğu üretim süreçlerinin yanı sıra tüketim süreçleri de bu kirliliği artırmaktadır. Değişen dünya koşullarında tüketici bireylerin moda ve teknolojik değişimlere yönelik tutku ve arzuları, daha ürünlerin ekonomik ömrü bitmeden bu ürünlerin atık hale gelmesine yol açmaktadır. Bu ortaya çıkan atıklarda çevrenin kendi kendini yenileme hızından daha hızlı bir şekilde oluştuğu için "çevre kirliliği" olgusu dünyanın en önemli gündemini yaratmaktadır (Önder, 2018). Bu bağlamda hükümetler, şirketler ve toplumlar hem israfı ortadan kaldırmak hem de atıkların toplum üzerindeki olumsuz etkilerini azaltmanın yolunu döngüsel ekonomiye başvurarak aramaktadırlar. Döngüsel ekonomi ilkeleri doğrultusunda çalışan şirketler (dünyanın en hızlı büyüyen şirketi McKinsey gibi), sadece çevre için iyi değil aynı

zamanda daha fazla büyüme, daha fazla harcanabilir gelir ve daha fazla istihdam gerçekleştirmektedir. Her yıl 100 milyar tondan fazla kaynak ekonomiye aktarılırken, bunların %60'ından fazlası atık olarak ve iklim krizinin tetikleyicilerinden biri olan sera gazı emisyonu salınımlarında artış ile sonuçlanmaktadır (Balbay, Sarıhan ve Avşar, 2021). Ek olarak, sera gazı emisyonları ile kastedilen karbon emisyonudur ve sera gazı emisyonları genellikle karbondioksit eşdeğerleri olarak hesaplanmaktadır. Nitekim, uygulanmakta olan emisyon ticareti mekanizması çerçevesinde de ülkeler arasında bir “karbon ticareti piyasası” oluşmuştur. Şöyle ki, belli bir emisyon hedefi olan ülkeler kendi aralarında emisyon izinlerinin bir bölümünü alıp satabilmektedirler. Herhangi bir ülke kendi emisyon kotasını aşarsa, daha az üreten ülkeden karbon emisyon kotası satın alabilmektedir. 2005 yılında 10 milyar \$ işlem hacmi olan karbon piyasası, 2016 yılı itibarıyla yaklaşık olarak 150 milyar \$'lık bir piyasa haline gelmiştir (Gazbir). Grafik 1'de toplam sera gazı emisyon değerleri karbondioksit eşdeğerinde 2000-2020 yılları arasında gösterilmiştir.

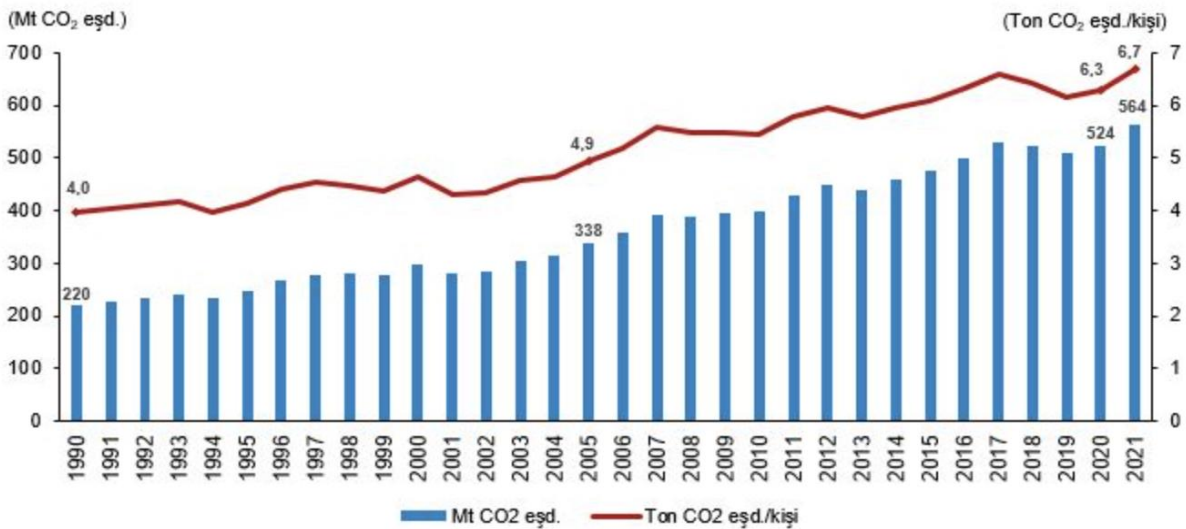
Grafik 1: 2000-2020 Yılları Arasında Toplam Sera Gazı Emisyon Değerleri



Kaynak: data.worldbank.org.

Türkiye’de ise TÜİK tarafından hazırlanan “2021 Sera Gazı Emisyon Envanteri” sonuçlarına göre toplam sera gazı emisyonu (CO<sub>2</sub> eşdeğerinde) 564,4 milyon ton (Mt) CO<sub>2</sub> eşdeğeri (eşd.) olarak hesaplanmıştır. Kişi başı toplam sera gazı emisyonu 1990 yılında 4 ton CO<sub>2</sub> eşd., 2020 yılında 6,3 ton CO<sub>2</sub> eşd. ve 2021 yılında 6,7 ton CO<sub>2</sub> eşd. olduğu tespit edilmiştir. Ayrıca sektörlere göre emisyon miktarları incelendiğinde enerji sektörünün ilk sırada yer aldığı görülmektedir. Şöyle ki, TÜİK verilerine göre toplam sera gazı emisyonlarında 2021 yılında CO<sub>2</sub> eşd. olarak en büyük payı %71,3 ile enerji kaynaklı emisyonlar alırken bunu sırasıyla %13,3 ile endüstriyel işlemler ve ürün kullanımı, %12,8 ile tarım ve %2,6 ile atık sektörü takip etmiştir.

Grafik 2: Toplam ve Kişi Başı Sera Gazı Emisyonu, 1990-2021



Kaynak: data.tuik.gov.tr.

2020 yılı Dünya Ekonomik Forumu Yıllık Toplantısında “İşletmelerin Döngüsel Ekonomi’ ye geçişi nasıl hızlandırılabilir” tartışılmış ve öneriler sunularak bu yeni modele geçiş süreci başlamıştır. AB’nin 2050 yılı hedefi, karbon nötr ilk kıta olmaktır ve bu doğrultuda tüm politikalarını “Yeşil Mutabakat” adı altında planlamıştır. Bu mutabakat AB sınırları içinde faaliyet gösteren firmaların yanı sıra AB’ye ihracat yapan firmaları (ülkemizin ihracatının yaklaşık %40’ı AB’ye yapılmasından ötürü ülkemizi de kapsamaktadır. Bu nedenle AB’ye ihracat yapan Türkiye’deki mevcut firmalar (tedarikçileriyle birlikte) bu mutabakata uymak zorundadır. Zira özellikle sektörünün öncüsü olan devler “Döngüsel Ekonomi uygulama sistemine” uyararak üretim yapan firmaları tercih etmektedir (Balbay, Sarihan ve Avşar, 2021).

76 ülke ve bölgeye ilişkin olarak sürdürülebilir ve düşük karbonlu bir gelecek için benimsediği beceriler dikkate alınarak MIT Technology Review tarafından hazırlanan 2022 yılı Yeşil Gelecek Endeksi (The Green Future Index 2022); ülke ekonomilerinin yenilebilir enerji, inovasyon ve yeşil politikalara yatırım yoluyla temiz enerji, sanayi, tarım ve topluma yönelme derecesini ölçmektedir. 2022 yılı itibarıyla Türkiye ekonomisi 3,7 puan alarak 76 ülke arasından 69. sırada yer almıştır. Ülkemizin Yeşil Gelecek Endeksi’ne göre aldığı puan detaylarını Tablo 1’de sunulmuştur.

Tablo 2: Türkiye’nin Yeşil Gelecek Endeksine Göre Durumu, 2022

Türkiye	
Ortalama Puan	69
Karbon Salınımı	66
Enerji Geçişi	19
Yeşil Toplum	44
Temiz İnovasyon	20
İklim Politikası	73

Kaynak: MIT Technology Review, The Green Future Index 2022, <https://www.technologyreview.com/2022/03/24/1048253/the-green-future-index-2022/>.

Yeşil Gelecek Endeksi’ne göre ilk beş sırada sırasıyla; İzlanda, Danimarka, Hollanda, Birleşik Krallık ve Norveç yer almaktadır. Son sıralarda ise ülkemizin ardından Endonezya, Katar, Paraguay ve İran gibi ülkeler bulunmaktadır.

## 5. SONUÇ

İnsanlar günlük yaşamlarını devam ettirebilmek için enerjiye gereksinim duymaktadırlar. Bu bağlamda insanların enerjiye bağımlı hareket ettikleri ve enerji taleplerinin de yıllar içerisinde katlanarak arttığı bir düzen söz konusudur. Günümüzde enerji, fosil yakıtlar ve yenilenebilir enerji kaynakları olmak üzere başlıca iki ana kaynaktan temin edilmektedir. Küresel düzeydeki enerji taleplerinin %87 gibi büyük bir kısmının petrol, kömür, doğal gaz gibi fosil yakıtlardan karşılandığı düşünüldüğünde ve insanların bu fosil yakıtları yoğun ve bilinçsizce kullanımları da beraberinde çevre kirliliği, küresel ısınma, sera gazı emisyonları ve iklim değişiklikleri gibi büyük sorunları meydana getirmektedir. Bu büyük sorunlarla mücadelede de artık hükümetler, şirketler ve toplumlar hem israfı ortadan kaldırmak hem de atıkların toplum üzerindeki olumsuz etkilerini azaltmanın yolunu döngüsel ekonomiye başvurarak aramaktadırlar. Çünkü “döngüsel ekonomi” daha sürdürülebilir ve dirençli bir geleceğe giden bir yol sunmaktadır. Toplumlar, kaynak verimliliği ve çevresel sorumluluğa öncelik veren ilkeleri benimseyerek doğrusal bir ekonomi modelinden döngüsel bir ekonomi modeline geçebilir ve böylece gezegenin ve gelecek nesillerin refahına katkıda bulunabilir. Döngüsel ekonomi, kaynak verimliliği, atık azaltımı ve ekonomik büyüme gibi çok sayıda fayda sunarak daha sürdürülebilir bir gelecek için cazip bir vizyon sunmaktadır. Ancak bu geçiş süreci teknolojik engeller, başlangıç maliyetleri ve yaygın davranış değişikliği ihtiyacı gibi bir dizi zorluğu da beraberinde getirmektedir. Zira bu zorlukların üstesinden gelebilmek ve döngüsel ekonominin tüm potansiyelini ortaya çıkarabilmek için hükümetlerin, endüstrilerin ve toplumların iş birliğine dayalı çabalarına ihtiyaç duyulmaktadır. Sürdürülebilirliğe giden bu yolda ilerlerken, avantajlar döngüsel bir yaklaşıma olan kolektif bağlılığımızda sebat etmenin öneminin altını çizmektedir.

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## Covid-19'un İşgücü Piyasalarında Cinsiyet Temelli Etkileri: İzmir Üzerine Bir Araştırma\*

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**Özet:** Covid-19 pandemisi günümüzde, sadece toplum sağlığında yarattığı etkilerle değil sosyo ekonomik etkileri ile de tartışılmaktadır. Bu süreçte kadınların işgücü piyasalarından hızlıca dışlandıkları, çalışmaya devam edenlerin ise ev içi sorumlulukları ile daha fazla yüzleşmek zorunda kaldıkları gözlenmiştir. Bilindiği üzere tarihte kriz dönemlerinde daima kadınlar ilk işten çıkarılanlar olmakla birlikte, dünya savaşları gibi zor dönemlerde de işgücü piyasalarında istihdamda aktif rol alarak işlerin ve üretimin devam etmesini sağlayan kesim olmuşlardır. Bu nedenle kadınların işgücü piyasalarında konumlarının korunması ülke ekonomilerinin özellikle zor zamanlarla yüzleşebilmeleri için kritik önemde görülmektedir. Bu kapsamda bu çalışmada işgücü piyasalarının Covid-19 pandemisinden etkilenme derecelerini cinsiyet temelli olarak ortaya koymak ve bu etkilerin ortadan kaldırılması için bölgesel politika önerileri geliştirmek amaçlanmaktadır. İlk amaç işgücü piyasalarında Covid-19'un cinsiyet temelli etkilerini tespit etmek, ikinci amaç ise, tespit edilen etkilerin nicel analizi ile bölgesel politika ve ulusal çıkarımlarında bulunmaktır. Yöntem açısından COVID-19'un işgücü piyasalarındaki cinsiyet temelli etkilerinin belirlenmesi amacıyla bir anket oluşturulmuş olup, anket sonuçlarına göre değerlendirmeler yapılmıştır. Çalışmanın özgün değeri ise, bu alanda İzmir odaklı bir analizin yapılmamış olmasıdır. Elde edilen analiz sonuçlarına göre Covid-19 pandemi süreci kadınlar ve erkekler üzerinde farklı etkiler doğurmakla birlikte kadınlar üzerindeki etkisi daha fazladır. Özellikle ev içi sorumluluklarının daha çok kadınlar üzerinde bir etki yarattığı tespit edilmiştir.

**Anahtar Kelimeler:** Cinsiyet Eşitsizliği, İşgücü, Covid-19

**Abstract:** Today, the Covid-19 pandemic is discussed not only with its effects on public health, but also with its socio-economic effects. In this process, it has been shown that women are quickly excluded from the labor market, and those who continue to work have to face with in-house responsibilities more. As it is known, women have always been the first to be dismissed in times of crises in history, but also in difficult times such as the world wars. They have always been the force that ensures the continuity of work and production by taking active roles in employment in the labor market. For this reason, protecting the position of women in the labor market is seen as critical for the economies of the countries facing especially with difficult times. In this study, it is aimed to reveal the extent to which the labor markets are affected by the Covid-19 pandemic on a gender basis and to develop regional and national policy recommendations to eliminate these effects. The first aim is to identify the gender-based effects of Covid-19 in the labor markets, and the second aim is to make regional policy implications with the quantitative analysis of the detected effects. In terms of the method, a survey was created in order to determine the gender-based effects of Covid-19 in the labor markets, and evaluations were made according to the survey results. The original value of the study is that an analysis focused on Izmir has not been made in this area yet. According to the results of the analysis, the Covid-19 pandemic process has different effects on women and men, but it has a greater effect on women. It has been determined that especially in-house responsibilities have an impact on women.

**Key Words:** Gender Discrimination, Laborforce, Covid-19

### 1. GİRİŞ

Covid-19 pandemisi geçmişte yaşanan diğer ekonomik ya da finansal krizlerin aksine hem ekonomik hem de toplumsal açıdan ciddi etkiler doğuran bir süreci içerisinde barındırmaktadır. 31 Aralık 2019 tarihinden itibaren dünya hızlı bir sağlık sorunu ile yüzleşmiş, tüm ülkelerde yaşanan paniğin yerini kendini koruma güdüsü almıştır. Diğer yandan bulaşıcılık özelliği çok yüksek olan bu virüsle birlikte yaşam koşulları ve çalışma şartları da değişime uğramıştır. Virüsün çıktığı ilk günden bu yana toplum sağlığı ile birlikte sosyal, kültürel ve ekonomik sorunlar da gün yüzüne çıkmıştır. İnsan sağlığının ciddi bir sınavdan geçtiği bu süreçte birçok ülke pandemiden negatif yönde etkilenmiştir. Diğer yandan, tüm ekonomileri etkileyen bu süreç, hanehalkı gelirlerinin daralması noktasında özellikle etkili olmuştur. Kısıtlayıcı sağlık tedbirleri ile birlikte işgücü piyasalarında da ciddi

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gerilemeler yaşanmıştır. Bu süreçte kadınların işgücü piyasalarından hızlıca dışlandıkları, çalışmaya devam edenlerin ise ev içi sorumlulukları ile daha fazla yüzleşmek zorunda kaldıkları gözlenmiştir. Çalışma saatlerinin azalması, işten çıkarma ya da ücretsiz izinlerin yanı sıra evden çalışma süreçleri yoğun olarak tüm ülkelerde izlenmiştir (Reichelt vd. 2021). International Labor Organization (ILO) (2020)'nin yürütmüş olduğu ve 129 ülkeyi kapsayan bir ankete göre pandemi, kadın istihdamını erkeklere göre daha fazla etkilemiştir. Özellikle Amerika, İngiltere, Avustralya, Kanada, Japonya ve Güney Kore'de kadın işsizlik oranlarının erkeklere nazaran daha fazla arttığı belirlenmiştir (Carli, 2020).

Bilindiği üzere tarihte kriz dönemlerinde çoğunlukla kadınların işgücü piyasalarından çekilmesi gözlemlenirken, zor dönemler dikkate alındığında kadınların işgücü piyasalarında istihdamda aktif rol alarak işlerin ve üretimin devam etmesini sağlayan kesim olduğu bilinmektedir. Covid-19 pandemisinin tüm bireyler üzerindeki etkileri farklılaşmakla birlikte bu projede genel olarak işgücü piyasalarının Covid-19 pandemisinden etkilenme derecelerini cinsiyet temelli olarak ortaya koymak ve bu etkilerin ortadan kaldırılması için bölgesel ve ulusal politika önerileri geliştirmek amaçlanmaktadır. Bu bağlamda bu çalışma iki temel amaca hizmet etmektedir. Bunlardan ilki işgücü piyasalarında Covid-19'un cinsiyet temelli etkilerini tespit etmek, ikincisi ise, tespit edilen etkilerin nicel analizi ile bölgesel politika ve ulusal çıkarımlarında bulunmaktır. Yöntem açısından Covid-19'un işgücü piyasalarındaki cinsiyet temelli etkilerinin belirlenmesi amacıyla bir anket oluşturulmuş olup, anket sonuçlarına göre değerlendirmeler yapılmıştır. Çalışmanın özgün değeri ise, bu alanda yapılmış bölgesel anlamda İzmir ili için bir analizin bulunmaması noktasındadır.

## 2. İŞGÜCÜ PİYASALARINDA CİNSİYET AYRIMI

İşgücü, ekonomide en temel üretim faktörlerinden biri olarak kabul görmektedir. Bu gerçekten yola çıkıldığında işgücü piyasaları da üretim ve dolayısıyla ekonomik büyümeyi belirleyen temel makro piyasalar olarak karşımıza çıkmaktadır. Bu bağlamda işgücü piyasalarının farklı yönleri ve boyutlarıyla incelenmesi, sosyoekonomik araştırmalar açısından özel önem arz etmektedir. Bu farklı yönler kimi zaman nitelikli-niteliksiz işgücü ayrımı ekseninde olurken kimi zaman işsizlik-istihdam ekseninde, kimi zaman da kadın-erkek ayrımı ekseninde olabilmektedir. Bu projenin temel araştırma konusu işgücü piyasalarındaki cinsiyet temelli ayrım olduğundan, analizlerin temelinde de kadın-erkek ayrımı eksenini yer almaktadır.

İşgücü piyasalarında cinsiyet temelli ayrımcılığın kökenleri aslında ilk çağlara kadar uzanmaktadır. İnsanoğlunun yerleşik topluma geçiş sürecinde kadının görevi, evdeki ateşi yanık tutmak, yemek pişirmek ve çocuklara bakmak olarak kodlanmıştır. Bu ataerkil kodlamanın dünya savaşları dönemine kadar yüzyıllarca sürdüğü bilinmektedir. 1. Dünya Savaşı ile birlikte birçok ülkede erkeklerin savaş meydanlarına gitmeleri, üretimin aksamaya başlamasına yol açmıştır. Sanayi Toplumu'nun ihtiyacı ise kitle üretiminin devamında yattığından, bu kez erkek nüfusunun azaldığı bir ortamda üretimi devam ettirmenin yolları aranmıştır. Tam da bu noktada kadınların üretimde istihdamı gündeme gelmiştir. Fabrikalarda ve atölyelerde erkeklerin yerini kadınlar almaya başladıkça, üretimin kadınlarla da sorunsuz devam edebildiği gözlenmiştir (Afşar ve Öğrekçi, 2014: 68). Bu ise, kadınların hem toplumda hem de ekonomide algılanışlarına ciddi bir değişiklik getirmiştir. Takip eden yıllarda gerçekleşen 2. Dünya Savaşı ile birlikte kadınların işgücü piyasalarındaki yerleri sağlamlaşmış, bu durum sırasıyla birçok ülkede kadına seçme ve seçilme hakkının da verilmesini beraberinde getirmiştir (Türkcan, 2021: 148). Öte yandan tüm bu gelişmeler kadının işgücü piyasalarında erkeklerden geri plandaki konumlarını ortadan kaldırmaya yetmemiştir.

Dünya geneline bakıldığında Dünya Bankası verilerine göre 2020 yılı itibarıyla dünya genelinde toplam kayıtlı işgücünün %38,8'i kadın işgücüdür. Diğer taraftan özellikle Asya Pasifik gibi bölgelerde özellikle turizm sektöründe yüksek oranda kayıtdışı kadın işgücü çalıştırıldığı da bilindiğinden, bu oranın aslında çok daha yüksek olduğu tahmin edilmektedir. Birleşmiş Milletler Kadın Birimi'nin tahminlerine göre 2019 yılı itibarıyla küresel ekonomide çalışan kadınların %23,2'si kayıtdışı işlerde çalışmaktadırlar. Kadın işgücü, toplam işgücünün bunca yüksek bir payını oluştururken işgücü piyasalarındaki konumları açısından düşünüldüğünde sadece kayıtdışı istihdam açısından değil aynı zamanda istihdamın türü açısından da dezavantajlı konumda oldukları göze çarpmaktadır. ILO 2020 yılı verilerine göre küresel bazda tüm firmaların sadece yaklaşık %19'unda kadınlar üst düzey yönetici olarak görev alabilirken; yine tüm firmaların sadece yaklaşık %35'inde kadınların sahipliği bulunmaktadır.

Türkiye ekonomisine bakıldığında ise yine kadınların dezavantajlı bir durumda oldukları göze çarpmaktadır. 2020 yılı ilk yarısında Türkiye İstatistik Kurumu (TÜİK) verilerine göre kadınların işgücüne katılım oranı yaklaşık %3,5 azalarak %35,6 oranına gerilemiştir. Kadın işsizlik oranı ise %15,8 olmuştur. Pandeminin ardından cari durumu görebilmek için ise yine TÜİK'in Mayıs 2022 işgücü istatistiklerini incelemek yerinde olacaktır. Mayıs

2022 verilerine göre kadınların işgücüne katılım oranının %35,1'e gerilediği görülmektedir. İşsizlik oranı ise %12,2 olarak gerçekleşmiştir. Kadınlardaki işsizlik oranındaki düşüşün nedeninin ise kriz dönemlerinde iş aramaktan ilk vazgeçenlerin kadınlar olması olabileceğinin altını çizmek yerinde olacaktır. Zira iş arayan tanımlamasından çıkan bireyler işgücü tanımlamasında yer almadıklarından işsizlik oranı hesaplamasına da dahil olmamaktadırlar. İşgücüne katılma oranındaki düşüş de bu öngörümüzü doğrular niteliktedir.

Tüm bunların yanı sıra, işgücü piyasalarında cinsiyet ayrımına yönelik bir diğer önemli gösterge, ücret ve kazanç istatistikleridir. Dünya genelinde olduğu gibi Türkiye'de de ücret ve kazanç istatistikleri açısından ciddi bir cinsiyet ayrımı olduğu yıllardır bilinegelen bir gerçektir. 2018 yılı TÜİK verilerine göre kadınlar yıllık ortalama olarak erkeklerden yaklaşık 4.000 TL az kazanç elde etmektedirler. TÜİK'in 2020 yılında yayınlamış olduğu Yaşam Memnuniyeti Araştırması'nda kadın çalışanların yalnızca %2,4'ü kazançlarından çok memnun olduklarını ifade etmişlerdir.

COVID-19 pandemisi ise işgücü piyasalarında zaten dezavantajlı konumda olan kadınların konumlarını daha da dezavantajlı hale getirmiştir. Takip eden bölümde ilgili literatüre dair açıklamalarda da ayrıntılı bir şekilde yer verildiği üzere pandemi ile birlikte kadınların daha fazla çocuk bakımı ve ev içi sorumluluklar ile yüzleştikleri ve bu durumun çalışma koşulları açısından kadınları olumsuz etkilediği ispatlanmış bir gerçektir. Bu duruma dair yurtdışında yapılmış pek çok çalışma olmasına rağmen Türkiye özelinde yapılmış çalışmaların henüz oldukça az olduğu bilinmektedir.

### 3. LİTERATÜR ANALİZİ

Covid-19 pandemisi öncesinde yaşanan ekonomik ve finansal kriz süreçlerine bakıldığında krizin istihdam açısından erkekler üzerinde yıkıcı etkilerinin olduğu gözlenmiştir, fakat içinde yaşadığımız bu süreçte ise kemer sıkma politikaları ve diğer kısıtlamaların özellikle kadın istihdamını olumsuz yönde etkilediği düşünülmektedir. 129 ülke dikkate alınarak yapılan bir anket çalışmasına göre Covid-19 pandemisinin kadın istihdamı üzerindeki etkisi daha fazladır (ILO, 2020). Ne zaman biri "Covid-19'un istihdam üzerindeki etkisi" veya "Covid-19'un neden olduğu istihdam kayıplarından" bahsetse cevap genelde aynıdır ve hatta belki de bilinçsizce zihninde bir karşı olgu oluşturmuştur. Bu bağlamda karşı tepki olarak "Covid-19 olmasaydı ne olurdu" çizgisinde bir soru oluşur. Yani, fiili istihdam seviyelerini, pandemi hiç var olmamış olsaydı oluşacak istihdam seviyeleriyle istemsiz olarak karşılaştırıyoruz. Türkiye'de Covid-19 kaynaklı istihdam kayıplarının hesaplanmasında karşı olgusal analizler hâlihazırda kullanılmıştır. Örneğin, DİSK-AR (2022) tarafından yapılan tahminler, dolaylı olarak istihdam seviyelerinin 2019'daki gibi olacağını varsaymaktadır. Mevsimsellikten arındırılmış verilerle bir dizi varsayım izlenmektedir ve pandemi olmadan istihdam seviyelerinin Aralık 2019'un mevsimsellikten arındırılmış istihdam seviyeleri gibi olacağı varsayılmıştır.

Bu varsayımlar pandemi sırasında kaybedilen işlerin sayısı için faydalı bir tahmin sunsa da bazı sınırlamalarla da karşı karşıya kalınmaktadır. Her şeyden önce, ikisi de 2020'de ekonomik görünümün ve dolayısıyla istihdam seviyelerinin iyileşip iyileşmeyeceğini değerlendirmek için son makroekonomik bilgileri kullanmıştır. Gerçekten de Türkiye ekonomisi GSYİH'sinin sırasıyla 2019'un 4. çeyreği ve 2020'nin ilk çeyreğinde %6,4 ve %4,4 büyüdüğünü görülmüştür. 2022 yılının ilk çeyreğinde ise yüzde %7,3 büyüme kaydedilmiştir. Bu oran tarım sektöründe yüzde %0,9, sanayi sektöründe yüzde %7,4 ve hizmetler sektöründe yüzde %9,8 olarak oranlanmaktadır (Strateji ve Bütçe Başkanlığı, 2022). Bu, işgücü piyasası performansı açısından korkunç bir yılın ardından ekonomik bir toparlanmanın yolda olabileceğine işaret etmektedir. Bu nedenle, pandemi öncesi istihdam seviyelerinin kullanılmasının, pandemi yokluğunda olacağından daha düşük olan karşı olgusal istihdam seviyeleri yaratarak Covid-19'un istihdam üzerindeki etkisini hafife alacağı iddia edilebilir. Bunun da ötesinde, geçmiş istihdam rakamlarını bir karşı olgu olarak kullanmak, Covid-19 olmadan Covid-19'a kıyasla daha kötü istihdam sonuçları bulma riskini de beraberinde getirmektedir ki bu çok gerçekçi bir sonuç vermeyebilir.

Covid-19 pandemisinin cinsiyet temelli etkilerini inceleyen çalışmalara bakıldığında henüz çok sayıda çalışmaya rastlanılmamakla birlikte yeni çalışmaların zaman içerisinde literatürde yer alması olasıdır. Ulusal ve uluslararası literatür incelendiğinde, ulusal nitelikte bu alanda çeşitli raporlar yer aldığı gözlemlenmiştir. Örnek vermek gerekirse, Aygüneş ve Ok (2020)'un hazırlamış oldukları Toplumsal Cinsiyet Çalışmaları İzleme Raporuna göre toplumsal cinsiyet eşitsizlikleri pandemi sürecinde daha da derinleşmiştir. Kadınlar açısından ev içi ücretsiz emeğin bu süreçte arttığı belirtilmiştir. Kalaylıoğlu vd. (2020) nin hazırlamış olduğu rapora göre Türkiye'de işini kaybeden kadınların sayısı erkeklere nazaran daha fazladır ve kadınların ev içindeki sorumluluklarının arttığı belirlenmiştir. Aslında yukarıda da bahsedildiği gibi Covid-19 olmadan Covid-19'dan daha da kötü istihdam sonuçlarının olabilme ihtimali aslında kadınların işgücünde istenilen oranda yer almaması Türkiye'deki düşük katılım ve istihdam oranlarının nedenlerinden biridir. Eğitim düzeylerinde yaşanan artışlara bakıldığında, çalışan



kadınlara karşı toplum içerisindeki normlara ve düşen doğurganlık oranına rağmen, kadınların işgücüne katılımı son derece düşük kalmaktadır. Salgının başlangıcında kadınların işgücüne katılımı yaklaşık %34 olmasının bir diğer nedeni de işgücü piyasasındaki yüksek kayıt dışılıktır. Bir önceki on yılda önemli bir düşüş olmasına rağmen, salgın öncesi kayıt dışılık oranı yaklaşık %34 olarak gerçekleşmiştir. Kayıtdışı tarım sektöründe de yüksektir. 2019 yılında toplam kayıt dışılık oranı yüzde 34,5 olurken, tarım, sanayi, inşaat ve hizmetler için sırasıyla yüzde 86,6, 20, 37,7 ve yüzde 22,5 olmuştur.

Korona virüs sınır, şehir veya mahalle tanımamasına rağmen, herkes bu süreçten eşit şekilde etkilenmemiştir. Daha az güvenli mesleklerde veya yüz yüze etkileşimlerin ekonomik faaliyetin önemli bir bileşeni olduğu endüstrilerde çalışan genç bireyler, özellikle genç kadınlar, diğer çalışanlara göre çok daha ciddi ve uzun vadeli sonuçlara maruz kalma tehlikesiyle karşı karşıyadır. Uluslararası nitelikte yapılan çalışmalar incelendiğinde ise durum çok da farklı değildir. Barneveld vd. (2020), COVID-19'un insani krize yol açtığını ve kadınların özellikle işgücü piyasalarında doğrudan etkilendiğini belirtmişlerdir. Cook and Grimshaw (2020) Covid-19'dan sonra Almanya, İtalya, Norveç ve Birleşik Krallık'ta uygulamaya konulan kısa vadeli çalışma planlarını tartışmış ve Avrupa ülkelerinin daha uzun vadede daha geniş politika perspektiflerine sahip olması gerektiğini belirtmişlerdir. Collins ve diğ. (2020), Şubat, Mart ve Nisan 2020 için ABD'deki çalışma saatlerine ilişkin verileri incelemişlerdir.

Araştırmalarına göre Covid-19 salgınının çalışma saatlerindeki cinsiyet farklılığını arttırdığını belirtmişlerdir. Özellikle küçük çocuğu olan kadınlar, çocuk bakımı sorumlulukları nedeniyle çalışma saatlerini azaltmıştır. Carli (2020), Covid-19'un cinsiyet ayrımcılığı üzerindeki etkilerini özetlemek amacıyla mevcut literatürü gözden geçirmiştir. Bu çalışmada, pandeminin kadınlar için daha fazla çocuk bakımı sorumlulukları, daha fazla iş kesintisi ve erkeklerden daha fazla iş kaybı gibi zorluklar yarattığının altı çizilmiştir. Czymara ve diğ. (2020) Almanya'da 1119 katılımcının yer aldığı bir anket yürütmüştür. Elde edilen sonuçlara göre, kadınlar karantina sürecinden daha fazla etkilenmiş ve bu durumun daha çok çocuk bakımı sorumluluğundan kaynaklandığı tespit edilmiştir. Farre ve diğ. (2020) İspanya'daki karantina sürecinin etkilerini analiz etmiş ve kadınların daha fazla ev işi ve çocuk bakımı sorumlulukları nedeniyle ülkedeki cinsiyet eşitsizliklerinin arttığını belirlemişlerdir. Hipp ve Bünning (2020)'in Almanya'da yapılan bir araştırmasına göre, Covid-19 pandemisi süresince kadınların çalışma saatleri erkeklere nazaran azalmış ya da kadınların işten çıkmaları artmıştır. Kadınların özellikle bakım sorumluluklarının bu süreçte arttığı ve ücretsiz çalışma sürelerinin arttığı belirlenmiştir. United Nations (UN) (2020), Covid-19'un küresel olarak cinsiyet ayrımcılığını artırdığının altını çizmektedir. Özellikle göçmen kadınlar, dezavantajlı etnik gruplardan kadınlar ve yoksul kadınlar pandemiden daha fazla etkilenmiştir. Ayrımcılık onlar için daha da kötü hale gelmiştir. Dahası, kayıt dışı sektörlerde çalışan birçok kadın işini kaybetmiştir. Salgının sadece ilk ayında kadınların gelirlerinin %60 düştüğü tahmin edilmektedir. Daha trajik olan ise sağlık hizmetlerinin kadın ağırlıklı olması ve bu nedenle kadın çalışanların birçok ülkede erkeklerden daha fazla enfekte olduğu gerçeğidir.

Ulusal ve uluslararası literatür incelendiğinde Covid-19 pandemisinin işgücü piyasasındaki cinsiyet temelli etkilerine dair çeşitli araştırmalar yapılmış olmakla birlikte çalışmaların neredeyse tümünün ulusal veya uluslararası düzeyde yapıldığı gözlenmiştir. Türkiye'de bölgesel düzeyde yapılmış tek bir çalışma olup Ankara ilinde yapılmış küçük çaplı bir uygulamadan ibarettir. Işık (2020) Eylül-Ekim 2020 tarihleri arasında Ankara'da 9 kadın ile gerçekleştirdiği derinlemesine mülakatlar sonucunda kayıt dışı çalışan kadınların pandemi sürecinden daha fazla etkilendiklerini tespit etmiştir. Bu bağlamda bu proje kapsamında yapılacak anket uygulaması ile Türkiye için cari dönemde en kapsamlı bölgesel analiz yapılmış olacak ve ilgili literatürde bu alandaki boşluk doldurulmaya çalışılacaktır.

### 3. YÖNTEM VE AMPİRİK BULGULAR

#### 3.1.Yöntem

Bu çalışmada Covid-19 pandemisinin iş gücü piyasasındaki cinsiyet temelli etkilerini analiz edebilmek amacıyla anket çalışması yürütülmüştür. Anket uygulaması, araştırması yapılmak istenen alanda hazır verinin olmadığı ve bazı yönleriyle derinlemesine istatistikî araştırmaların yapılmak istendiği durumlarda başvurulan bir yöntem olarak sosyal bilimler alanında sıkça kullanılan bir metottur. Bu proje kapsamında da araştırması yapılan alanda yayınlanmış hazır verinin olmaması nedeniyle anket uygulaması yöntemi benimsenmiştir.

Anket hazırlama sürecinde uluslararası literatürde yapılmış benzer çalışmalar dikkate alınmıştır. Tüm benzer anket uygulamalarının (Czymara vd., 2020; Hipp ve Bünning, 2020) öncelikle demografik sorular ile başladığı ardından kadınların işgücü piyasasındaki durumlarının tespitine yönelik sorulara geçildiği gözlenmiştir.

İlgili çalışmalarda anket soruları paylaşılmış olmamakla birlikte, anket sonuçlarına dair bulguların yorumlaması kısımlarında vurgu yapılan hususlardan yola çıkılarak ve araştırmamızın hipotezleri de dikkate alınarak anket soruları hazırlanmıştır. Oluşturulan anket uzman görüşüne sunulmuştur. Anket uygulama konusunda tecrübesi ve uzmanlık bilgisi olan akademisyenlerden görüş alındıktan sonra 10 kişilik bir odak gruba anketin ön uygulaması yapılmıştır. Ön uygulamadaki amaç, anket sorularının anlaşılabilirlik açısından kontrolü ve test edilmek istenen hipotezlerin yeterince güçlü bir şekilde öznelere aktarılıp aktarılamadığının tespitidir. Uzman görüşleri ve ön uygulamadan elde edilen geri bildirimler doğrultusunda anket nihai haline getirilerek Etik Kurul onayına sunulmuştur. Etik Kurul onayının alınmasından ardından anketin uygulama sürecine geçilmiştir. Anket yayınlandıktan sonra toplam yanıtlama sayısı 413 olarak gerçekleşmiştir. Ancak İzmir harici illerden yanıtlayanlar olduğu da gözlenmiş ve bu veriler elenmiştir. Nihayetinde 300 kullanılabilir anket verisi ile analizler gerçekleştirilmiştir. Analizler için SPSS programı kullanılmıştır. Hazırlanan anketin giriş soruları yanıtlayanların demografik özelliklerini tespit etmek üzere hazırlanmıştır. Bu kapsamda ilk 9 soru cinsiyet, medeni durum, meslek, eğitim düzeyi, yaş, mesleki tecrübe süresi, gelir, ikamet edilen il ve çocuk sahibi olma durumudur. İkamet edilen il bilgisi İzmir özelinde yapılacak çalışmaya online ortamda başka illerden katılabilecek olanların bilgilerini eleyebilmek için özellikle sorulmuştur. Çocuk sahipliği sorusu, pandemi döneminde evden çalışma koşullarında çalışanlar için özellikle zorlayıcı bir durum olması nedeniyle yöneltilmiştir. 10. Sorudan itibaren yapılan araştırmaya ve kurulan hipotezlere yönelik sorulara yer verilmiştir. Ayrıca ilk 14 soru çoktan seçmeli sorular olup, geri kalan sorular likert ölçekli sorular olarak belirlenmiştir. Likert ölçeklendirmede ‘Kesinlikle katılmıyorum’ seçeneğinden ‘Kesinlikle katılıyorum’ seçeneğine doğru değişen 5li likert ölçeklendirme benimsenmiştir. Likert ölçeklendirme, özellikle nitel verinin nicel ölçümlenmesi açısından güçlü ve tercih edilen bir ölçeklendirme türü olup anketimizde de anket uygulamalarındaki bu yaygın kullanım göz önüne alınmıştır.

Diğer taraftan bazı sorularda da daha önce de ifade edildiği üzere çoktan seçmeli maddelendirme tercih edilmiştir. Bu sorular, temel itibarıyla demografik özelliklere yönelik sorular olup, demografik özellikler açısından sınıflandırma yapabilme amacına hizmet etmektedir. Demografik soruların yanısıra evden çalışırken karşılaşılan zorluklar ve maaş/ücret değişikliğine yönelik sorularda da maddelendirme tercih edilmiştir. Madde havuzları oluşturulurken yine uluslararası literatürdeki örnek çalışmaların bulguları ve bu projenin İzmir özelindeki hipotezleri dikkate alınmıştır. Tüm bunların yanısıra uzman görüşleri de dikkate alınarak özellikle evden çalışırken karşılaşılan zorluklar maddelendirmesinde ‘Diğer’ maddesi de eklenerek katılımcıların madde havuzu haricinde bir zorlukla karşılaşmış olmaları durumunda cevaplarını ankete ekleyebilmeleri sağlanmıştır.

### 3.2. Evren ve Örneklem

Araştırmamızın evreni İzmir ilinde yaşayan ve işgücüne dâhil olan bireylerdir. İşgücü, 15 yaş üzeri olup hâlihazırda çalışmakta olan ya da çalışma niyeti olduğu ve iş aradığı halde iş bulamayanlardan oluşmaktadır. Diğer bir ifadeyle işgücü, istihdam edilen ve işsiz yetişkinlerin toplamından teşekkül etmektedir. İşgücüne dair bu tanımlama, anketin açıklama kısmında verilerek, işgücüne dâhil olmayanların sehven anketi cevaplamalarının da önüne geçilmeye çalışılmıştır. 2019 yılı nüfus sayımı verilerine göre İzmir ili nüfusunun 4 milyonun üzerinde olması ve buna paralel olarak çok geniş bir işgücünü barındıran metropolitan bir şehir olması nedeniyle, hiç şüphesiz araştırma evreninin tümüne anket aracılığı ile ulaşmak mümkün değildir. Bu nedenle anket uygulamasında rassal örnekleme yöntemi benimsenmiştir. Söz konusu örneklemede, anket çevrimiçi (online) platformlarda yayılırken, yanıtlayıcıların, demografik özellikler açısından normal dağılıma yakın bir profil sergilemesine dikkat edilmiştir.

### 3.3. Çalışmanın Hipotezleri

Araştırmamızın temel hipotezleri aşağıdaki gibi sıralanabilir:

**Hipotez 1:** COVID-19 pandemisi kadın istihdamı üzerinde olumsuz etkiye sahiptir.

**Hipotez 2:** Covid19 pandemisinin bireylerin gelirleri üzerindeki etkisi konusunda cinsiyete göre farklılık söz konusudur.

**Hipotez 3:** Covid-19 pandemisi kadınların çalışma saatlerini erkeklerden daha fazla azaltmıştır.

**Hipotez 4:** Covid-19 pandemisi ile evden çalışma koşullarında kadınlar ev içi sorumluluklar ve çocuk bakımı konularında erkeklerden daha fazla sorumluluk almışlardır.

**Hipotez 5:** Covid-19 sürecinde mesleki beceri edinme ve kariyer gelişimi konularında cinsiyete göre farklılık bulunmaktadır. (Kadınlar erkeklerden daha olumsuz etkilenmiştir)

**Hipotez 6:** Covid-19 sürecinde çalışma stresi ve pandemi sonrasında işini kaybetmeye yönelik endişeler konusunda cinsiyete göre farklılık söz konusudur. (Kadınlar daha yüksek stres ve endişe yaşamaktadırlar)

### 3.4. Ampirik Bulgular

Anket sorularına verilen cevaplara ilişkin değerlendirmeler şu şekildedir;

- \* Ankete katılanların yüzde 64'ü kadın, yüzde 36'sı erkektir.
- \* Ankete katılanların yüzde 53.6'sı evli, yüzde 46.3'ü bekârdır.
- \* Ankete katılanların çoğunluğunu özel sektör çalışanları oluşturmakla birlikte, kamu çalışanları ikinci sıradadır.
- \* Ankete katılanların yarısı lisans mezunudur.
- \* Ankete katılanların çoğunluğunu 25-44 yaş grubu oluşturmaktadır.
- \* Çalışma süresi açısından bakıldığında ise ankete katılanların neredeyse yarısı 10 yıldan uzun süredir çalışmaktadır.
- \* Ankete katılanların gelir grupları açısından bir heterojenlik durumu söz konusudur.
- \* Ankete katılanların yüzde 47.6'sının çocuğu varken, bu oran çocuğu olmayanlar için yüzde 52.3'tür.
- \* Ankete katılanların yaklaşık yüzde 55.6'sı evden çalışma sürelerinin arttığını belirtmişlerdir.
- \* Evden çalışanlar açısından iş performansının olumlu yönde etkilendiğini belirten anket katılımcılarının sayısı daha fazladır.
- \* Ankete katılan katılımcılar evden çalışırken en fazla zorlandıkları konunun iş arkadaşlarıyla olan etkileşimin azalması olduğunu belirtmişlerdir. Ev işleri sorumluluğunun da bu süreçte artması ve ev ortamının görüntülü görüşmeler için her zaman uygun olmaması da diğer bir önemli konu olmuştur.
- \* Ankete katılanların çoğu Covid-19 pandemisinde maaş ya da ücret değişikliğinin olmadığını belirtmişlerdir.
- \* Diğer yandan maaş değişikliği yaşayan katılımcılar maaşlarının/ücretlerinin azaldığını belirtmişlerdir.
- \* İşverenlerin anlayışlı davranması hususunda ise katılımcıların çoğunluğu işverenlerin anlayışlı olduğunu belirtmişlerdir.
- \* Ankete katılanlar kişilerin çoğunluğu evden çalışma sürecinin nispeten zor olduğunu belirtmekte birlikte evden çalışma sürecinin kariyerleri üzerindeki etkisinin olumsuz belirtmiştir.
- \* Anket katılımcıları pandemi sonrasında çok fazla iş kaybı endişesi taşımamaktadırlar.
- \* Bununla birlikte pandeminin iş yükünde artış meydana getirdiğini düşünenlerin yüzdesi bir hayli yüksektir.
- \* Ankete katılanlara göre pandemi süreci yeni becerilerin edinilmesinde olumlu katkılar içermektedir.
- \* Katılımcılar pandemi süreci ile birlikte teknoloji kullanma yeteneklerinin arttığını belirtmişlerdir.

İş kaybı endişesi yaşayan 73 kişinin 48'ini kadınlar oluşturmaktadır; gelir ya da maaşlarının düştüğünü belirten 43 kişiden 31'i kadınlardır. Diğer yandan evden çalışma sürecinde en fazla zorlanılan maddelerden biri olan ev içi sorumluluklarını seçen 81 kişiden 57'si kadınlardır; çocuk bakımından sorumlu olma konusunda da 68 kişiden 50'si kadınlardır. Dolayısıyla iş kaybı, gelir azalışları ve evdeki sorumlulukların artması pandemi sürecinde kadınları daha fazla etkilemiş olabilir. Bu sonuç Aygüneş ve Ok(2020), İlkaracan ve Memiş (2020), Kalaylıoğlu vd. (2020)'nin çalışmalarıyla uyumludur. Diğer yandan pandemi sürecinde mesleki beceriler edinme noktasında olumlu düşünen 151 kişiden 95'i kadınlar olmuştur. Her ne kadar pandeminin kadınlar ve erkekler üzerindeki etkileri farklı olsa da kariyer gelişimi açısından bakıldığında kadınların meslekleri açısından yeni beceriler elde etmesi olumlu bir gelişmedir.

#### 3.4.1. Tek Yönlü ANOVA Test Sonuçları

Tek yönlü ANOVA testi, anket uygulamalarında en yaygın kullanılan ve en temel varyans analizi yöntemidir. ANOVA testi sonuçları, hesaplanan Levene istatistiği ve F istatistiği değerleri dikkate alınarak yorumlanmaktadır

(Antalyalı, 2010: 132). Bu araştırma ekseninde temel analiz sorusu, pandeminin cinsiyete göre çalışma ve ücret konularında farklı etkiler yaratıp yaratmadığı olduğundan, cinsiyete dayalı gruplar arası farklılıklar olup olmadığı araştırılmıştır. ANOVA testinde öncelikle araştırılan değişkenlerin varyanslarının homojen dağılıp dağılmadığı araştırılmaktadır. Levene İstatistiğine göre karar verilmekte ve bu istatistik sonucuna göre varyansların homojen olduğuna dair sıfır hipotezi kabul veya reddedilmektedir (Türkcan, 2017:49). Aşağıda araştırmanın temel hipotezleri doğrultusunda yapılan tek yönlü ANOVA testi sonuçlarına yer verilmektedir. Tek Yönlü ANOVA Testine tabi edilen tüm sorular için uygulanan Varyansların Homojenliği Testi sonuçlarına göre elde edilen tüm Levene İstatistiği sonuçları, varyansların homojen dağıldığını göstermiştir. Aşağıda anket uygulamasındaki farklı sorulara dair Tek Yönlü ANOVA Testi sonuçlarına tablolar itibarıyla yer verilmektedir.

Tablo 1: İzmir ilinde Covid-19 pandemisiyle birlikte daha fazla evden çalışmaya başlama konusunda cinsiyete göre farklılık bulunmakta mıdır?

	Kareler Toplamı	Serbestlik Derecesi	Ortalama Karesi	F İstatistiği	Olasılık Değeri
<b>Gruplar Arası</b>	0,048	1	0,048	0,192	0,662
<b>Gruplar İçi</b>	73,171	295	0,248		
<b>Toplam</b>	73,219	296			

ANOVA test sonucuna göre COVID19 pandemisi ile birlikte evden çalışmaya başlama konusunda cinsiyete göre farklılık görünmemektedir

Tablo 2: İzmir ilinde Covid-19 pandemisiyle birlikte maaş ve ücret değişimi konusunda cinsiyete göre farklılık bulunmakta mıdır?

	Kareler Toplamı	Serbestlik Derecesi	Ortalama Karesi	F İstatistiği	Olasılık Değeri
<b>Gruplar Arası</b>	0,002	1	0,002	0,012	0,911
<b>Gruplar İçi</b>	47,669	290	0,164		
<b>Toplam</b>	47,671	291			

Pandemi ile birlikte maaş ve ücret değişimi konusunda İzmir ilinde ANOVA test sonucuna göre cinsiyete göre farklılık olmadığı görülmektedir.

Tablo 3: İzmir ilinde Covid-19 pandemisi süresince işverenlerin artan sorumluluklar ve stres konusunda özneye karşı anlayışlı davrandıkları görüşüne dair cinsiyete göre farklılık bulunmakta mıdır?

	Kareler Toplamı	Serbestlik Derecesi	Ortalama Karesi	F İstatistiği	Olasılık Değeri
<b>Gruplar Arası</b>	1,470	1	1,470	0,733	0,393
<b>Gruplar İçi</b>	557,330	278	2,005		
<b>Toplam</b>	558,800	279			

Bu analiz sonuçlarına göre de işverenlerin davranışları konusunda cinsiyete göre farklılık olmadığı görülmektedir.

Tablo 4: İzmir ilinde evden çalışmanın zor olduğuna yönelik düşünce, cinsiyete göre farklılık göstermekte midir?

	Kareler Toplamı	Serbestlik Derecesi	Ortalama Karesi	F İstatistiği	Olasılık Değeri
<b>Gruplar Arası</b>	0,048	1	0,048	0,192	0,662
<b>Gruplar İçi</b>	73,171	295	0,248		
<b>Toplam</b>	73,219	296			

İlgili değişkenlere yönelik yapılan Tek Yönlü ANOVA Testi sonuçlarına göre İzmir ilinde evden çalışmanın zor olduğuna yönelik görüş açısından cinsiyete göre farklılık görülmemektedir.

Tablo 5: İzmir ilinde evden çalışmanın kariyeri olumsuz etkilediğine yönelik düşüncede cinsiyete göre farklı görüş beyanı var mıdır?

	Kareler Toplamı	Serbestlik Derecesi	Ortalama Karesi	F İstatistiği	Olasılık Değeri
<b>Gruplar Arası</b>	0,527	1	0,527	0,249	0,618
<b>Gruplar İçi</b>	563,458	266	2,118		
<b>Toplam</b>	563,985	267			

Yine Tek Yönlü ANOVA Testi bulguları, ilgili araştırma sorusu kapsamında da cinsiyete göre farklılık olmadığını işaret etmektedir.

Tablo 6: İzmir ilinde pandemi sonrası işini kaybetme korkusunda cinsiyete göre farklılık var mıdır?

	Kareler Toplamı	Serbestlik Derecesi	Ortalama Karesi	F İstatistiği	Olasılık Değeri
<b>Gruplar Arası</b>	0,027	1	0,027	0,011	0,916
<b>Gruplar İçi</b>	665,693	280	2,377		
<b>Toplam</b>	665,720	281			

Uygulanan Tek Yönlü ANOVA Testi'nin sonuçlarına göre İzmir ilinde pandemi sonrasında işini kaybetme korkusu konusunda cinsiyete göre farklılık olmadığı görülmektedir.

Tablo 7: İzmir ilinde pandemi ile iş yükünün arttığına dair görüş açısından cinsiyete göre farklılık görülmekte midir?

	Kareler Toplamı	Serbestlik Derecesi	Ortalama Karesi	F İstatistiği	Olasılık Değeri
<b>Gruplar Arası</b>	0,175	1	0,175	0,087	0,769
<b>Gruplar İçi</b>	566,426	281	2,016		
<b>Toplam</b>	566,601	282			

Yapılan test sonuçlarına göre pandemi ile iş yükünün arttığına yönelik görüş açısından da cinsiyete göre farklılık olmadığı görülmektedir.

Tablo 8: İzmir ilinde pandemi ile yeni beceriler edindiğini ifade eden işgücünde cinsiyete göre farklılık var mıdır?

	Kareler Toplamı	Serbestlik Derecesi	Ortalama Karesi	F İstatistiği	Olasılık Değeri
<b>Gruplar Arası</b>	0,447	1	0,447	0,242	0,623
<b>Gruplar İçi</b>	519,659	281	1,849		
<b>Toplam</b>	520,106	282			

Test sonuçları kapsamında ilgili soru açısından da cinsiyete göre farklılık olmadığı görülmektedir.

Tablo 9: İzmir ilinde pandemi ile birlikte teknoloji kullanımının arttığına yönelik görüş bildiren işgücünde cinsiyete göre farklılık var mıdır?

	Kareler Toplamı	Serbestlik Derecesi	Ortalama Karesi	F İstatistiği	Olasılık Değeri
<b>Gruplar Arası</b>	1,259	1	1,259	0,801	0,371
<b>Gruplar İçi</b>	455,655	290	1,571		
<b>Toplam</b>	456,914	291			

Son olarak, İzmir ilinde pandemi ile birlikte teknoloji kullanımının artmasına yönelik görüş bildiren işgücünde de cinsiyete göre farklılık bulunmadığı tespit edilmiştir.

### 3.4.2. Pearson Korelasyon Analizi Sonuçları

Pearson Korelasyon Katsayısı, iki sürekli değişken arasında doğrusal ilişkinin yönüne ve şiddetine yönelik araştırmalar için kullanılan bir katsayıdır (Galton, 1907). Pearson Korelasyon Katsayısı -1 ile +1 arasında değişen bir katsayıdır (Sungur, 2010: 116). Tablo 19'da çocuğunun olmasının evden çalışmayı daha zor hale getirip getirmediğine yönelik Pearson Korelasyon Analizi sonuçlarına yer verilmektedir. Çocuk sahibi olmanın özellikle kadın çalışanlar için zorlayıcı bir faktör olması nedeniyle ilgili analizin, araştırmanın odağı açısından önemli olduğu düşünülmektedir.

Tablo 10: Çocuğunun Olması ile Evden Çalışmanın Daha Zor Olduğuna Yönelik Görüş Arasındaki Pearson Korelasyon Analizi

		Çocuk	Evden Çalışma Zorluğu
<b>Çocuk</b>	Pearson Korelasyonu	1	0,094
	Olasılık Değeri		0,123
	N	300	272
<b>Evden Çalışma Zorluğu</b>	Pearson Korelasyonu	0,094	1
	Olasılık Değeri	0,123	
	N	272	272

Analiz sonuçları incelendiğinde korelasyonun %10 istatistiki anlamlılık düzeyinde geçerli ve anlamlı olduğu görülmektedir. Ayrıca ilgili değişkenler arasında pozitif korelasyon olduğu göze çarpmaktadır. Daha açık ifadeyle, çocuk sahibi olmak, evden çalışmayı zorlaştıran bir koşul olarak karşımıza çıkmaktadır.

Tablo 11: Çocuk Sahibi Olmak ile Evden Çalışmanın Kariyer Gelişimini Olumsuz Etkilediğine Dair Görüş Arasındaki Pearson Korelasyon Analizi

		<b>Çocuk</b>	<b>Evden Çalışma ve Kariyer</b>
<b>Çocuk</b>	Pearson Korelasyonu	1	0,041
	Olasılık Değeri		0,505
	N	300	268
<b>Evden Çalışma ve Kariyer</b>	Pearson Korelasyonu	0,041	1
	Olasılık Değeri	0,505	
	N	268	268

Yapılan Pearson Korelasyon Analizi sonuçları %5 istatistiki anlamlılık düzeyine korelasyona işaret etmektedir. Ayrıca pozitif korelasyon olduğu görülmektedir. Yine açıkça belirtmek gerekirse, çocuk sahibi olmak, evden çalışmanın kariyeri olumsuz etkilediğine dair görüşe yol açmaktadır

#### 4. SONUÇ

Araştırmanın hipotezleri bağlamında sonuçları değerlendirecek olursak karşımıza İzmir işgücü piyasaları açısından ilgili literatürdeki bulgulardan biraz farklı bir portre çıkmaktadır. İlk hipotezimiz kapsamında İzmir ilinde COVID-19 pandemisinin kadın istihdamı üzerinde olumsuz etkiye sahip olduğu hipotezini kabul edebileceğimiz bir bulgu elde edilemediği görülmektedir. İkinci hipotezimiz olan COVID-19 pandemisinin bireylerin gelirleri üzerindeki etkisi konusunda da cinsiyete göre anlamlı farklılık olduğu doğrulanmamıştır. Bir diğer hipotez olan pandeminin kadınların çalışma saatlerini de erkeklerden daha fazla azalttığına yönelik bulgu elde edilememiştir. Ancak 4. Hipotezimiz olan pandemide evden çalışma koşullarında kadınların ev içi sorumluluklar ve çocuk bakımı konularında erkeklerden daha fazla sorumluluk aldıklarına yönelik bulgular, hipotezimizi doğrular niteliktedir. Beşinci hipotezimiz olan kadınların pandemide mesleki beceri edinme ve kariyer gelişim konularında erkeklerden daha olumsuz etkilendiklerine dair hipotez, anket bulguları doğrultusunda doğrulanmamaktadır. Son hipotezimiz olan pandemide çalışma stresi ve işini kaybetmeye yönelik korkular konusunda kadınların erkeklerden daha olumsuz etkilendikleri hipotezinin de benzer şekilde doğrulanabilir olmadığı gözlenmiştir.

Tüm bulgular doğrultusunda değerlendirecek olursak; Covid-19 pandemi süreci işgücü piyasasında ciddi etkiler doğurmakla birlikte İzmir ili açısından bakıldığında kadınlar ile erkekler arasında ciddi farklılıklar tespit edilememiştir. Bu durumun temelinde, araştırmanın sınırlılıkları yatmaktadır. Araştırmada karşımıza çıkan en önemli sınırlılık, proje süresinin daha geniş bir örnekleme ulaşmaya imkân tanınamış olmasıdır. Dolayısıyla ilgili anketin proje sonrasında da yayılmaya devam edilmesi veya yeni bir proje ekseninde anket uygulamasının devam ettirilmesi ile daha geniş bir örnekleme ulaşmak mümkün olabilir. Bilindiği üzere örneklem büyüklüğü arttıkça ana evrene dair daha anlamlı ve sapmasız ampirik bulgular elde etmek de mümkün olmaktadır. Araştırmanın bir diğer önemli kısıtı, pandemi koşulları nedeniyle anketin yalnızca online ortamda uygulanmış olmasıdır. Online anket yanıtlama becerisine sahip olmayan, düşük eğitimli kadın işgücüne bu nedenle istenen oranda ulaşamamıştır. Pandeminin ortadan kalkması ile anketin yüz yüze güvenli bir şekilde uygulanma olasılığı doğduğunda ilgili kesime anket uygulanarak bu sınırlılık da aşılabılır.

Pandeminin toplumun her kesimini ekonomik, sosyal ve kültürel açılarından olumsuz yönde etkilediği bilinen bir gerçek olarak karşımızdadır. Bu doğrultuda cinsiyet eşitliğini gözeterek istihdam politikalarının ve eşit işe eşit ücret politikalarının politika yapıcılar tarafından önemsenmesi ve etkin bir şekilde yürürlüğe konulması gerekmektedir. Bunların yanısıra, pandemi özelinde acil eylem planı olarak kadınların işgücü piyasalarındaki mağduriyetlerini giderici birtakım önlemlerin alınması gerekliliği de aşikârdır. Yapılan analizler, kadınların ev içi sorumluluklar ve çocuk bakımına yüksek oranda maruz kaldıklarını ve bunun iş yaşamlarını olumsuz etkilediğini göstermektedir. Bu durumu kısa dönemde çözmek çok kolay olmamakla birlikte, ev içi sorumluluklarda eşitlikçi yaklaşımların benimsenmesine yönelik aile içi eğitimler ve bilgilendirici kamu spotları hazırlanması etkin politika aksiyonları olabilir. Ayrıca kadınların kazançlarının pandemi döneminde erkeklerden daha fazla kesintiye uğradığı bulgusu dikkate alındığında da, işverenlerin kadın çalışanların kazançlarını azaltmamaları doğrultusunda sübvansede edilmeleri de bir çözüm önerisi olarak sunulabilir.

## KAYNAKÇA

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## Yavaş Şehir Yaklaşımının Sürdürülebilir Yerel Kalkınmaya Etkisi

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**Özet:** Dünya nüfusunun hızlı bir şekilde artması, teknoloji ve sanayileşmede yaşanan gelişmeler kentlere doğru göçün hızlanmasına neden olmuştur. Küreselleşmenin artması, var olan sosyo-ekonomik yapıyı da değiştirerek, kentleşmeyi de artırmıştır. Teknolojik, bilimsel, ekonomik ve sosyal gelişmeler, başta doğal kaynaklar ve çevre olmak üzere onarılması güç zararlara neden olmaktadır. Aşırı kentleşme ve küreselleşme nedeniyle insanlar farklı bir yaşam biçimi arama yoluna gitmiştir. Küreselleşmenin zarar verici unsurlarına karşı çevresel değerlerin gelecek nesillere aktarılmasını, yerel ekonominin ve kültürel varlıkların ön plana çıkarılmasını ve kentsel yaşam kalitesinin artırılmasını amaçlayan Yavaş Şehir Hareketi ortaya çıkmıştır. Yavaş şehir hareketi ekonomik, sosyal ve çevresel sürdürülebilirliği sağlayarak o bölgede yaşayan halkın kentsel yaşam kalitesini artırmayı amaçlayan bir harekettir. Bu çalışmada, yavaş şehir yaklaşımının sürdürülebilir yerel kalkınmaya etkisi incelenmiştir.

**Anahtar Kelimeler:** Sürdürülebilirlik, Yavaş Şehir, Sürdürülebilir Yerel Kalkınma.

### The Effect of Slow City Approach on Sustainable Local Development

**Abstract:** Rapid increase in world population and developments in technology and industrialization have led to an acceleration of migration to cities. Increase in globalization has changed existing socio-economic structure and increased urbanization. Technological, scientific, economic and social developments cause irreparable damage, especially to natural resources and the environment. Due to extreme urbanization and globalization, people have sought a different way of life. Against the damaging elements of globalization, the Slow City Movement has emerged, aiming to transfer environmental values to future generations, highlight the local economy and cultural assets, and increase the quality of urban life. The slow city movement is a movement that aims to improve the quality of urban life of the people by ensuring economic, social and environmental sustainability locally. In this study, the effect of the slow city approach on sustainable local development was examined.

**Keywords:** Sustainability, Slow City, Sustainable Local Development.

#### 1. GİRİŞ

Küreselleşmenin artması, var olan sosyo-ekonomik yapıyı da değiştirerek, kentleşmeyi de artırmıştır. Tüketim odaklı yaşam tarzıyla birlikte insanları doğadan ve birbirlerinden kopartan modern kent yaşamı insanlara mutluluk getirmemiş, insanlar farklı bir yaşam biçimi arama yoluna gitmiştir. İnsanların bu arayışı kentsel boyutta “yaşamın, yaşamaktan zevk alınacak bir hızda yaşanmasını” savunan Yavaş Şehir hareketini ortaya çıkarmıştır (Kartal, 2019: 11).

Yavaş Şehir, Cittaslow adıyla 1999’da İtalya’da ortaya çıkmış, günümüzde tüm dünyaya yayılmıştır. Cittaslow, kentlerin kendi gelenek göreneklerini, yemeklerini, tarihsel kimliklerini korumalarına önem veren şehirler ağıdır.

Sürdürülebilirliğin bu üç boyutu yavaş şehir konseptine uyarlandığında, yavaş şehir hareketi sürdürülebilir bir şehircilik, sürdürülebilir turizm, sürdürülebilir kalkınma anlamına gelen, ekonomik kaynaklarını koruyan, sosyal yönü güçlü ve çevreye duyarlı bir şehircilik ve turizm anlayışıdır.

#### 2. SÜRDÜRÜLEBİLİR YEREL KALKINMA

Sürdürülebilirlik, ekonomik kalkınma, turizm, tarım, sanayi, kentleşme, ekosistem yönetimi, su kaynakları ve kirlilik yönetimi gibi sorunları da ele alan geniş bir kavramdır (Özmehmet, 2008: 11). Sürdürülebilirlik küresel, bölgesel, ülkesel ve yerel olmak üzere olmak üzere dört düzeyde incelenebilir.

Kartal, Küresel sürdürülebilirlik, dünya genelinde doğal kaynakların nasıl kullanılacağı ve paylaşılacağı, ekolojik çevre üzerinde endüstrileşmenin ortaya çıkardığı baskının nasıl ortadan kaldırılacağını; bölgesel sürdürülebilirlik, birden fazla ülkeyi ilgilendiren ancak küresel düzeyde olmayan sorunları; ülkesel sürdürülebilirlik, ülkelerin ulusal düzeyde ekolojik çevre, ekonomi, sosyal yapı gibi konularda, sürdürülebilirlik konusunda makro düzeyde planlama yapma ve eylem planı geliştirme olanaklarını (2019: 11) ifade etmektedir



şeklinde tanımlamıştır. Yerel sürdürülebilirlik kavramı ise, daha üstteki üç düzeyde alınan kararların doğrudan hayata geçirildiği düzeyi ifade etmektedir (Akgül, 2010:145-147).

Kalkınma; ekonomik, sosyal, kültürel ve demokratik yapıların/kaynakların bir bütün olarak değiştirilerek kişi başına düşen gelirin artırılmasının yanı sıra toplumun refahının artırılmasını da içeren çok yönlü bir kavramdır.

Küçük yerleşimlerdeki kaynakların sürdürülebilirlik ilkesi doğrultusunda kullanıldığı ve yerel aktörlerin katıldığı karar süreçleriyle şekillendiği kalkınma anlayışı, sürdürülebilir yerel kalkınma olarak ifade edilmektedir (Peker-Say vd., 2015: 137).

Yerel kalkınma; Kırsal alanlardaki doğal kaynakların kullanımını esas alarak, bir yandan yöredeki tüm bireylerin gelir düzeyini ve yaşam kalitesini artırarak gelişmişlik farklarını azaltmayı amaçlayan, diğer yandan çevresel ve kültürel değerlerin korunması ve geliştirilmesini gözeterek, yerelde farklılaşan ihtiyaç, potansiyel ve dinamikleri dikkate alarak, çok sektörlü yaklaşımla planlanan faaliyetler bütünü olarak kabul edilmektedir (Yalçın ve Yalçın, 2013: 33-34).

Yerel sürdürülebilir kalkınma; Yerel aktörlerin ve dinamiklerin katılımıyla, sağlam bir uzlaşma temelinde, sürdürülebilir kalkınma ilkeleri doğrultusunda yerel toplulukların fiziksel, ekonomik, sosyal, kültürel ve politik alanlarda kalkınmasının sağlanması amaçlanmaktadır (Yalçın ve Yalçın, 2012).

### 3. YAVAŞ ŞEHİR HAREKETİ VE SÜRDÜRÜLEBİLİR YEREL KALKINMA

Yavaş Şehir hareketi, insanların iletişim kurabildiği, sosyalleşebildiği, kendi kendine yetebilen, sürdürülebilir olduğu, el sanatlarına, doğaya, gelenek ve göreneklere sahip çıktığı; Ayrıca altyapısı sorunsuz olan, enerjide yenilenebilir kaynakları kullanan ve teknolojinin nimetlerinden faydalanmayı amaçlayan bir harekettir (Kartal, 2019: 11).

Cittaslow, kentlerin kendi gelenek, göreneklerini, yemeklerini, tarihsel kimliklerini korumalarına önem veren şehirler ağıdır. Üye şehirler yerel kimliklerini, geleneklerini ve kültürlerini koruyacak, yaşam hızını rahatlatmaya katkıda bulunacak, şenlik ve misafirperverliği oluşturacak ve yerelin ve yerel farklılıkların benzersizlik algısını artıracak projeler yürütmek zorundadırlar. Cittaslow felsefesi sahip oldukları şartlar çerçevesinde kentlerin hangi alanlarda güçlü ve zayıf olduklarını analiz ederek bir strateji geliştirmelerini teşvik etmektedir (Özhancı ve diğ. 2012:164).

Yavaş şehir kriterleri, Cittaslow Birliği tarafından belirlenir. Cittaslow Birliği, 1999 yılında İtalya'nın Greve in Chianti kentinde kurulan nüfusu 50.000 altında olan kentlerin üye olabildiği uluslararası bir belediyeler birliğidir. Birliğe üyelik olabilmek için belirlenen kriterler yerine getirilmeli, bu amaçla projeler geliştirmeli ve bu projeler uygulanmalıdır. Bu kapsamda belirlenen kriterler doğrultusunda kentlerin yaptığı çalışmalar puanlanmakta, başvuru yapan şehir 50 ve üzerinde puan alması halinde birliğe kabul edilmektedir.

Belediyelerin kendi istekleri ve başvuruları sonucunda üye olabilecekleri bu birliğin merkezi, İtalya'nın Orvieto kentinde yer almaktadır. Birlik yönetimi için üyeler arasından; başkan, başkan yardımcısı ve genel sekreter seçilir. Üyelerin de yönetimde söz hakkına sahip olabilmesi için Ulusal Ağlar sistemi kurulmuştur. Bir ülkeden 3 farklı kentin yavaş şehir olmasıyla Ulusal Ağ kurulabilir. Ulusal Ağ kurabilmiş olan devletler, Cittaslow'un yönetim organı olarak kabul edilen Uluslararası Koordinasyon Komitesinde temsil edilme hakkı kazanır. Kriterlerin belirlenmesi ve başvuruların değerlendirilmesi de bu yönetim sistemi doğrultusunda gerçekleşir" (<https://greenpetition.com/tr/blog>).

Yavaş Şehir Üyelik Kriterleri yedi ana grupta yer almaktadır. Bunlar;

- Çevre Politikaları,
- Altyapı Politikaları,
- Kentsel Yaşam Kalitesi Politikaları,
- Tarımsal, Turistik, Esnaf ve Sanatçılara Dair Politikalar,
- Misafirperverlik, Farkındalık ve Eğitim için Planlar,
- Sosyal Uyum,
- Ortaklıklar.

Bu kriterler kısaca şu şekilde özetlenebilir (Hekimci, 2010: 38-39; Kartal, 2019: 12):

- Hava, su ve toprak temizliğinin yasal limitler içinde olduğunun belgelenmesi,
- Şehrin ve çevresinin ayrıcalıklı özelliklerini ortaya çıkartacak, geri dönüşümü ve yeniden kullanımı teşvik edecek çevresel politikalar uygulanması,
- Toprağın çevre dostu kullanımını destekleyecek alt yapı oluşturulması,
- Kent içinde ve dışında şehir yaşamının ve havanın kalitesini yükseltmek için çevre dostu teknolojilerin desteklenmesi,
- Çevrenin tarihini, kültürünü önemli yapılarını ve ören yerlerini korumak, yeni yerleri bulmak, tarihini ortaya çıkartmak ve koruma altına almak.
- Organik tarımın desteklenmesi ve kentteki restoranlarda, kafelerde, okul kantinlerinde bölgede yetişmiş organik ürünlerin kullanılmasının sağlanması.
- Enerji tasarrufu için planlar hazırlanması ve yenilenebilir enerji kaynaklarından faydalanılması,
- Yerel üretimin desteklenmesi, yerel üreticiler ile tüketiciler arasında ilişkiler kurulması ve bunun için ortamlar ve mekânlar oluşturulması,
- Peyzaj düzenlemelerinde yerel bitkilerin kullanılmasına dikkat edilmesi ve okullarda sebze bahçeleri oluşturulması,
- Kökleri eskilere dayanan yöresel ürünlerin korunması ve desteklenmesi,
- Yöresel gıdaların tanıtımının yapılması ve bu gıdaların tarihinin araştırılması,
- Ziyaretçileri tatmin edecek konukseverliğin gösterilmesi,
- Yavaş Şehir içinde yaşayan insanlar arasında Yavaş Şehir bilincinin artırılması ve yerel yönetim faaliyetleri katılımının sağlanması,
- Belediye hizmetlerinin internet üzerinden sunulması.

Dünyanın farklı pek çok ülkesinde de Cittaslow unvanını kazanmış bölgeler mevcuttur. Bunlardan bazıları; Kristinestad (Finlandiya), Clonakilty (İrlanda), Silly (Belçika), Greve in Chianti (İtalya), Svendborg (Danimarka).

Türkiye’de Uluslararası Cittaslow Birliğine başvuru sürecini Cittaslow Türkiye Ofisi yürütmektedir. Birliğe başvuracak kentlerin nüfuslarının 50.000’den az olması ve kent yönetiminin Cittaslow felsefesi ile uyumlu olmaları gerekmektedir.

Türkiye’nin ilk yavaş şehir ünvanını alan kent ise İzmir’in Seferihisar ilçesidir. Isparta’nın Eğirdir ilçesi, Sinop’un Gerze ilçesi, Muğla’nın Akyaka ilçesi, Çanakkale’nin Gökçeada ilçesi, Şanlıurfa’nın Halfeti ilçesi, Ordu’nun Perşembe ilçesi, Artvin’in Şavşat ilçesi, Sakarya’nın Taraklı ilçesi, Kırklareli’nin Vize ilçesi de listede sıralanmaktadır.. Isparta’nın Yalvaç ilçesi ve Aydın’ın Yenipazar ilçesi de yavaş kent olarak anılıyor. Türkiye’nin en son yavaş şehri ise Erzurum’un Uzundere ilçesidir.

Sürdürülebilirliğin ekonomik, çevresel ve sosyal boyutu yavaş şehir konseptine uyarlandığında, yavaş şehir hareketi sürdürülebilir bir şehircilik, sürdürülebilir turizm, sürdürülebilir kalkınma anlamına gelen, ekonomik kaynaklarını koruyan, sosyal yönü güçlü ve çevreye duyarlı bir şehircilik ve turizm anlayışıdır. Yeni bir bilinç ve değer kavramının şekillendirilmesini hedefleyen bir yavaş şehir, temelde yerel kültür ve kimliğin korunduğu ve güçlendirilip canlandırıldığı bir ortam hazırlamaktadır (Karadeniz, 2014: 84-85).

Yavaş şehir kriterleri arasında;

- Organik gıdaların üretimini ve tüketilmesini desteklemek,
- Yerel üretimi desteklemek ve bunların kullanımını teşvik etmek,
- Yerel üreticiler ile tüketiciler arasında ilişkiler kurmak ve bunun için ortamlar ve mekânlar yaratmak yer almaktadır.

Bu doğrultuda Yavaş Şehir hareketinin en önemli amacı çevreyi koruyan, ekolojik, dönüşebilen ve yeniden kazandırılabilen bir üretimi öngören ve bu yönde bir kent yönetimini talep eden “halk-tüketici” ortaya çıkarmaktır. Bunun yanında yerel ürünlerin tercih edilmesiyle birlikte yerel üreticiler harekete geçmekte, organik üretimle bu ürünlerin değer kazanması sağlanarak yerel ekonomide bir canlanma, istihdam ve refah artışı ortaya çıkması beklenmektedir (Hekimci,2014: 45-49).

#### 4. SONUÇ

Sürdürülebilir kalkınma; Çevrenin ve toplumsal yapının korunduğu, ekonomik kalkınmanın da yaşandığı kalkınmadır. Sürdürülebilirliğin üç boyutu olan ekonomik, çevresel ve sosyal sürdürülebilirlik, yavaş şehir konseptine uyarlandığında, yavaş şehir hareketi ekonomik kaynaklarını koruyan, sosyal yönü güçlü ve çevreye duyarlı bir şehircilik ve turizm anlayışı olarak Cittaslow adıyla 1999'da İtalya'da ortaya çıkmış, günümüzde tüm dünyaya yayılmıştır.

Yavaş şehir kriterleri, Cittaslow Birliği tarafından belirlenir. Cittaslow Birliği, 1999 yılında İtalya'nın Greve in Chianti kentinde kurulan nüfusu 50.000 altında olan kentlerin üye olabildiği uluslararası bir belediyeler birliğidir. Birliğe üyelik olabilmek için, birlik tarafından belirlenen kriterler yerine getirilmeli, bu amaçla projeler geliştirmeli ve bu projeler uygulanmalıdır. Türkiye'de Uluslararası Cittaslow Birliğine başvuru sürecini Cittaslow Türkiye Ofisi yürütmektedir. Birliğe başvuracak kentlerin nüfuslarının 50.000'den az olması ve kent yönetiminin Cittaslow felsefesi ile uyumlu olmaları gerekmektedir. Türkiye'nin ilk yavaş şehir unvanını alan kent ise İzmir'in Seferihisar ilçesidir.

Yavaş Şehir hareketi, insanların iletişim kurabildiği, sosyalleşebildiği, kendi kendine yetebilen, sürdürülebilir olduğu, el sanatlarına, doğaya, gelenek ve göreneklere sahip çıktığı; Ayrıca altyapısı sorunsuz olan, enerjide yenilenebilir kaynakları kullanan ve teknolojinin nimetlerinden faydalanmayı amaçlayan bir harekettir. Yavaş şehir uygulamaya konulduğunda, yerel ekonomide bir canlanma, istihdam ve refah artışına da neden olmaktadır.

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## Examination of Metropolitan Cities and Nature-Friendly Sustainable Cities

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**Abstract:** The development of economy and technology has increased migration to cities and caused cities to grow rapidly, causing changes in their growth patterns. In cities that grow with the rapid population growth in urban areas, on the one hand, the agricultural lands around them have been lost, on the other hand, the carbon footprint has increased with the widespread use of individual vehicles, and this has caused problems such as climate change. At the same time, cities face challenges associated with aging infrastructure. Nowadays, the majority of human beings live in urban areas and it is predicted that this rate will increase in the future. Thus, cities growing over time are the source of various problems and cause effects that threaten human and all living things. Rapid and unplanned urbanization presents an unhealthy environment, especially to people living in metropolises, and therefore, increasing problems are encountered. Therefore, the increasing negative effects of today's urban life on people have led to the development of new urban alternatives for a better environment and social life. In this context, it is seen that protecting limited natural resources and transferring them to future generations is increasingly vital, and sustainable urbanization approaches are needed to prevent the uncontrolled and rapid development of cities. Sustainable cities are places with high livability where future generations will encounter healthy living environments. They are places where socio-economic interests are aligned with environmental concerns to ensure continuity of change and development. With the formation of sustainable cities, places are established where the negative effects of metropolises on people and all living things can be eliminated and the damage to nature and natural assets can be reduced. In this study, the characteristics of metropolitan and sustainable cities and the differences between them were examined.

**Key Words:** Sustainability, Metropolitan Cities, Sustainable Cities

### Metropol Kentler ve Doğa Dost Olan Sürdürülebilir Kentlerin İncelenmesi

**Özet:** Ekonomi ve teknolojinin gelişmesi, kentlere göçü arttırmış ve kentlerin hızlı bir şekilde büyümelerini sağlayarak büyüme şekillerinde değişiklik yaratmıştır. Kentsel mekânlardaki hızlı nüfus artışı ile büyüyen kentlerde bir yandan çevrelerindeki tarım topraklarının yitirilmesi, diğer yandan bireysel araç kullanımının yaygınlaşarak karbon ayak izinin artması ve buna dayalı iklim değişikliği gibi problemler oluşmuştur. Aynı zamanda kentler yaşanan altyapı ile bağlantılı zorluklarla da karşı karşıya kalmaktadır. Günümüzde artık insanoğlunun büyük kısmı kentsel mekânlarda yaşamakta ve gelecekte bu oranın daha da artacağı öngörülmektedir. Böylece zaman içinde büyüyen kentler, çeşitli sorunların kaynağı olarak insan ve tüm canlı yaşamını tehdit eden etkilere yol açmaktadır. Hızlı ve plansız kentleşme özellikle metropollerde yaşayan insanlara sağlıksız bir çevre sunmakta ve bundan dolayı gittikçe artan sorunlarla karşılaşmaktadır. Dolayısıyla günümüz kent yaşamının insanlar üzerindeki olumsuzluklarının giderek artması, daha iyi bir çevre ve sosyal yaşam için yeni kent alternatiflerinin geliştirilmesini sağlamıştır. Bu bağlamda, sınırlı doğal kaynakların korunması ve gelecek nesillere aktarılmasının giderek daha fazla hayati önem taşıdığı görülmekte, kentlerin kontrolsüz ve hızlı gelişmesinin önüne geçmek için sürdürülebilir kentleşme yaklaşımlarına ihtiyaç duyulmaktadır. Sürdürülebilir kentler, gelecek nesillerin sağlıklı yaşam çevreleriyle karşılaşacağı yaşanılabilirliği yüksek yerlerdir. Değişim ve gelişimin devamlılığını sağlamak amacıyla sosyo-ekonomik çıkarların çevre ile ilgili kaygılarla uyumlu hale getirildiği yerlerdir. Sürdürülebilir kentlerin oluşumuyla, metropollerin insanlar ve tüm canlılar üzerindeki bu olumsuz etkilerinin ortadan kaldırılabilmesi; doğaya ve doğal varlıklara verdiği zararın azaltılabileceği mekanlar kurulmaktadır. Bu çalışmada, metropol ve sürdürülebilir kentlerin özellikleri ile aralarındaki farklılıklar ele alınarak incelenmiştir.

**Anahtar Kelimeler:** Sürdürülebilirlik, Metropol Kentler, Sürdürülebilir Kentler

### 1. INTRODUCTION

The economic development approach, which disregards nature and wastefully uses natural resources as if they will never end, has brought the world to an unsustainable level. The urbanization process, which started with the Industrial Revolution and in which people flocked to city centers where factories were located for a better life, became the starting point of ecological problems (Keskin, 2012: 84).

Today, approximately 55% of the world's population lives in urban areas and this number is increasing day by day. Although urban areas are dynamic, productive, innovative and attractive, they face some undesirable problems such as informality, health, energy, traffic, waste management, air and water pollution, unplanned urbanization, access to resources and increase in crime rates due to intense migration. In addition to the

increase in urban population density due to migration from rural areas to cities in most countries of the world, various complex problems such as food security, disposal of solid waste without harming nature, drinking water supply, urban traffic management, increasing poverty rate among citizens, and climate change also threaten urban life (Bilici and Babahanoğlu, 2018; Demirören Civan and Görmüş Cengiz, 2023). Nowadays, due to the increase in the population in urban areas, the destruction caused to the natural environment in order to meet the consumption needs has reached a level that threatens humankind (Kaya and Taylan Susan, 2020).

Uncontrollably growing cities threaten the future of underdeveloped and developing countries, while "mega" cities of developed countries are the source of important problems such as sprawl, pollution, transportation and social segregation. The only solution to these problems is to align sustainable development policies with urbanization (Yazar, 2009: 115). Today, within the framework of the idea that the world is not an inheritance but a trust, different sustainable city approaches have begun to be put forward, centering on the quality of life of people who will live in the same place both today and in the future (Keskin, 2012: 84).

### **1.1. Urban and Sustainability Concept**

Cities are not only physical but also social, political, economic and cultural production areas (Altay, 2007). Cities are places where economic activities such as industry, trade and services are carried out; The population concentrated in a defined area is socially stratified; increased specialization; vertical and horizontal mobility is common; There are administrative institutions representing the central and local government, where various social groups are accommodated; It is a heterogeneous society/structure with local, regional or international relationship networks (Bal, 1999).

Urbanization, as a sociological concept, does not only indicate a new economic organization and a changed physical environment, but also a new social order that affects people's behavior and thoughts (Güçlü, 2002:113). Various factors such as the increase in the number of cities and the population living in cities, the diversification of the division of labor, and the change in the social structure have revealed the negative development and change of cities. Social class differences in today's metropolitan cities are one of the most important parameters in determining the way of development (Altuntaş, 2012).

Physical activities carried out to transform natural areas into urban areas drag humanity towards irreversible disasters. In addition, cities use approximately 70% of the world's energy and produce more than 80% of all greenhouse gas emissions, especially CO<sub>2</sub>, ongoing lifestyle and consumption habits, destruction of nature and natural assets, problems resulting from unplanned urbanization such as dispossession, fragmentation, generation of urban rent, and increase in crimes have been the driving force in the emergence of the sustainable city concept (Altuntaş, 2012).

The concept of livability should be evaluated together with sustainability. When defining the livability of cities, it is important to take into account rights such as accessibility, equality, fairness and participation and to continue the improvement of the social, economic, cultural and environmental qualities of the citizens (Kayır, 2007: 562). A sustainable city is defined as a city that prevents the irreversible destruction of natural values as a result of use above their carrying capacity and adopts a development style that meets the needs of future generations as well as current ones (Bayram, 2001: 255).

Sustainability means ensuring the continuity of ecosystems in all dimensions and in all kinds of relationships and interactions between nature and society, taking into account the rights of future generations; It can be defined as providing life support and protection to each element that constitutes these relationships and interactions and transferring them to the future (Altuntaş, 2012: 137).

The concept of sustainability was first integrated with development by the World Commission on Environment and Development in the Brundtland report and defined as "development that meets the needs of today without compromising the ability of future generations to meet their needs" (Brundtland, 1987: Atıl, Gülgün and Yörük, 2005: 217).

It is possible to talk about three dimensions of sustainability, which can be defined as economic sustainability, social sustainability and environmental sustainability. The first of these dimensions includes the stability of economic capital, the second includes participation and a strong civil society, and the third includes the protection of natural resources that meet human needs and increasing human welfare (Goodland, 1995; Yazar, 2006). Sustainability can only be achieved if economic, social and environmental dimensions are realized in parallel and at the same time (Haştemoğlu, 2006).

## 1.2. Metropolitan Cities and Sustainable Cities

The twentieth century witnessed the development of major metropolises. Today, large-scale settlements are called "metropolis" or "metropolitan city". Metropolitan city; One or more developed lower level centers connected to the city center that forms the main core; settlements dependent on these centers; more than one local government unit; large-scale local services; Its large surface area with rural areas integrated with residential areas; It can be defined as a residential area with a dense population of over one million (Oktaş, 2012).

These are areas that exist in every country, generally focus on service activities rather than production, and have many relationships with both other regions of the country and other large cities (Ponting, 2000). Today, there are nearly 600 metropolitan cities in the world. This rapid development not only affects the physical structure of cities, but also affects urban people intensely. The ongoing rapid urbanization process has generally led to the formation of cities with widespread, dispersed and dense populations. One of the reasons behind this situation is the automobile-dependent development process of the twentieth century. Increasing separation of urban functions and their spread accordingly, excess energy consumption and increased environmental pollution as a result of supporting a transportation policy dependent on private automobiles, destruction of natural habitats and damage to biodiversity are just some of the main problems created by this widespread and dispersed urban form (Yazar, 2009). The first physical problems that come to mind are the negative change of urban identity in metropolises, the pressure of intense construction, the increasing difficulty of transportation, the decrease in life security, the gradual decrease in quality and healthy environments and the disappearance of natural areas.

Metropolitan cities are large cities known for their population density, high-rise buildings, complex transportation network, extensive job opportunities, cultural diversity and many other features. These cities are generally known as the largest economic, political and social centers of the country. It usually contains a large number of people, businesses and industries due to its high population density. Therefore, job opportunities are abundant. However, high competition, long working hours and intense workload can also be a disadvantage of job opportunities in metropolitan cities. They also include areas such as the business district, cultural centres, shopping malls and tourist attractions in their centres. While metropolitan cities bring many advantages, they also bring some problems. These problems include issues such as population density, traffic congestion, high living costs, air pollution and water resources shortage (Kaya and Taylan Susan, 2020).

There is an inequality in the use of the opportunities provided by metropolises, that is, individuals cannot benefit from urban advantages at the same level. In addition, there are serious differences in the residence areas represented by social groups living in metropolises (Karaküçük and Gürbüz, 2007: 87).

The current cosmopolitan structure and excessive population growth in Istanbul, Turkey's largest metropolis; industrial density and pollution; transportation problem, the additions that Bosphorus crossings impose on road transportation; preference for aboveground over underground in the old texture; water, sewage, treatment, heating, communication disruptions, air, soil, water and sea pollution; unplanned settlements, illegal rent sharing arising from bad and illegal land use; the rise of organized crime; economic living conditions; Insufficient management (Es, 2007: 43; Yazar, 2006) and various problems reveal that the quality of life in the metropolis is decreasing day by day.

Metropolises have greatly exceeded their carrying capacity due to the effect of uncontrolled and rapid growth. In order to eliminate this situation and make cities livable places, ensuring the integration of sustainability with cities is one of the ways that should be tried.

Sustainable cities aim to ensure that metropolises regain the meaning and importance they are rapidly losing due to changing values and lifestyles and provide livable environments for people (Çahantimur and Yıldız). According to Eryıldız and Xhexhi (2011), a sustainable city should be a city where residents meet their own needs while not endangering other people's living conditions and biodiversity in the natural environment, now or in the future. Such a city should be able to feed safely from the rural area surrounding it and power itself with renewable energy sources. Wheeler (2013) argues that a sustainable city should be comfortable, attractive, green, safe, human-scale, with identity and healthy for all members of the society.

Sustainable cities are cities or urban areas where economic, social and physical systems are internalized in appropriate urban policies, based on a sustainable social base, with the aim of providing a high quality of life and with the least burden on the environment (Palabıyık, 2005).

According to Eryıldız and Xhexhi (2011), urban planning approaches to be developed for sustainable development should address the ecological, economic and social dimensions of sustainability, adhering to the goal of transferring living environments and nature to future generations. Wheeler (2013) states that in the planning and management of sustainable cities, concentrated (compact) and effective land use, less motor vehicle use, ease of access, effective resource use, less pollution and waste, restoration of natural systems, creation of quality shelter and living environments. considers it necessary to consider factors such as healthy social ecology, preservation of local culture, sustainable economy and ensuring public participation.

In a sustainable city, buildings and vehicles that use alternative energy sources, recycling of water and waste, and filtering of pollution are encouraged. All of these support the feature of sustainable cities also being healthy cities. A healthy city means that people living in the city have equal rights and freedoms in physical, social, psychological and environmental matters (Ercan, 2007: 69). Clean, safe, high quality physical environment for people; a balanced and sustainable ecosystem; a strong and successful society in solidarity; citizens' participation in decisions affecting their life, health and well-being and their influence on the decisions taken; meeting the basic needs of everyone living in the city (food, water, shelter, income, security, work, etc.); Accessing all existing experiences and resources using various communication, interaction and connections; innovative urban economy necessary for diverse lives; citizens who protect their cultural, historical and economic past and heritage; adequate public health and care services accessible to all; high level of health services will be provided (Kayır, 2007).

Sustainable development aims to ensure environmental quality of life, quality of social life and economic viability. In this aspect; Sustainable development is also integrated with the concept of urban development. In order to achieve sustainable development, it is necessary to implement policies and practices that will ensure sustainable urbanization.

Based on the assumption that production and consumption occur in a complementary manner in the natural ecosystem, it becomes necessary to create "environmentally friendly" cities that meet their own consumption with their own production in the urban ecosystem in the context of imitating nature (Gül and Polat, 2009).

In order to create a standard across Europe, 'urban sustainability indicators' were developed by the European Foundation in 1998. Nine environmental; six social and one economic indicators; environmental indicators; It covers global climate change, air quality, acidification, general protection of ecosystems, clean transportation, solid waste management, water management and, at the highest level, energy efficiency (Yazar, 2009).

The sustainable urbanization approach should include the following basic issues (Wheeler, 2004; Karakurt Tosun, 2009):

- Growth control and land use planning,
- Urban design,
- Housing,
- Transport,
- Environmental protection and restoration,
- Energy and material use,
- Green architecture and construction,
- Equity and environmental justice,
- Economic development,
- Population.

In addition, the following conditions must be met for sustainable urbanization (Ulusoy and Vural, 2001):

- a) Space-saving developments should be implemented.
- b) Natural habitat should be protected.
- c) Urbanization should be planned.
- d) Large green areas should be provided.
- e) Water resources should be protected.
- f) Motor vehicle use should not be encouraged.
- g) Recycling programs should be initiated.

In the process of urbanization, public institutions and centers, private sector units, non-governmental units and local people in the city must play an active role in the decision-making process in the preparation, decision-making and implementation stages of policies that concern.

### 1.3. Comparison of Metropolitan Cities and Sustainable Cities

The socio-cultural and political differences between metropolitan cities and sustainable cities are summarized in Table 1.

Table 1: Comparison of Metropolitan Cities and Sustainable Cities in Terms of Socio-Cultural and Political Perspectives.

Metropolitan Cities	Sustainable Cities
<ul style="list-style-type: none"> <li>■ Interpersonal communication is poor,</li> <li>■ Social division of labor is limited,</li> <li>■ There is dispersed growth and development,</li> <li>■ Differences between classes are large,</li> <li>■ Social and public spaces are fewer,</li> <li>■ Living standards are lower,</li> <li>■ Intense stress and pressure,</li> <li>■ Public participation is weak,</li> <li>■ Recycling is not common,</li> <li>■ Complex and difficult to solve problems,</li> <li>■ Experimental education based on memorization,</li> <li>■ Excessive exploitation,</li> <li>■ Ordinarity,</li> <li>■ Difficult accessibility,</li> <li>■ Central management,</li> <li>■ Consumer sovereignty,</li> <li>■ Uncontrolled growth,</li> <li>■ Alienation from the city,</li> <li>■ Urban identity is weak,</li> <li>■ Uniform structures without identity,</li> <li>■ Ignored urban rights.</li> </ul>	<ul style="list-style-type: none"> <li>■ Strong interpersonal communication,</li> <li>■ Social division of labor is more inclusive,</li> <li>■ There is regular, planned growth and development,</li> <li>■ Differences between classes are less,</li> <li>■ More social and public spaces,</li> <li>■ Living standards are higher,</li> <li>■ Public participation is strong,</li> <li>■ Recycling is very common,</li> <li>■ Simple and easily solvable problems,</li> <li>■ Observation-based ecology-based education,</li> <li>■ Economical use,</li> <li>■ Creativity,</li> <li>■ Easy accessibility,</li> <li>■ Local government,</li> <li>■ Producer sovereignty,</li> <li>■ Controlled growth,</li> <li>■ Adopting and integrating with the city,</li> <li>■ Strong urban identity,</li> <li>■ High urban awareness,</li> <li>■ Characteristic and diverse structures,</li> <li>■ Citizens' rights are taken into consideration.</li> </ul>

Source: Altuntaş, 2012: 144.

The economic differences between metropolitan cities and sustainable cities are presented in Table 2.

Table 2: Economic Comparison of Metropolitan Cities and Sustainable Cities.

Metropolitan Cities	Sustainable Cities
<ul style="list-style-type: none"> <li>■ Energy usage is high,</li> <li>■ There is dispersed growth and development,</li> <li>■ Transportation is difficult,</li> <li>■ Industrial based production,</li> <li>■ Emission is high,</li> <li>■ Access to clean water is more difficult,</li> <li>■ Recycling is not common,</li> <li>■ Complex and difficult to solve problems,</li> <li>■ Transportation based on automobiles,</li> <li>■ Excessive exploitation,</li> <li>■ Difficult accessibility,</li> <li>■ Central management,</li> <li>■ Consumer sovereignty,</li> <li>■ Uncontrolled growth.</li> </ul>	<ul style="list-style-type: none"> <li>■ Energy usage is less,</li> <li>■ There is regular, planned growth and development,</li> <li>■ Easy transportation,</li> <li>■ Ecology-based production,</li> <li>■ Emission is low,</li> <li>■ Public participation is strong,</li> <li>■ Recycling is very common,</li> <li>■ Simple and easily solvable problems,</li> <li>■ Public transport-oriented transportation,</li> <li>■ Modest use,</li> <li>■ Easy accessibility,</li> <li>■ Local government,</li> <li>■ Producer sovereignty,</li> <li>■ Controlled growth.</li> </ul>

Source: Altuntaş, 2012: 144.

The ecological and physical differences between metropolitan cities and sustainable cities are presented in Table 3.

Table 3: Comparison of Metropolitan Cities and Sustainable Cities in Terms of Ecological and Physical Terms.

Metropolitan Cities	Sustainable Cities
<ul style="list-style-type: none"> <li>■ Energy resources are limited,</li> <li>■ Energy usage is high,</li> <li>■ Respect for nature to a limited extent,</li> </ul>	<ul style="list-style-type: none"> <li>■ Renewable energy use is widespread,</li> <li>■ Energy-saving,</li> <li>■ There is respect for nature,</li> </ul>



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| <ul style="list-style-type: none"><li>■ Development plans,</li><li>■ Unhealthy environment,</li><li>■ Large ecological footprint,</li><li>■ Limited renewal opportunity,</li><li>■ Emission is high,</li><li>■ Public participation is weak,</li><li>■ Access to clean water is more difficult,</li><li>■ Recycling is not common,</li><li>■ Complex and difficult to solve problems,</li><li>■ Transportation based on automobiles,</li><li>■ Excessive exploitation,</li><li>■ Difficult accessibility,</li><li>■ Uncontrolled growth.</li></ul> | <ul style="list-style-type: none"><li>■ Ecological planning,</li><li>■ Healthy and balanced natural environment,</li><li>■ Small ecological footprint,</li><li>■ Unlimited renewal opportunities,</li><li>■ Emission is low,</li><li>■ Public participation is strong,</li><li>■ Access to clean water is easier,</li><li>■ Recycling is very common,</li><li>■ Simple and easily solvable problems,</li><li>■ Public transport-oriented transportation,</li><li>■ Economical use,</li><li>■ Easy accessibility,</li><li>■ Controlled growth.</li></ul> |
|--|---|
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Source: Altuntaş, 2012: 144.

By ensuring the sustainability of cities, not only will we find solutions to environmental problems, but also the quality of life of the current population will increase and livable spaces will emerge where future generations can live their lives comfortably. When the aim is to create livable cities today and in the future and to establish the human-nature-economy triangle in the healthiest way, professional groups that know natural resources best and foresee the creation of healthy uses should take an active role in the adaptation of the concept of sustainability to cities (Atıl, Gülgün and Yörük).

## 2. DISCUSSION AND CONCLUSION

The rapid change in information and communication technologies in our age permeates every aspect of our lives. The rapid increase in population rates along with the increasing urbanization rate also affects the ecological balance and prepares for a collapse in resource use in cities. Growing and populated cities not only harm the environment by consuming more and more each day and releasing more harmful waste, but they also affect the lives of individuals positively or negatively. In this context, technological developments are integrated into different points of the city as an element of economic competition (Bilici and Babahanoğlu, 2018).

Perhaps the biggest reason for the extremely dispersed and irregular growth of metropolises is migration. Migration to cities should be prevented; Efforts should be made to balance the carrying capacities of cities; The living conditions of people considering migrating to the city should be improved by developing local and regional development models. In addition, people should be directed to public transportation in order to improve transportation systems, which is one of the activities that harm ecosystem cycles. In this way, the release of toxic gases into the air will be reduced. Apart from this, the use of renewable energy resources in production and other activities will contribute greatly to the spread of sustainable cities (Altuntaş, 2012).

Creating environmentally and economically sustainable cities can only be achieved if the importance of the issue is understood and embraced by people of all social classes and status. Sustainable cities, which can be possible by ensuring ecological, economic and social sustainability, are expressed with "physical" and "sociocultural" sustainability requirements. These requirements interact in a complementary way (Çahantimur and Turgut Yıldız, 2008). By fulfilling these requirements, cities that are physically "livable" and socioculturally "identified and protected" will be created.

The sustainability of cities can be defined as the sustainability of societies. Human communities are directly affected by the place they live in and are also influenced by it. Ensuring the sustainability of cities is ensuring continuity by increasing the quality of life of those who live in cities and will live in the future. Sustainable urban development should be considered in parallel with sustainable social development (Atıl, Gülgün and Yörük, 2005: 216, 217). In order to achieve sustainable development, it is necessary to implement policies and practices that will ensure sustainable urbanization.

The basic principles on which sustainable city goals are based include finding options in development; countering poverty; solving employment and nutrition problems; meeting basic health-related needs; conservation and enhancement of biodiversity; technology restructuring; controlling population growth; It is extremely important to eliminate risks by using renewable energy resources and accessing clean, reliable water (Karakurt Tosun, 2009).

In the transition process for the creation of sustainable cities all over the world, there is no agreed model regarding the form of urbanization, formation and planning of a sustainable city. According to new urbanism, smart growth and ecological urbanization approaches, in order to produce a clean, green and sustainable city, nature-compatible design and planning strategies should be produced by collaborating with nature instead of using and consuming nature for human needs.

It should not be forgotten that thanks to these cities, societies with high ecological awareness, respect for nature and each other, living and producing with the knowledge of the cycles and functions of ecosystems, and protecting their cities will be formed. As a result, sustainable cities are needed in order not to take away the right of future generations to live in this world and to leave them a livable world.

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## Kirlilik Sığınağı Hipotezi ve Kirlenme Hale Hipotezinin Yeni Kırılgan Beşli Ülkelerinde Sınanması: Panel Eş bütünleşme ve Nedensellik Yaklaşımı

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**Özet:** Ülke yapısı ile çevresel kirlilik arasındaki ilişki ele alındığında, ekonomik büyüme sürecinde endüstrileşme, üretim ve tüketim artışı gibi etkenler, çevresel kirliliğin önemli kaynaklarını oluşturmaktadır. Kirlilik sığınağı hipotezine göre, ekonomik büyümenin ilk aşamalarında sanayileşme ile birlikte endüstrileşme ve kaynak tüketimi arttığı için çevre kirliliğinin de artacağını görüşü hâkim olmaktadır. Kirlenme hale hipotezine göre ise gelişmekte olan ülkelerin uluslararası ticaret yoluyla temiz teknolojilere yönlendirildiğini, bu durumun yönetim anlayışındaki değişikliklerle birleşerek çevresel bozulmayı azalttığı öne sürülmektedir. Çalışma kapsamında 1994-2020 dönemine ait uygulama için seçilen yeni kırılgan beşli ülkelerinde, (Standard&Poor's, 2017 tanımlamasıyla Türkiye, Arjantin, Katar, Mısır ve Pakistan), kirlilik sığınağı hipotezi ve kirlenme hale hipotezlerinin geçerliliğinin test edilmesi amaçlanmaktadır. Bu amaçla Westerlund ve Edgerton (2007) eşbütünleşme testi ve panel nedensellik analizi ile doğrudan yabancı yatırımlar ve dış ticaret hacmindeki artışın karbondioksit emisyonlarından kaynaklanan kirlilik hasarına yol açıp açmadığı incelenmiştir. Elde edilen sonuçlar ışığında, yeni kırılgan beşli ülkelerinde doğrudan yabancı sermaye yatırımlarındaki artışın karbondioksit emisyonlarından kaynaklanan kirlilik hasarını arttırdığını ve kirlilik sığınağı hipotezinin geçerli olduğu sonuçlarına ulaşılmaktadır.

**Anahtar Kelimeler:** Kirlilik Sığınağı Hipotezi, Kirlenme Hale Hipotezi, Panel Eşbütünleşme

### 1. GİRİŞ

Çevresel kirlilik, genel anlamda, insan faaliyetleri sonucu doğal çevrenin zarar görmesi anlamına gelmektedir. Söz konusu zarar ise genellikle hava, su, toprak vb. çevresel unsurlar üzerinde etkisini göstermektedir.

Ülke yapısı çevresel kirlilik üzerinde önemli bir etkiye sahip olup, üretim süreçleri ve tüketim alışkanlıkları, çevresel kirliliğin önemli kaynaklarını oluşturmaktadır. Sanayileşme öncesi tarım toplumunda insanlar sadece kendi ihtiyaçları kadar üretirken; sanayi devrimi ile birlikte üretimdeki artış üretim teknikleri ve tüketici tercihlerinde değişime yol açmıştır (Bayhan, 2011). Böylelikle üretim teknikleri ve tüketim alışkanlıklarının değişmesi, tüketim toplumlarının çevreye olan etkilerini de yaygınlaştırmıştır. Tek kullanımlık plastikler, ambalaj atıkları, elektronik atıklar gibi tüketim kaynaklı kirlilikler, sahip olunan kaynakları tüketmekte ve atıkların birikmesine yol açarak çevreye zarar vermektedir. Üretim kaynaklı kirlilik dikkate alındığında ise sanayileşmenin gelişmesi ile birlikte, endüstriyel tesisler, fabrikalar, tarım işlemleri ve madencilik gibi üretim süreçleri sırasında ortaya çıkan kirleticilerin yol açtığı kirlilik olarak ifade edilebilmektedir. Bu kirlilik, atık ürünleri, kimyasal maddeleri, gazları ve sıvıları içermektedir. Her iki tür kirlilik de çevresel sorunlara ve sürdürülebilirlik endişelerine yol açmaktadır.

Diğer taraftan 1970'lerden itibaren, ticaretin çevreye olan etkileri daha fazla gündemde yer edinmeye başlamış, Birleşmiş Milletler Ticaret ve Kalkınma Konferansı (UNCTAD), Kuzey Amerika Serbest Ticaret Anlaşması (NAFTA), Gümrük Tarifeleri ve Ticaret Genel Anlaşması (GATT), Dünya Ticaret Örgütü (WTO) gibi çeşitli kuruluşların ticaretin serbestleştirilmesine katkılarıyla birlikte, 1980'lerden itibaren küreselleşmede hızlı trend artışı dikkat çekici hale gelmeye başlamıştır (Şahin vd., 2019). Artan küreselleşme ile birlikte, çevresel kirlilik ve ticaret arasındaki ilişki dikkat çekici bir hal almış ve çok yönlü bir ilişki karşımıza çıkmıştır.

Küreselleşme, ülkeler arasındaki ticareti arttırırken, sanayi üretimini de genişletmektedir. Bu durum, üretim sürecinde sanayi atıkları ve emisyon atıklarının artması nedeniyle sanayiden kaynaklanan çevresel kirliliğin küresel düzeyde nasıl dağıldığı konusunda araştırmaların yapılması gerekliliğini ortaya çıkarmıştır. Bu süreçte çevre ekonomisi konusunda literatürde, Kirlilik Sığınağı Hipotezi (Kirlilik Cenneti Hipotezi ya da Yer Değiştirme Hipotezi) ve Kirlenme Hale Hipotezi (Porter Hipotezi) olarak adlandırılan birbirine karşıt iki çelişkili görüş ortaya atılmaktadır.

Kirlilik sığınağı hipotezi, çevre kirliliği ile ekonomik büyüme arasındaki ilişkiyi açıklamaya çalışan bir teori olup, teoriye göre bir ülkenin ekonomisi büyüdükçe, başlangıçta çevresel kirliliğin artması, daha sonra ise zamanla azalması beklenmektedir.

Bu hipoteze göre, ekonomik büyümenin ilk aşamalarında sanayileşme, endüstrileşme ve kaynak tüketiminin artması nedeniyle çevresel kalitenin düşeceği diğer bir ifade ile çevresel kirliliğinin artacağı görüşü hâkim olmaktadır. Bununla birlikte, uluslararası ticaretin yaygınlaşması ve gelişmekte olan ülkelerin kirlilik ihracına izin vermesi nedeniyle, uluslararası ticaret ve çevre kalitesi arasında negatif bir ilişkinin varlığı açıklanmaktadır. Bu sebeple, hipoteze göre gelişmekte olan bir ülkede, doğrudan yabancı yatırımlar arttıkça, karbon emisyonunda da artış olacağı öne sürülmektedir (Zeren, 2015).

Kirlilik sığınağı hipotezine karşıt bir görüş olarak ortaya atılan, Kirlenme hale hipotezi ise, çevre ekonomisi literatüründe Neo-klasik düşünce tarzının çevreye bakış açısını yansıtan teknolojik iyimserlik yaklaşımına benzer bir metodoloji kullanmakta ve gelişmekte olan ülkelerin uluslararası ticaret yoluyla temiz teknolojilere yönlendirildiğini, bu durumun yönetim anlayışındaki değişikliklerle birleşerek çevresel bozulmayı azalttığını öne sürmektedir. Bu hipoteze göre, doğrudan yabancı yatırımlar yoluyla, çok uluslu şirketler daha yeşil teknolojilerini başka ülkelere aktarmaktadır (Güvercin, 2019). Bu aktarım, kirliliği azaltan teknolojilerin yanı sıra geleneksel enerji kaynaklarına olan talebi azaltan daha verimli enerji teknolojilerini de içerebilmektedir. Uluslararası yardım, teknoloji transferi ve iş birliği programları, bu ülkelerin çevre kirliliğiyle mücadele etme kapasitesini artırırken, çevresel sürdürülebilirlik ve ekonomik kalkınma arasında denge kurulmasını sağlamaktadır. Hipotezin genel amacında, teknoloji transferiyle yeşil teknolojilerin benimsenmesi ve çevresel etkilerin azaltılması hedeflenmektedir.

Öte yandan, özellikle kırılgan yapıya sahip ekonomilerde sıklıkla ekonomik büyüme hedeflerine öncelik verilirken, çevresel kirlilik endişesinin geri planda kaldığı görülmektedir. Acil ekonomik ihtiyaçlar, endüstriyel büyüme çabası, iş istihdamı ve gelir artışı gibi hedefler öncelikli olabilirken, çevre koruması için gereken yatırımlar ve düzenlemeler ikinci planda kalabilmektedir. Bu ekonomilerde çevresel sürdürülebilirliği sağlamak için teknolojik yenilikler, yeşil enerji ve çevre dostu politikaların teşvik edilmesi gerekmektedir. Ancak gelişmekte olan ülkeler genellikle kaynak kısıtlamaları ile karşı karşıya oldukları için bu tür çalışmaları sürdürürken zorluklarla karşılaşabilmektedir. Özellikle ekonomik büyüme ve refah seviyesi arttıkça, halk ve hükümetler çevre sorunlarına daha fazla dikkat göstermekte ve dolayısıyla çevre koruması için politika ve düzenlemeler geliştirebilmektedir. Bu anlamda, ülke ekonomileri belirli bir büyüme seviyesine ulaştıklarında, çevre kalitesi için daha fazla yatırım yapılabileceğinden, büyümenin de beraberinde getirdiği teknolojik gelişmelerle çevre koruma düzenlemelerinde artış meydana gelebilmektedir.

Bu çalışmada ekonomik büyümenin gerçekleşmesi aşamasında, mevcut çevresel kirlilikte artışın olup olmadığı kirlilik sığınağı hipotezi ve kirlenme hale hipotezi çerçevesinde incelenmektedir. Bu kapsamda yeni kırılgan beşli olarak tanımlanan Türkiye, Arjantin, Katar, Mısır ve Pakistan ülkeleri ele alınmıştır. Söz konusu ülkelerde hipotezlerin geçerliliği 1994-2020 dönemi verileri ele alınarak Westerlund Edgerton (2007) panel eşbütünleşme testi kullanılarak test edilmiştir. Elde edilen sonuçlar ele alınan dönemde kırılgan beşli ülkelerinde kirlilik sığınağı hipotezinin geçerli olduğunu doğrulamaktadır.

## 2. LİTERATÜR TARAMASI

Çevre kirliliği ile uluslararası ticaret arasındaki ilişki, 1990'lı yıllardan itibaren araştırmacılar tarafından incelenen konular arasında yer almaktadır. Özellikle doğrudan yabancı yatırımların çevre üzerindeki etkisini ele alan çeşitli çalışmalar literatürde mevcuttur (Walter ve Ugelow, 1979; Copeland ve Taylor, 1994; Wagner ve Timmins, 2009; Tang ve Tan, 2015; Al-mulali, 2012; Lan vd., 2012; Baek, 2016; Solarin vd., 2017; Liu vd. 2018; Zhang ve Zhang, 2018; Haug ve Ucal, 2019 ).

Walter ve Ugelow (1979); Copeland ve Taylor (1994); Wagner ve Timmins (2009); Tang ve Tan (2015); Solarin vd. (2017) kirlilik sığınağı hipotezini açıklarken, doğrudan yabancı yatırımlar ile çevre kirliliği arasındaki bağlantıyı destekleyen görüşlerini belirtmektedir.

Al-mulali (2012), Lan vd. (2012) çalışmalarında, doğrudan yabancı yatırımların, karbondioksit emisyonlarını artırdığını ifade etmektedir. Gür (2019), çalışmasında doğrudan yabancı yatırımlar ile karbondioksit salınımı arasında uzun dönemde düşük etkili pozitif yönde ilişkinin varlığını belirtirken, kısa dönemde daha yüksek düzeyde pozitif yönde ilişki olduğunu açıklamaktadır.

Öte yandan Mielnik ve Goldemberg (2002 ); List ve Co (2000); Mert ve Bölük (2016); Zhang ve Zhou (2016); Hao vd. (2020), çalışmalarında ele aldıkları ülkeler için doğrudan yabancı yatırımlardaki artışın karbondioksit emisyonlarının azaltılmasına katkıda bulunduğunu öne sürmektedir. Letchumanan ve Kodama (2000), doğrudan yabancı yatırımların, teknolojik transfer desteğinin yanı sıra çevre dostu ürün ve üretim sürecinin aktarılması yoluyla, çevresel refahın arttığını belirtmektedir. Benzer şekilde, Hao vd. (2020) çalışmalarında, doğrudan

yabancı yatırımların karbondioksit emisyonlarını azalttığını ve kirlilik halesi hipotezinin geçerliliğini ifade etmektedir.

Son yıllarda yapılan çalışmalar dikkate alındığında, Shabir (2022), ekonomik büyüme ve ticaretin çevreyi olumsuz etkilediğini, doğrudan yabancı yatırımın ise ele alınan ülkelerde çevre kalitesini artırdığını belirtmektedir.

Yurtkuran (2021), çalışmasında doğrudan yabancı sermaye yatırımları ve finansal gelişmedeki artışın karbondioksit salınımını arttırdığını ve kirlilik sığınağı hipotezinin geçerli olduğunu ifade etmektedir.

Çoban ve Özkan (2022), çalışmasında doğrudan yabancı yatırımlar, enerji tüketimi ve ticari açıklığın, çevresel kirlilik üzerine etkisini, kirlilik sığınağı hipotezi kapsamında incelemekte ve ele alınan değişkenlerin çevre kalitesini kötüleştirdiğini ve dolayısıyla kirlilik sığınağı hipotezinin geçerli olduğunu ifade etmektedir.

Tran vd. (2022), gelişmekte olan ekonomilerde doğrudan yabancı yatırımların karbondioksit riski üzerindeki olumlu etkisine dair güçlü kanıtlar ortaya koymaktadır. Abbass vd. (2022), Çin'in doğrudan yabancı yatırımının karbon emisyonlarını artırdığını ve kirlilik halesi kavramını doğruladığını göstermektedir. Saqib vd. (2023), kirlenme hale hipotezini destekleyen çalışmalarında, doğrudan yabancı yatırım ve ekolojik ayak izlerinin negatif bir korelasyona sahip olduğunu ortaya koymaktadır.

### 3. YÖNTEM

Panel veri modellerinde ortak şokların var olması nedeniyle hatalarda yatay kesit bağımlılığı ortaya çıkabilmektedir. Bu sebeple, çalışma kapsamında ilk olarak paneli oluşturan birimler arasında yatay kesit bağımlılığının olup olmadığı test edilmiştir. İkinci aşamada, birimler arasında yatay kesit bağımlılığına izin veren Pesaran (2007) panel birim kök testi kullanılarak değişkenlerin durağanlığı test edilmiştir. Son olarak Westerlund ve Edgerton (2007) eşbütünleşme testi ile değişkenler arasında uzun dönemli ilişkinin varlığı araştırılmıştır.

Pesaran (2007), yatay kesit bağımlılık sorununu ele almak için faktör yaklaşımı kullanmaktadır. Test yaklaşımında, hem seriler, hem de serilerin birinci farklarına ait yatay kesit ortalamaları standart Dickey-Fuller veya genişletilmiş Dickey-Fuller regresyonlarına eklenerek birim kökün varlığı araştırılmaktadır. Bu teste ilişkin regresyon denklemi (1) no'lu eşitlikte verilmektedir.

$$\Delta Y_{it} = \alpha_i + \rho_i Y_{it-1} + c_i \bar{Y}_{t-1} + d_i \Delta \bar{Y}_t + \sum_{k=1}^p \beta_{ik} \Delta Y_{it-k} + u_{it} \quad (1)$$

Değişkenler arasında eşbütünleşme ilişkisinin varlığını test etmek için kullanılan Westerlund ve Edgerton (2007) eşbütünleşme testinde yatay kesit birimleri arasındaki bağımlılık dikkate alınmakta ve bu test küçük örneklerde başarılı sonuçlar vermektedir.

Eşbütünleşmenin olmadığını ifade eden sıfır hipotezi, (2) no'lu eşitlikte hesaplaması verilen LM test istatistiği ile sınımlanmaktadır.

$$LM_N^+ = \frac{1}{NT^2} \sum_{i=1}^N \sum_{t=1}^T \hat{w}_i^{-2} S_{it}^2 \quad (2)$$

(2) no'lu eşitlikte  $S_{it}$  terimi,  $z_{it}$  hata terimlerinin kısmi toplamını,  $\hat{w}_i^{-2} u_{it}$ 'nin uzun dönem varyansını ifade etmektedir.

Engle ve Granger'e (1987) göre, eğer bir dizi değişken arasında eşbütünleşme ilişkisi varsa, nedenselliğin yönünü bulma olasılıkları da vardır. Nedensellik ilişkisi oluşturulan Panel VECM modeli ile test edilebilmektedir.

### 4. VERİ SETİ VE UYGULAMA

Çalışma kapsamında uygulama için seçilen Yeni Kırılğan Beşli Ülke, IMF (Uluslararası Para Fonu) tarafından belirlenen ve ekonomik açıdan belirli bir kırılmalığa sahip olan beş ülkeyi ifade etmektedir. Söz konusu ülkeler genellikle çeşitli iç ve dış faktörler nedeniyle, ekonomik dengesizlikler, zayıf ekonomik büyüme, yüksek borç yükü, döviz kuru dalgalanmaları, politik istikrarsızlık gibi faktörlerle karakterize özelliklere sahiptir ve ekonomik

istikrarını sürdürmekte zorluklarla karşılaşmaktadır. Bu tanıma dâhil olan ülkeler, belirli bir zaman dilimine göre ekonomik kırılganlıklarındaki gelişmelerle birlikte farklı sınıflamalara dâhil edilebilmekte, başka bir deyişle tanıma dâhil olan ülkeler ekonomik durumlarına göre zamanla güncellenmektedir. Kasım 2017’de Standard&Poor’s tanımlamasıyla seçilen ve uygulama kapsamında ele alınan Yeni Kırılgan Beşli Ülkeleri Türkiye, Arjantin, Katar, Mısır ve Pakistan ülkeleridir.

Kirlilik sığınağı hipotezi ve Kirlenme hale hipotezlerinin söz konusu ülkelerde geçerliliğini test etmek amacıyla ele alınan değişkenler Tablo 1’de tanımlanmaktadır.

Tablo 1: Değişkenler ve Tanımları

CA	Karbondioksit Emisyonlarından Kaynaklanan Kirlilik Hasarı (Ton Başına 40 ABD Doları )
DYY	Doğrudan Yabancı Yatırımlar (Net Girişler)
TRA	Dış Ticaret Hacmi (GSYH'nin Yüzdesi)

Ele alınan değişkenlere ait tüm veriler Dünya Bankasının veri tabanından alınmış olup, öncelikle tüm değişkenlerin doğal logaritması alınmıştır. Değişkenlerde birim kökün varlığı sınanmadan önce yatay kesit bağımlılığı test edilmiş ve yatay kesit bağımlılığı için test sonuçları Tablo 2’de verilmiştir.

Tablo 2: Yatay Kesit Bağımlılığı Test Sonuçları

	LCA	LDYY	LTRA
BP LM	266,0526***	55,0144***	266,1237***
SCLM	57,2551***	10,0655***	57,2710***
LM	57,1589***	9,9693***	57,1748***
CD	16,3109***	4,8461***	16,3132***

Not: \*\*\*, \*\* ve \* sırasıyla 0,01, 0,05 ve 0,10 anlam düzeylerini göstermektedir

Yatay-kesit bağımlılığını test etmek amacıyla Pesaran vd. (2004) CD testi, Breush-Pagan (1980) LM testi ve Pesaran, Ullah ve Yamagata (2008) SCLM testleri kullanılmış olup, testlerden elde edilen sonuçlara göre  $\alpha = 0,05$  anlam düzeyinde tüm değişkenlerde yatay kesit bağımlılığının var olduğu söylenebilmektedir.

Çalışma kapsamında kullanılan değişkenler için ülkeler arasında yatay kesit bağımlılığı var olduğundan, serilerin durağanlığı, ikinci nesil birim kök testlerinden Pesaran (2007) CADF testi ile incelenmiştir. Tablo 3’te değişkenlere ilişkin birim kök test sonuçları yer almaktadır.

Tablo 3: CIPS Birim Kök Testi Sonuçları

	Sabit	Sabit&Trend
LCA	-2,0995	-2,1823
LDYY	-1,9165	-2,2435
LDA	-2,1289	-2,2350
1.LCA		-3,7426***
1.LDYY		-4,7818***
1.LDA		-4,1572***

NOT: \*\*\*, \*\* ve \* sırasıyla 0,01, 0,05 ve 0,10 anlam düzeylerini göstermektedir

Tablo 3’te verilen birim kök test sonuçlarına göre değişkenlerin tümünün düzey değerinde durağan olmadığı ve serilerin 1. Farkı alındıktan sonra durağan hale geldiği söylenebilmektedir. Dolayısıyla tüm değişkenlerin birinci derece entegre I(1) seriler olduğu belirlenmektedir. Değişkenlerin durağanlık mertebeleri belirlendikten sonra eşbütünleşme ilişkisinin test edilmesi amacıyla kurulan model (3) no’lu eşitlikte yer almaktadır.

$$LCA = \alpha_i + \sum_{j=1}^p \beta_{ij} LCA_{it-j} + \sum_{j=0}^q \gamma_{ij} LDYY_{it-j} + \sum_{j=1}^k \lambda_{ij} LDA_{it-j} + \varepsilon_{it} \quad (3)$$

Eş bütünleşme ilişkisinin varlığı Westerlund ve Edgerton (2007) eşbütünleşme testi kullanılarak test edilmiş ve sonuçlar Tablo 4’te verilmiştir.

Tablo 4: Eşbütünleşme Test Sonuçları

Test istatistiği
------------------

**Westerlund Eşbütünlüme  
Testi**

4,666 [0,000]

Not: Köşeli parantez içindeki değerler p value (olasılık) değerlerini göstermektedir.

Westerlund eşbütünlüme test sonuçları değerlendirildiğinde değişkenler arasında eşbütünlüme ilişkisinin olmadığını ifade eden sıfır hipotezinin red edildiği, dolayısıyla değişkenler arasında eşbütünlüme ilişkisinin var olduğu söylenebilmektedir. Değişkenler arasında eşbütünlüme ilişkisinin varlığı tespit edildiğinden dolayı, uzun dönem katsayıları tahmin edilmiş ve tahmin sonuçları Tablo 5'te verilmiştir.

Tablo 5: Model Tahmin Sonuçları

FMOLS Uzun Dönem Tahminleri		
Değişken	Katsayı	Standart Hata
LDYY	1,011[0,000]	27,730
LDA	-0,224 [0,029]	-10,456

Not: Köşeli parantez [] içindeki değerler p value (olasılık) değerlerini göstermektedir.

Ele alınan tüm değişkenlerin uzun dönem parametrelerinin istatistiksel olarak anlamlı olduğu görülmektedir. Uzun dönemde doğrudan yabancı yatırımlarda meydana gelecek %1'lik artış, karbondioksit emisyonlarından kaynaklanan kirlilik hasarında % 1,011 oranında artışa sebep olacaktır. Diğer taraftan, dışa açıklık oranında meydana gelecek %1'lik artış karbondioksit emisyonlarından kaynaklanan kirlilik hasarında %0,224 oranında azalışa sebep olacaktır.

Çalışmada son olarak ele alınan değişkenler için Panel VECM nedensellik analizi uygulanmış ve sonuçları Tablo 6'da verilmiştir;

Tablo 6: Panel Nedensellik Analizi Sonuçları

H <sub>0</sub>	Test İstatistiği	Nedensellik
LDYY ≠> LCA	1,011[0,000]	Evet
LTRA ≠> LCA	-0,224[0,290]	Hayır
LCA ≠> LDYY	3,024[0,082]	Hayır
LTRA ≠> LDYY	0,419[0,517]	Hayır
LCA ≠> LTRA	0,078[0,779]	Hayır
LDYY ≠> LTRA	0,009[0,920]	Hayır

Not: Köşeli parantez [] içindeki değerler p value (olasılık) değerlerini göstermektedir.

LCA'nın LDYY Granger nedeni olmadığını ifade eden sıfır hipotezi %5 anlamlılık düzeyine göre reddedilmiş olup, nedensellik ilişkisi mevcuttur. Diğer değişkenler için herhangi bir yönde nedensellik ilişkisi bulunmamaktadır.

## 5. SONUÇ

Çevre kirliliği ile ekonomik büyüme arasındaki ilişkiyi açıklamaya yönelik olan Kirlilik Sığınağı Hipotezi, bir ülkenin ekonomik büyümesinin başlangıçta çevresel kirliliği artıracaklarını, ancak zaman içinde kirliliğin azalacağını öne sürmektedir. Bu hipoteze göre, gelişmekte olan ülkeler, uluslararası ticaretin genişlemesi ile birlikte çevresel kalitenin düşeceği görüşündedir. Aynı zamanda, doğrudan yabancı yatırımların artışıyla birlikte karbon emisyonunda bir artış beklenmektedir. Buna karşın, Kirlenme Hale Hipotezi, gelişmekte olan ülkelerin uluslararası ticaret aracılığıyla temiz teknolojilere yönlendirildiğini savunmaktadır. Hipoteze göre, çok uluslu şirketler doğrudan yabancı yatırımlar aracılığıyla çevreyi koruyan teknolojileri diğer ülkelere transfer etmektedirler. Uluslararası yardım, teknoloji transferi ve iş birliği programları, bu ülkelerin çevresel kirlilikle mücadele kapasitesini artırarak çevresel sürdürülebilirlik ve ekonomik kalkınma arasında bir denge sağlamaktadır.

Çalışma kapsamında, söz konusu hipotezleri sınamak amacıyla, Türkiye, Arjantin, Katar, Mısır ve Pakistan ülkelerini kapsamına alan Yeni Kırılgan Beşli ülkelerinde, doğrudan yabancı yatırımlar ve dış ticaret hacmindeki artışın karbondioksit emisyonlarından kaynaklanan kirlilik hasarına yol açıp açmadığı incelenmiştir. Elde edilen sonuçlar ışığında, yeni kırılgan beşli ülkelerinde doğrudan yabancı sermaye yatırımlarındaki artışın karbondioksit emisyonlarından kaynaklanan kirlilik hasarını arttırdığını ve kirlilik cenneti hipotezinin geçerli olduğu sonuçlarına ulaşılmaktadır.

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## Türk-Alman Kültürel İlişkilerde İstanbul Buluşması: “İstanbul’da Uyanmak”

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**Özet:** Türk Alman ilişkileri altmışüç yıllık bir göç sürecinin yol hikâyesidir. 1961 yılında ilk gurbetçi işçilerin Almanya’ya göçleriyle başlamış, evrimleşmiş, kök salmış ve bugünkü Türk Alman toplumunu yaratmıştır göç sonrası dönemde. Elbette biten bir şey yok, tersine devingenleşen, yaşayan bir azınlık kültürü söz konusu. Altmışüç yıllık bir süreçte kendi edebiyatını, sanatını ve önemli bir kültür birikimini de ortaya koymuş büyük ve önemli bir potansiyel haline gelmiştir. Üstelik bu kültür yapısı asla tek taraflı değil, Türk ve Alman kültürleri olmak üzere her iki kültür unsurlarının da bir arada bulunduğu, zaman zaman keşiştiği, bütünleştiği, bazen de ayrı kulvarlarda yer aldığı ama hep bir temas, hep bir etkileşim içinde olduğu köklü ve büyük bir birikimdir. Bazı kültür, sanat ve edebiyat etkinlikleri mekân olarak Almanya dışında Türkiye’de de konumlandırılabilir. Bunlardan en önemlilerinden biri de İstanbul’dur. “Aufwachen in Istanbul (İstanbul’da Uyanmak)” başlıklı kitapta toplanan etkinlik kitabında edebiyat dünyası ile güzel sanatlar dünyasından Türk ve Alman sanatçıların yapıtları sergilenmiş, söyleşi ve etkinlikler düzenlenmiştir. Tüm bu etkinlikler kitaplaştırılarak belgelenmiştir. Bu çalışmada da söz konusu kitap ile ilgili incelemeye yer verilmiş, Türk Alman edebiyatı ve kültürü, Türk-Alman ilişkileri bağlamında oluşturduğu katkılarının incelenmesi amaçlanmıştır.

**Anahtar Kelimeler:** Türk Alman İlişkileri, Edebiyat, Türk-Alman Edebiyatı, Sanat, İstanbul.

### Istanbul Meeting in Turkish-German Cultural Relations: "Waking up in Istanbul"

**Abstract:** Turkish-German relations are the story of a sixty-three-year migration process. It started in 1961 with the migration of the first expatriate workers to Germany, evolved, took root and created today's Turkish-German society in the post-migration period. Of course, nothing is over, on the contrary, there is a dynamic, living minority culture. In a period of sixty-three years, it has become a great and important potential that has produced its own literature, art and a significant cultural accumulation. Moreover, this cultural structure is never one-sided, it is a deep-rooted and great accumulation in which both cultural elements, Turkish and German cultures, coexist, sometimes intersect, integrate, sometimes take place in separate lanes, but always in contact, always in interaction. Some cultural, artistic and literary events can be located in Turkey as well as in Germany. One of the most important of these is Istanbul. In the book "Aufwachen in Istanbul" (Waking up in Istanbul), the works of Turkish and German artists from the world of literature and fine arts were exhibited, interviews and events were organised. All these events were documented in a book. The aim of this study is to analyse this book and to examine its contributions to Turkish-German literature and culture and Turkish-German relations.

**Key Words:** Turkish-German Relations, Literature, Turkish-German Literature, Art, Istanbul.

#### 1. GİRİŞ

Türk Alman ilişkileri tarihte de çok köklü bir geçmişe dayanır aslında. Türklerin Avrupaya viyana önlerine kadar gelişinden, Alman imparatorun Osmanlı topraklarına gelişine ve yeni bir sömürge olabileceği düşüncesiyle Bağdat demiryolu projesini gündemlerine almalarına ve Sultanahmet meydanında Alman çeşmesi yaptırıp zamanın Osmanlı yöneticilerine hediye etmesine kadar pek çok siyasal, askeri ve de kültürel ilişkilerimiz olmuştur. Ancak toplumsal düzeyde ve de daha derinden hissedilerek yaygınlık kazanan sanırım Almanya’ya 1961 yılında imzalanan işçi göçü antlaşmasıyla başlayan göç sürecidir. Nihayet günümüzde atmışüç yıllık bir zaman sürecini tamamlayan göç süreci giderek evrimleşmiş ve göçmenlikten çift vatandaşlığa doğru yerleşik hale gelmiştir. Almanya’da varlığını sürdüren bir Türk-Alman toplumu oluşmuştur. Dolayısıyla bu Türk-Alman toplumunun çeşitli alanlarda olduğu gibi kültür, sanat ve edebiyat alanlarında da izdüşümleri olmuş ve her daim olacaktır. Üstelik bu tarz kültürel ilişkiler belli bir ülkenin sınırlarını aşır kaynak kültürler olan her iki kültürü de kapsayacak şekilde organik hale gelmiştir, denebilir. Bunun yüzlerce somut örneğinden biri de İstanbul’da esinlenip atölye kısmını bu büyük şehrimizde tamamlayarak Köln kentinde ürünlerin sergilendiği sergidir. Bu aynı zamanda Köln-İstanbul kardeş şehirlerinin de bir projesidir aynı zamanda.

#### 2. “İstanbul’a Uyanmak” Başlıklı Kültür Sanat Etkinliği

Almanya’nın Köln kentinde sanatevi “Kunsthau Rhenania”da “İstanbul’da Uyanmak” başlığı altında ondokuz sanatçı ve yazarların eserlerinden oluşan ve büyük önem taşıyan bir sergi açılmıştır. Serginin küratörlüğünü Nadine Müseler yapmıştır. Aldıkları burslarla İstanbul’da boğazda esinlendikleri ürünlerini sergilediler. Bu sanatçı ve yazarlar 2009 ila 2017 yılları arasında, Türkiye’nin batı-doğu metropolünün kalbindeki Galata

stüdyosunda (Galata Atölye) iki ila altı ay boyunca yaşadılar ve çalıştılar. Bu değişim sanat ve yazınsal eserlerin çeşitliliğine de yansımıştır. Köln'lülerin bir kısmı belli bir projeye İstanbul'a doğru yola çıkarken, bir kısmı da şehrin esintilerini alıp deneyimlerini ancak daha sonraki eserlerine işlemiştir. Sonuçta heykeller, resimler, filmler, romanlar, minyatürler ve şiirlerin yanı sıra disiplinlerarası çalışmalar ortaya çıkmıştır. Birbirini yabancı olarak değil, bir perspektif olarak gören genç, meraklı, hırslı ve kültürel açıdan açık bir sanatçı kuşağının çalışmalarından oluşan bir sergi olarak tanımlanmaktadır sergi kitabının önsözünde. On yıl döngüsünde çıkarılan bu belgesel yazın kitabı, "Aufwachen in İstanbul (İstanbul'da Uyanmak)" başlığında toplanan etkinlik kitabında<sup>1</sup> edebiyat dünyası ile güzel sanatlar dünyasından Türk ve Alman sanatçıların yapıtları sergilenmiş, söyleşi ve etkinlikler düzenlenmiştir. Tüm bu etkinlikler kitaplaştırılarak belgelenmiştir. Bu anlamda Galata bursu, Köln Şehri Uluslararası İlişkiler Ofisi ve Köln-İstanbul İkizini Tanıtma Derneği'nin de katıldığı kardeş şehirler Köln ve İstanbul arasındaki kültürlerarası alışverişi on yıldır derinleştirmektedir. Ayrıca belirtmek gerekir ki Köln ile İstanbul yirmi yıldır kardeş şehirler statüsündedir. Kardeş şehirler programında pek çok değişim yapılmaktadır. Bu değişim pek çok düzeyde önemli kabul edilmektedir Türk Alman ilişkileri açısından. Bu nedenle ihtisas programına önümüzdeki yıllarda da devam edilebileceği belirtilmektedir. Jüri tarafından seçilen burs sahiplerine, tutkularının peşinden gitme ve İstanbul sanat ve edebiyat sahnesinde bağlantılar kurma fırsatı vermiştir. Bu tür etkinliklerle hâlihazırda pek çok Alman-Türk iş birliğine ve uzun vadeli dostluklara yol açmak hedeflenmiştir. Açılan sergi konserler, okumalar ve tartışmalarla desteklenmiştir. Böylelikle İstanbul'da Uyanmak kitabı hem bir belgesel yazın, hem de bir sergi ve sanat kataloğu niteliği taşımaktadır.

Resim 1: "Aufwachen in İstanbul (İstanbul'da Uyanmak)" kitabı.



Ülkeler arası ilişkiler açısından bakıldığında her bir ülkenin belli bir kültür politikası vardır ve bu politikasını kurumları aracılığıyla başka kültürler içinde tanıtma, yayma, kendi ülke imajını oluşturma gibi amaçlar içerirler. Almanya'nın kültürel ilişkilerinde de Goethe Enstitüsü yurt dışında Alman dili ve kültürü konusunda öncüdür; Almanca kursları düzenler, değişim programları gerçekleştirir ve ülkeler arası kültür işlerini de yürütür. Elbette Alman dili ve kültürünün yaygınlaştırılması tanıtılması, kültür ihracı diyebileceğimiz işlevleri yürütür. Bizde de Yunus Emre enstitümüz vardır ve bu bağlamda aynı işlevleri bu kurumumuz yapar ve yerine getirir. Bu kurumlar kültürel ilişkilerde sanatçılara burslar da verebilmektedir. Bu burslar sayesinde o kültürün dili ve kültürüne hizmet etmek amacıyla belli bir süre ikamet edebilir ve çalışır, sonunda da eserlerini ya da ürünlerini ortaya koyarlar. Böylelikle hem disiplinler arası anlamda, hem de kültürlerarasılık anlamında çok önemli katkılar sağlanabilmektedir. Sergiye katılan yazar ve sanatçılar şunlardır: Lars Breuer, Marianna Christofides, Doris Frohnafel, Tanja Goethe, Selma Gültoprak, Noa Gur, Tessa Knapp, Alfons Knogl, Robert Kraiss, Evamaria Schaller, Philipp Enders, Andrea Karimé, Stan Lafleur, Ulla Lenze, Selim Özdoğan, Bastian Schneider, Gerrit Wustmann, Mona Yahia. Diğer katılımcılar da şunlardır: Erdoğan Altındış, Alper Canigüz, Orhan Esen, Barbara Foerster, Burçak Konukman, Nadine Müseler, Jochen Proehl.

### 3. İstanbul'da Edebiyatın İzdüşümleri

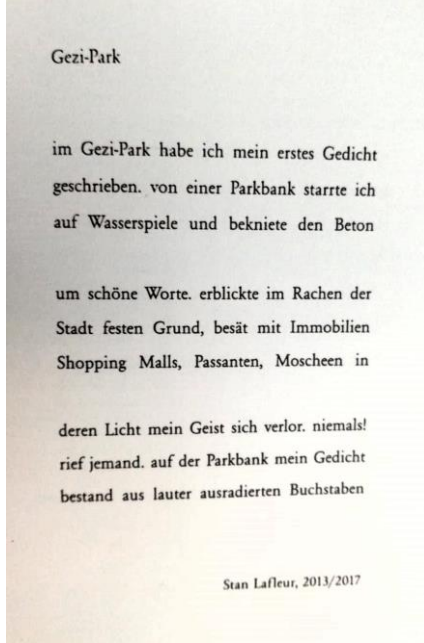
Çalışmanın sınırlandırılması amacıyla bu kültür-sanat etkinliğinin yalnızca edebiyat ile ilgili izlerine bu çalışmada değinilecektir. Bu bağlamda Gerrit Wustmann'ın bir tespiti şu şekildedir: "İstanbul'daki bir okuma etkinliğinde

<sup>1</sup> Kitabın derlemesi Nadine Müseler ve Gerrit Wustmann tarafından yapılmış Köln belediyesi tarafından 2019 yılında basılmıştır.

yazar kitabından okumaz. Yazar ile sohbet edilir”. İlk göze çarpan gözlem olarak dile getirilir (Wustmann 2019: 81). Dinleyici ya da katılımcılar kitabı bilmektedirler ve okumuşlardır. Etkinlikte ise yazarın kendi sesinden kitabı dinlemek yerine bizzat yazar ile söyleşmek çok daha fazla tercih edilen bir etkinliktir. Bu söyleşi yerini etkinlik sonrasında yazarla bir fotoğraf, bir “Selfi / özçekim” etkinliğine bırakır.

Bir başka izlenim de yazar Andrea Karime’den. İstanbul izlenimlerini sular ve kapılar dünyası olarak tanımlar ve İstanbul şehrinin kapılarından söz eder. Dostluk kapısı, misafirlik kapısı, yem içme kapısı, dil, kelime, konuşma ve benzer unsurlar için “kapı” imgesini kullanmaktadır ve İstanbul şehrinin ona tüm dillerin, seslerin ve renklerin kapılarını açtığını belirtir (Karime 2019: 88). Stan Lafleur ise 2013/2017 aralığında yaşadığı ve edindiği en büyük izlenimin “Gezi Parkı” olduğunu belirtir. Ayrıca “Gezi-Park” başlığını taşıyan şiir de yazmıştır. Şairin ayrıca “Gülhane-Park” başlıklı şiiri de mevcut olup söz konusu kitapta yer almaktadır.

Resim 2: Stan Lafleur



Bu şiirden hareketle sanatçıların, Türk veya Alman olsun buldukları ülkelerin kültür, sanat gibi alanların yanı sıra toplumla ilgili siyaset, ekonomi gibi alanlarıyla da yakından ilgilendikleri, toplumun sorunlarına yaklaşmaya çalıştıkları söylenebilir. Almanya’da da Türklerin altmış yıllık sürece rağmen halen dışlanma, yabancı düşmanlığı, uyum / entegrasyon kavramı adı altında asimilasyon süreçleri gibi sorunlara maruz bırakıldığı da ilgilenilen diğer alanlardır. Bu anlamda yazın dünyasından Türk Alman yazar Selim Özdoğan, İstanbul izlenimlerinden çok da olumlu olarak bahsetmez. Karşılaştığı İstanbul simgelerinin ve de klişelerinin çoğunun Asyalı / Anadolu imgeleri olduğu, İstanbul’un Avrupalı yanının çok da gölgede kaldığını belirtir.

İstanbul’dan esinlenen bir diğer yazar ise Ulla Lenze’dir. “Die endlose Stadt” (2015-Tr. Sonsuz şehir) adlı kent romanı, yazarın 2009 yılında ikamet ettiği İstanbul’da edindiği izlenimlerin birikimiyle oluşmuş, roman figürlerinin doğu ile batı (Orient-Okzident) dünyaları arasında var olmaya çalışan figürlerinin öyküsünün anlatıldığı bir İstanbul sevdalısı eser olarak tanımlanabilir.

Diğer bir Alman sanatçı da Bastian Schneider’dir<sup>2</sup>. Genç yaşına rağmen oldukça üretken ve başarılı bir yazar olup, pek çok ödüle layık gösterilmiştir. “Aufwachen in Istanbul” kültür sanat etkinliklerinde sanatçı olarak katılan yazar, 2017 yılında “İstanbul harika” adlı eserini de kaleme almıştır. Eserlerinden bazıları şunlardır:

Vom Winterschlaf der Zugvögel, Sonderzahl Verlag, Wien, 2016.

Irgendwo, jemand. Gedichte, parasitenpresse, Köln, 2017.

İstanbul, harika, Edisyon Ekmek, Istanbul, 2017.

Die Schrift, die Mitte, der Trost. Stadtstücke, Sonderzahl Verlag, Wien, 2018.

Eine Naht aus Licht und Schwarz. Graphic Novel, zus. m. M. Kone u. W. Pamminger, Wien, 2018.

<sup>2</sup> Almanya-Siegen 1981 doğumlu genç yazarın eserleri pek çok ödüle layık görülmüştür.

Paris im Titel, Sonderzahl Verlag, Wien, 2020

Sanatçının İstanbul izlenimleri arasında doğu dünyasının mistik şehri olarak masmavi boğaz suları üzerinde ışıltılarıyla parlayan bir şehir olarak İstanbul'u anlatmış, her bir köşesinde küçük çay ocaklarıyla, el zanaatçılarıyla otantik atmosferini birer yazınsal projeksiyon olarak dile getirmiştir. Işık, ses ve koku başlıca duyumsanan unsurlar olarak sanatçının belleğinde yer etmiştir.

#### 4. SONUÇ

Sonuç olarak Türk-Alman kültür ve sanat etkinlikleri çerçevesinde önemli bir kültür projesi tamamlanmış ve Türk Alman olmak üzere her iki toplumun kültür yaşamına katkıda bulunulmuştur. Bu tür etkinliklerle karşılıklı anlayış ve hoşgörü kavramlarının pekiştirilebileceği, toplumların sanat aracılığıyla birbirini daha çok anlayabileceği değerlendirilmektedir. "Galata-Atölye" isimli çalışma grubu bu sanat anlayışına mekân olarak İstanbul'da hizmet etmiş ve birbirinden değerli sanatçıları ağırlamıştır.

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## Altmışüç Yıllık Türk Alman Kültürel Çifte Vatandaşlığı: Emine Sevgi Özdamar'ın "Aynadaki Avlu" Adlı Eserinde İzler

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**Özet:** Altmışüç yıllık bir göç sürecinin hikyesidir aslında Türk-Alman edebiyatı. Bugün artık dördüncü kuşak edebiyatçıların konuşulduğu köklü bir geçmişe sahip azınlık kültürüdür söz konusu olan. 1961 yılında Türkiye'den Almanya'ya ekonomik göç ile başlamış, misafir işçi, gurbetçi, Almancı gibi isimleri aldıktan sonra nihayet Türk-Alman toplumu ya da Avrupalı Türkler adını almıştır. Bugün için Türk Alman toplumunun Alman toplumuna uyum gibi bir sorunu bulunmamaktadır. Ortak geçmişinin tercümanı da edebiyatçıları ve sanatçıları olmuştur. Emine Sevgi Özdamar da Türk Alman toplumunun ikinci kuşak yazarları arasında ve de üçüncü kuşağa geçiş aşamasındaki ünlü yazarlarımızdandır. Türkçe ve Almanca'nın dilsel unsurlarını eserlerinde çok başarılı sentezlerle bir araya getirmiş ve dil unsurlarını farklı kullanımlarla eleştirel sorulara çevirmiştir, denebilir. Böylelikle göç sürecinin izlerini ve etkilerini dil alanında somutlaştırarak örneklemiştir. Yazarın "Aynadaki Avlu" eserinden yola çıkarak Türk Alman toplumunun geçirdiği göç evrelerinin izlerine yer verilmiştir bu çalışmada.

**Anahtar Kelimeler:** Emine Sevgi Özdamar, Aynadaki Avlu, Türk-Alman Edebiyatı, göç

### Sixty-Three Years of Turkish German Cultural Dual Citizenship: Traces in Emine Sevgi Özdamar's "Mirror Courtyard"

**Abstract:** Turkish-German literature is actually the story of a sixty-three-year migration process. Today, we are talking about a minority culture with a deep-rooted history in which fourth-generation literary figures are being spoken about. It started in 1961 with economic migration from Turkey to Germany, and after taking names such as guest worker, expatriate, Germanist, it finally took the name of Turkish-German community or European Turks. Today, the Turkish-German community has no problem of integration into German society. The interpreter of their common past has been their literary figures and artists. Emine Sevgi Özdamar is one of the second generation of writers of the Turkish-German community and one of our famous writers in the transition to the third generation. It can be said that she has brought together the linguistic elements of Turkish and German in her works with very successful syntheses and turned language elements into critical questions with different uses. In this way, he has exemplified the traces and effects of the migration process by concretising them in the field of language. Based on the author's work "The Courtyard in the Mirror", the traces of the migration phases of the Turkish-German society are included in this study.

**Key Words:** Emine Sevgi Özdamar, Courtyard in the Mirror, Turkish-German Literature, migration.

#### 1. GİRİŞ

Altmışüç yıllık bir geçmişe sahip Türk Alman yazını ilginç bir şekilde Türk ve Alman kültürlerinin her ikisine de sahip çifte vatandaşlık öyküsüdür aslında. Bu çifte vatandaşlık çoğu zaman resmîyette uzun yıllardır verilmemiş, günümüzde yeniden tartışma konusu olmuş ve en son onaylanan bir kararla Alman meclisinde yasalaşmıştır. Böylelikle Türk Alman varlığı ya da Almanya'daki gurbetçilerimizin misafirperverlik – gurbetçilik- göçmenlik ve en sonunda vatandaşlık konularına geçişi şeklinde uzanan uzun bir yol hikâyesidir. Bugün için konuşulan konu çifte vatandaşlıktır. Türk-Alman kültürünün resmîyetteki en son durağıdır. Bu zaman içinde Türk-Alman toplumu kendi içinden aynı şekilde altmışüç (63) yıllık bir edebiyat birikimini de oluşturmayı başarmıştır. Bu Türk-Alman yazını çağımızın Almanya'daki gurbetçilerimizin öykülerini kaleme almış, sazı, sözü yani tercümanı olmuştur denebilir. Aynı zamanda da tarihi olmuştur. Türk-Alman toplumunun altmışüç yıllık tarihini yazınsal belge niteliğiyle ölümsüzleştirmiştir, denebilir. Bu büyük birikimin yazarlarından biri de; her iki kültürün dil unsurlarını bir araya getirerek çok farklı bakış açıları kazandırmış olan Emine Sevgi Özdamar'dır kuşkusuz. Türk Alman yazınının ikinci kuşak yazarlarından Emine Sevgi Özdamar (doğ. 10 Ağustos 1946, Malatya), Türkiye'de doğup büyümüş ve sonradan Almanya'ya göç eden Türk yazarlarımızdan biridir. Berlin'de yaşayan sanatçı Bochum ve Berlin tiyatrolarında oyuncu ve rejisör olarak çalışmış<sup>1</sup>, 1982 yılından bu yana da serbest yazar olarak yaşamına

<sup>1</sup> İlk kez on iki yaşında Bursa'da sahneye çıkan sanatçı 1965 yılında misafir işçi olarak Almanya'ya gitti. 1967 yılında Türkiye'ye dönerek, İstanbul'da Muhsin Ertuğrul, Beklan Algan, Ayla Algan, Haldun Taner, Melih Cevdet Anday ve Nurettin Sevin'den tiyatro eğitimi aldı. 1970'te eğitimini tamamlayan Özdamar daha sonra Doğu Berlin'e geçerek buradaki Halk Tiyatrosu'nda Benno Besson ve Matthias Langhoff'la birlikte çalıştı. İzleyen yıllarda Bochum ve Frankfurt Şehir Tiyatroları'nda kariyerine devam eden sanatçı birkaç filmde, bu arada Dorris Dörrie'nin "Doğum Günün Kutlu Olsun, Türk" adlı filminde de rol almıştır.

devam etmektedir. Sonradan Almanya'ya göç etmesine rağmen yerel kültüre uyum sorununu aşmıştır. Çocukluğu Türkiye'de geçmiş, tiyatro tutkusu sayesinde Almanya'ya gitmiş ve sonradan öğrendiği bir dilde başarılı eserler ortaya koyarak dikkatleri üzerine çekmiştir. Daha çok otobiyografik eserler<sup>2</sup> yazan Emine Sevgi Özdamar'ı diğerlerinden farklı kılan özelliği kullandığı dildir; "Türkçe düşünüp Almanca yazıyordu". Bu ilk bakışta negatif bir özellik gibi görülse de, bu günlerde anlaşıldığı gibi böyle yazmasıyla, Almanca'ya da katkıda bulunmuş oluyordu. 'Hayat Bir Kervansaray', ona ilk büyük ödülünü getirdi, hem de kitap basılmadan, sadece verdiği bir özetle: Ingeborg Bachmann Ödülünü. Bu Ödül Almanca'yı zenginleştiren yazarlara verilen bir ödüldür. O zaman tabii anadili Almanca olmayan biri bu ödülü aldı diye büyük yankı uyandırmıştı. Kelimelerin ve cümlelerin büyüklü gücüyle Türk insanını Alman okura tanıtıyordu. Yazın hayatına ve Almanca'ya yaptığı katkılar nedeniyle olsa gerek, 2004 yılı kasım ayında Almanya'nın en büyük yazın ödüllerinden birisi olan Heinrich-von-Kleist ödülünü almıştı<sup>3</sup>. Emine Sevgi Özdamar II. kuşak yazarlardan sayılmasına rağmen bu çalışmada incelenecek olan "Aynadaki Avlu" adlı kitabı konu ve eseri işleyiş tarzı bakımından III. kuşak Türk Alman yazını eseri de sayılabilir.

Genel olarak ele alınan konuların kimlik arayışı olmasından ötürü geçiş yazını olarak nitelendirilen birinci kuşak Türk Alman yazının ardından iki kültür arasında sıkışıp kalmışlığı ifade eden ve kimlik bunalımı ve arayışı çabalarının gözlemlendiği ikinci kuşak Türk Alman yazını gelmektedir. Bu kuşaktaki bazı yazarlar Türkçe yazmak

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<sup>2</sup> Sanatçının Eserleri:

Karagöz in Alania (1982) (Karagöz Almanya'da, oyun)

Bir Temizlikçi Kadının Kariyeri (oyun, 1984)

Mutterzunge (1990) (Anne dili, Öykü)

Keloğlan in Alania, die Versöhnung von Schwein und Lamm. (Oyun, 1991)

Das Leben ist eine Karawanserei, hat zwei Türen, aus einer kam ich rein, aus der anderen ging ich raus. (Roman, 1992; Tr. "Hayat Bir Kervansaray"; Varlık Yayınları, Çeviri Ayça Sabuncuoğlu)

Die Brücke vom Goldenen Horn. (Haliçli Köprü, roman 1998: Turkuvaz Yayınları, Çevirmen İlknur Özdemir)

Der Hof im Spiegel. (Aynadaki Avlu-Öykü, 2001)

Seltsame Sterne starren zur Erde. Wedding – Pankow 1976/77. (Roman, 2003, Tuhaf Yıldızlar Dünyaya Bakıyor, roman, 2003; İletişim Yayınevi Çeviri Fikret Doğan)

Araf'takiler – Hayatları Roman olanlardan (ADIM, 2004, Erzurum-Türkiye).

Sonne auf halben Weg: die Istanbul Berlin Trilogie. (üçlü eser: "Leben ist eine Karawanserei", "Brücke vom Goldenen Horn" & "Seltsame Sterne starren zur Erde", Kiepenheuer & Witsch, 2006)

Kendi Kendinim Terzisi Bir Kambur (Ece Ayhan'lı anılar, 1974 Zürih günlüğü, İstanbul 2007)

Perikızı (Oyun – 2010), Uwe B. Carstensen, Stefanie von Lieven (der.): Theater Theater. Odyssee Europa. Fischer Taschenbuch Verlag, Frankfurt a. M. 2010

<sup>3</sup> Sanatçının almış olduğu Ödülleri:

1991 - Ingeborg Bachmann Ödülü (Hayat Bir Kervansaray)

1993 - Walter Hasenclever Ödülü (Hayat Bir Kervansaray)

1994 - NewYork Yılın En İyi 20 Kitabı (Anne Dili)

1994 - London Times En İyi kitap (Hayat Bir Kervansaray)

1998 - Kuzey Ren Westfalya Yılın Sanatçısı Ödülü

1998 - Almanya Kuzey Şehirleri Literatür Ödülü

2003 - Frankfurt Şehir Yazarı Ödülü

2004 - Kleist Ödülü

2009 Fontane-Ödülü

2010 Carl-Zuckmayer – Ödülü (madalya)

2012 Alice Salomon Poetik Ödülü

yerine Almanca yazmayı tercih etmişlerdir. Buna rağmen bu yazarların eserlerinde yer yer Türkçe kokusu da alınır:

*"Bazı yazarlar ikinci dili (Almanca) kullanmalarına rağmen yazınlarında kullandıkları dilin farklı alanlarda yabancı öğeler içerdiğini saptayabiliriz. Çünkü göçmenlerin kullandığı bu dil birçok yönden kırılmış ve yabancılaşmıştır"* (Karakuş, 2000: 103). Emine Sevgi Özdamar da bu kapsama dâhil edilebilir. Kendinden önceki kuşaklara oranla üçüncü kuşak Türk Alman yazını ise geçmişteki tüm sorunları geride bırakıp yeni bir akım yaratmıştır. Artık göç ile süregelen sorunlar ve kimlik kaygısı pratikte yer yer devam etse de yazın dünyasında geçmişte kalmış, bunun sonucunda yeni bir yazınsal akım doğmuştur, denebilir. "Aynadaki Avlu" da bu bağlamda ikinci kuşak Türk Alman yazınına üçüncü kuşak yazına bağlayan bir geçiş eseri olarak değerlendirilebilir.

İlk göç süreci ile başlayan Türk-Alman yazınının adlandırılmasıyla ilgili tartışmalar göç sonrası dönemde de devam etmiştir.

*"Bugüne kadar önerilen "misafir işçi edebiyatı" (Gastarbeiterliteratur), "yabancılar edebiyatı" (Ausländerliteratur), "azınlıklar edebiyatı" (Minderheitenliteratur), "kültürlerarası edebiyat" (Interkulturelle Literatur), "çok kültürlü edebiyat" (Multikulturelle Literatur) vb. nitelendirmelerin çoğunun bu edebiyatı bütün yönleriyle kapsadığı söylenemez"* (Ekiz, 2007: 37).

Buna rağmen, bu kavramlar Türk-Alman yazınına belli başlı bir çerçeve ile sınırlayarak okuyucuların fikir sahibi olmasını sağlar. Almanya'ya ilk göç eden Türkler arasından çıkan I. kuşak yazarların konularını elbette yaşadıkları zorluklar oluşturmuştur. *"Almanya'da yazan çoğunlukla birinci kuşaktan yazarlarımız daha çok göç olgusunu, dil sorununu, yabancı bir kültürde yaşamının sıkıntılarını, dışlanmışlıklarını, gurbeti, sılayı, özlemi, göçü, vatani dile getirirler"* (Ekiz, 2007: 37). Bu kuşağın hemen ardından gelen II. kuşak yazarların ise konularını çeşitlendirdiklerini ve farklılaştırdıklarını görürüz. Ayrıca II. dönem yazarların konularını zenginleştirmenin yansira edebi estetik kaygısı güttüklerini de söyleyebiliriz.

III. kuşak yazarlar ise I. ve II. kuşak yazarlardan tamamen bağımsız olarak yeni ve özgün konular ile kültürlerarası bir yazın oluşturmuşlardır. *"Kültürler arası ya da çok kültürlü edebiyat olarak da adlandırılan Göçmen Yazın, Almanya'da ikinci ama daha çok üçüncü kuşak göçmenlerin oluşturduğu bir edebiyata karşılık gelir"* (Bilopavlovic, 2008: 40; Aktaran: Kırgız Karak, 2014: 237). III. kuşak yazarların eserlerinde anlattıkları konular ise artık göçmen sorunları değil tam aksine güncel meselelerdir ve birçoğu vatan hasreti, kimlik kaygısı ya da entegrasyon sorunu gibi temaları işlememektedirler. Bu neslin yazarları artık kendilerini Almanyalı Türkler hatta birçoğu Alman olarak tanımlarlar ve eserlerini sadece Almanca olarak yaratırlar. Bu da bize onların Almanya'ya ne denli uyum sağladıklarını açık bir şekilde göstermektedir.

*"Almanya'daki edebiyatçıların dili, bize, oradaki edebiyatın oluşum ve gelişim süreci hakkında önemli bilgiler vermektedir. Almanya'daki Türk edebiyatının ilk yıllarında dil çoğunlukla Türkçe iken bu, zamanla hem Türkçe hem Almancaya dönüşmüştür. Edebiyat, üretildiği dille yaşar, onunla beslenir ilkesinden yola çıkacak olursak edebi eserlerde dilin giderek Almancaya dönüşmesi Türk edebiyatçıların Almanya'yı benimsediklerinin bir göstergesidir"* (Topçu, 2009: 705).

Günümüze doğru geldikçe artık "göç sonrası Türk-Alman Yazını" ya da kısaca "Türk-Alman Yazını" gibi genel kavramlarla bu edebiyat türü anılmaya başlamıştır.

## 2. TÜRK-ALMAN YAZINININ BİR TEMSİLCİSİ: EMİNE SEVGİ ÖZDAMAR

Emine Sevgi Özdamar Almanya'daki II. kuşak yazarlardandır. 1946 yılında Malatya'da doğup büyümesine rağmen bir tiyatro hayalinin peşine takılarak, o da kendisini bir anda Almanya'daki milyonlarca Türk gibi göçmen statüsünde bulur. Muhsin Ertuğrul, Beklan Algan, Ayla Algan, Haldun Taner, Melih Cevdet Anday ve Nurettin Sevin gibi isimlerden tiyatro eğitimi alır ve bu bağlamda kendisini geliştirir. Benno Besson ve Mathias Langhoff ile baş asistan, dramaturg ve oyuncu olarak Berlin, Paris, Avignon, Lyon, Münih, Frankfurt, Bochum gibi şehir tiyatrolarında çalışmıştır. Ayrıca çalışmalarından dolayı Paris Vencennes Üniversitesi tarafından kendisine doktora yapma hakkı tanınmıştır. Almanca dilini sonradan öğrenmesine rağmen eserlerini bu dilde yazmaya karar verir. Hala Almanya'da olan Emine Sevgi Özdamar 1982 yılından bu yana da serbest yazar olarak çalışmaktadır.



Emine Sevgi Özdamar'ın en dikkat çekici özelliklerinden bir tanesi de eserlerini sonradan öğrenmiş olduğu Alman dilinde yazmasıdır. Tarihsel olarak ve eserlerinde anlattığı konular bakımından II. kuşak yazarlar arasına girmesine rağmen bu çalışmada inceleyeceğimiz "Aynadaki Avlu" adlı eserindeki konuyu işleyiş tarzıyla II. kuşak Türk-Alman yazınına III. kuşak Türk-Alman yazınına bağlayan bir yazar olarak nitelendirebiliriz. Anadilinin Türkçe, yazı dilinin ise Almanca olması Emine Sevgi Özdamar'ın Türkçe düşünüp Almanca yazmasına sebep olmuş ve bu durumda onun kendine has ve samimi bir anlatı tarzının oluşmasını sağlamıştır.

*"Yazarın eserleri dilsel açıdan incelendiğinde yazarın kendine özgü bir Almanca kullanımına sahip olduğu anlaşılmaktadır. Standart dilden uzaklaşma, gramer kurallardan sapma, birbiri ardına kullanılan atasözleri, deyimler, eğretilmeler, şiirler, şarkılar, dualar, simgesel anlatımlar vasıtasıyla kendini gösteren bu özgün dilin Türkçe'den Almanca'ya kelimesi kelimesine aktarım olması Alman okuyucuda merak uyandırmasını sağlamaktadır" (Asutay, Çelik, 2015: 286).*

Anadili Türkçe olan bir yazarın sonradan öğrendiği bir dilde bu denli başarılı eserler ortaya koyması bize en başta iki dili sağlam bir şekilde harmanlayabildiğini göstermektedir. Bu sayede Almanca'ya da katkı sağlayabiliyordu. Nitekim bu özelliği sayesinde genellikle Alman dilini zenginleştirdiğine inanılan yazarlara verilen "Ingeborg Bachmann Ödülü"ne "Hayat Bir Kervansaray" adlı eseriyle layık görüldü.

*"Emine Sevgi Özdamar'ın eserleri genel itibarıyla ele alındığında 1980'li yılların Konuk İşçi Edebiyatı ile üçüncü kuşağın paradigma değişimi arasındaki dönemi tematize ettiği söylenebilir. Eserlerinde yabancı kavramı ve yabancı deneyimlerinin konu edilmek suretiyle çok kültürlülük olgusuna geçiş sağlandığı net bir şekilde görülmektedir. Bu bağlamda gerek ana vatanda gerekse yabancı ülkede yaşanan deneyimlere çok sık yer verilmesi, doğu batı arasında köprü oluşturulmasını sağlamış, bu deneyimler yabancılaşmanın beraberinde getirdiği kimlik ve kültür arayışında da ön plana çıkmıştır" (Asutay, Çelik, 2015: 286).*

Yazarımız eserlerinde ele aldığı konular bakımından da Türkiye ve Almanya arasında bir köprü görevi üstlenmiştir. Ayrıca bu bağlamda Emine Sevgi Özdamar'ın eserlerinde entegrasyon-asimilasyon sorunsalının ortadan kalktığını, ana kültürden kopmadan hedef kültüre uyum sağlanarak kültürlerarası diyalogun da başarılı bir şekilde işlendiğini söyleyebiliriz. Kültürlerarası arabuluculuk rolüyle Almanca'ya da yeni kelimeler kazandıran Emine Sevgi Özdamar'ın bir eserinin de adı olan "Mutterzunge" yani "Anne Dili" bu hususa örnek olarak gösterilebilir. Tarafımca yapılan çeviride: *"Emine Sevgi Özdamar'da dilleri harmanlamak bir alışkanlık daha doğrusu bir yazım prensibi olmuştur"* (Güde, 2011: 22). Almanca'da "Muttersprache" olarak kullanılan "Anadili" kelimesi onun yaratıcılığıyla Türkçe'de bir organ adı olan "dil" kelimesine Almanca'da karşılık gelen "Zunge" kelimesi ile birleştirilerek yeni bir kelime olan "Mutterzunge" yaratılmıştır. Bu örnekten de anlaşılacağı üzere Emine Sevgi Özdamar'ın iki kültürü de harmanlaması neticesinde ortaya sadece yeni bir edebi tarz değil aynı zamanda da yeni bir Almanca çıktığını söylemek pek de yanlış olmayacaktır.

## 2.1. Eserin Biçimsel Çözümlemesi<sup>4</sup>

Emine Sevgi Özdamar'ın "Aynadaki Avlu" adlı eseri, 2012 yılında Yapı Kredi Yayınları tarafından 152 sayfa olarak yayımlanmıştır. Bu eser, Almanca gazete ve dergilerde yayımlanmış yazılardan oluşmaktadır ve yakın geçmişteki toplumsal-tarihsel olaylara yazarın kendi hayatından anekdotlarla ışık tutmaktadır. Gerek otobiyografik özellikler taşıması açısından gerek kullanılan dil ve üslup açısından gerekse yazarın kullandığı anlatıcı bakış açısından dolayı okuyucuya anlatılanların gerçekliği ve inandırıcılığı konusunda mutlak bir güven duygusu aşılamaktadır.

Emine Sevgi Özdamar'ın II. kuşak yazarlardan kabul edilmesine rağmen, bu eseriyle III. nesil Türk-Alman yazınına giriş yaptığını söyleyebiliriz. Bu eserde işlenen konular, II. kuşak yazarların işledikleri konularla benzerlik taşımasına rağmen, konuları anlatış biçimiyle yeni bir tarz yaratılmıştır. Eserde geçen olaylar bir ayna aracılığıyla okuyucunun gözleri önüne serilir. Yani okuyucu birçok olayı yazarın evinde bulunan aynadaki yansıma sayesinde izler. Bunun oldukça enteresan bir ifade biçimi olduğunu söylemek pek de yanlış sayılmayacaktır. Emine Sevgi Özdamar'ın bu eserinde vatana özlem, aileye özlem gibi Türk izlerini de sıkça görmemize rağmen, olayların okuyucuya aktarımında edebi estetik ön planda tutulmuştur. Genel itibarıyla II. kuşak yazarlarda, I. kuşak yazarlardan farklı olarak kimlik kaygısı konusuna daha az rastlandığını belirtmekte de fayda vardır. II. kuşak yazarlar edebi eserlerde estetiğe daha çok önem verirler.

*"İçerik ağırlıklı yazarın birinci kuşağa karşı, ikinci kuşak yazarlarımızın konularını zenginleştirdiklerini, biçim arayışına girdiklerini, estetik boyutu dikkate aldıklarını görmekteyiz. Onlar, kendilerini daha iyi ifade*

<sup>4</sup> Çalışmanın eser inceleme (içerik ve biçimsel çözümleme) kısmı Doğan Kılıç (Trakya Üniversitesi, Sosyal Bilimler Enstitüsü, Alman Dili ve Edebiyatı, Yüksek Lisans Öğrencisi) tarafından yapılmış olup yeniden düzenlenmiştir.

*edebildikleri Almanca'yı kullanarak köklerine ilişkin konuları, kimlik sorunlarını vb. dile getirirler. Bir anlamda yazmayı kendilerini kanıtlayanın bir aracı olarak görürler" (Ekiz, 2007: 37).*

Buradan hareketle de Emine Sevgi Özdamar'ın bu eserinde konuların II. kuşak yazarların eserlerindeki konularla benzerlik göstermesine rağmen, olayları aktarım tarzının yani ifade ediş biçiminin oldukça enteresan bir yaratıcılığın ürünü olduğunu söyleyebiliriz. Bu bağlamda da I. ve II. kuşak yazarların etkisinden kurtulan III. kuşak yazarlarının yeni bir edebi akım yarattıklarından yola çıkarak, Emine Sevgi Özdamar'ın "Aynadaki Avlu" adlı eserinin edebi estetik bakımından bu sınıfa da dâhil edilebileceğini söyleyebiliriz.

## 2.2. Eserin İçerik Çözümlemesi

Yazarımız bu eserde Almanya'daki günlerini Türkiye'deki günleri ile özdeşleştirmektedir. Yani hem ait olduğu ana kültürden kopmaz hem de yaşamını sürdürdüğü Almanya'daki Alman kültürüne uyum sağlar. Almanya'daki günlerini anlatırken okuyucuya kendi iç dünyası ile de tanışma fırsatı verir. Aileyle sık sık yapılan telefon görüşmeleri, Türkiye'ye ve Türkiye'deki hayata karşı duyulan derin özlem, anne-kız ilişkileri, Almanya'ya uyum sağlama süreci, Almanya'da kurulan yeni hayatın içsel dünyaya yansımaları gibi konular bu eserde sıkça karşımıza çıkar:

*"Ben çocukken annem hep öyle yapardı. Saçlarının arasından daima birkaç iplik sarkar, yüzünün sağ yanına dikiş makinesine, iğnenin önüne dayar ve kumaşla iğneyi birbirine bağlayan ipliği dişleriyle koparırdı" (Özdamar, 2012: 9).*

Yazarın annesi ile olan ilişkisi eserde sıkça karşımıza çıkmaktadır. Yurtdışına gitmesine rağmen geçmişinden, aile bağlarından hatta hatıralarından dahi kopmamış ve bununla da kalmayıp zihnindeki hatıraları her anına yansıtmış olduğunu görmekteyiz. Bu paragrafta; komşusunun dikiş makinesi yazara, geçmişte annesinin de dikiş makinesiyle meşgul olduğu zamanları hatırlatmış ve bu vesileyle okuyucu da yazar ile birlikte geçmişe doğru kısa bir yolculuğa çıkabilmiştir:

*"Bazen gece uykudan uyanır ve iğne hala orada mı diye karanlıkta orta parmağını yoklardım. Orada mıydı yoksa kalbine giden yolda ilerliyor muydu? Yıllarca kırık bir iğnenin bekçiliğini yaptım" (Özdamar, 2012: 10).*

Bu satırlarla Emine Sevgi Özdamar'ın geçmişe yönelik hatıralarının her an aklında olduğunu somut bir şekilde görebiliriz. Bir gün annesi dikiş yaptığı sırada kırılan iğne orta parmağına batar ve doktorun bu durumu zararsız görmesinden dolayı iğne orada öylece kalır. Bu anı, Emine Sevgi Özdamar için öyle unutulmaz olmuştur ki, yıllar geçmesine rağmen hala hafızasındadır. Şunu da belirtmekte fayda vardır ki; yazarımız köklerine bağlı kalan bir yazar olmasına rağmen, Almanya'ya da başarılı bir şekilde uyum sağlamıştır. Yani birçok göçmen entegrasyon-asimilasyon ikileminde kaybolurken, Emine Sevgi Özdamar asimile olmadan entegre olmayı başarmıştır. Eserlerinde yerli motifleri sürekli görürken Almanya'ya ve Alman halkına özgü motiflere de sıkça rastlarız:

*"Bir de Noel'de lüks alışveriş caddesi Königsallee'de ağaçlardan sallanan ampullerin altında naylon torbalarıyla tek başına, Armani'nin tam karşısındaki bir tahta bankta oturan evsiz adam. Üç kral bir kere de ona uğramalıdır" (Özdamar, 2012: 14).*

Bu satırlarda tasvir edilen Hristiyan dokusunu açık bir şekilde görebiliriz. Okuyucuda adeta görsel bir Noel izlenimi yaratmakla kalmayıp Hristiyanlıkta kutsal kabul edilen üç kral hikâyesine de atıfta bulunuluyor.

*"Tango yapa yapa bütün odaları dolaştık ve ikimizi bir an için üç aynada birden gördüm. Sonra kuyruklu piyanonun başına oturdu ve Chopin çalmaya başladı" (Özdamar, 2012: 28).*

Burada adı gecen Chopin dünyaca ünlü Polonyalı bir piyanisttir. Bu kısımdan hareketle yazarın sadece Alman kültürü değil aynı zamanda Avrupa kültürünün de önemli isimlerine eserinde yer verdiğini söyleyebiliriz. Emine Sevgi Özdamar Türk dokularından kopmamasına rağmen, Almanya ve Avrupa kültürel dokularına da ciddi anlamda uyum sağlamıştır. Bu durum bize yazarın Türkiye ve Almanya arasında bir köprü görevi üstlendiğini bir kez daha göstermektedir.

*"Kedi Heinrich Heine'nin şiirini dinledikten sonra odada turlamaya başladı. Geri döndü, köşedeki büyük aynada kendini gördü ve aynadaki kediyle meşgul olmaya başladı" (Özdamar, 2012: 35).*

Emine Sevgi Özdamar burada 19. yüzyılın en ünlü Alman şairlerinden biri olan Heinrich Heine'ye atıfta bulunmaktadır. Heinrich Heine Alman kültürü için simge isimlerden biridir. Ayrıca okuyucu eserde geçen birçok olaya, yazarın aynası aracılığıyla şahitlik eder. Evin bir köşesine yerleştirilen bu ayna, evden hiç dışarıya çıkmadan bile sokak hayatını evin içine taşır. Yazarın oturduğu sokağı, komşularını, dışarıda yaşanan günlük rutin olayları, evden, yazar ile birlikte bu ayna aracılığıyla izleriz. Aynı zamanda bu ayna yazara arkadaş

olmuştur. Yazar, ölülerini de dirilerini de sığdırdığı bu aynanın içinde kendisine yeni bir hayat kurmuştur. Aslında yan yana gelmesi bile mümkün olmayan insanlar gerek aynanın görüş açısı ile gerekse yazarın hayal gücüyle hep birlikte bir aynanın içinde hayat sürmektedirler:

*"Bir ilkbahar akşamı ilk kez kadının yüzünü aynada gördüm. Başını eski, tozlu tül perdeye dayamıştı ve sanki perdeyi kokluyormuş gibi görünüyordu. 'Neden pencerede dururken kaşlarında korku asili bakire?' dedim. Bir kürk mantom vardı; onu şimdi tam kadının üzerine denk gelecek şekilde aynaya doğru tutuyordum. Böylece rahibe kürk mantosu içinde başını lüks bir otelin penceresine dayamış, imkânsız aşkını düşünen Greta Garbo gibi görünüyordu" (Özdamar, 2012: 22).*

Bu satırlardan da görebileceğimiz gibi yazar aynadaki yansıma sayesinde olay yerinde bulunmamasına rağmen sanki oradaymış gibi davranıyor.

*"Aşağıdaki avluda birdenbire gülmeye başlasın diye aynada genç rahibeyi arkadan gıdıklıyordum. 'Anne, şu anda onu gıdıklıyorum'" (Özdamar, 2012: 23).*

Yazar, bu satırlarda o anda Türkiye'de bulunan annesi ile bir telefon görüşmesi sırasında, aynadaki yansıma aracılığıyla gördüğü komşusu ile olan bir anısını anlatıyor. Yine olay yerinde bulunmamasına rağmen komşusu olan rahibeye tamamen hayali bir biçimde dokunuyor ve bunu da annesine anlatıyor. Bu satırlarda yazarın kendi iç dünyasında yarattığı bir "mini-dünya" kavramından bahsedebiliriz. Gerçek dünyanın bir yansımasını izlediği aynada, sanki gerçek dünyayı yaşıyormuşçasına davranması ve okuyucuyu da bu "mini-dünya"nın içine çekmesini, vatanından uzakta yaşayan bir insanın, yaşadığı topraklara tümüyle entegre olsa dahi kendisini yalnız hissetmesi sonucunda böyle bir yola giriştiğini de söyleyebiliriz. Buradan yola çıkarak Emine Sevgi Özdamar gibi hedef kültüre uyum sorununu rahatlıkla aşmış bir yazarın bile farklı topraklarda olduğu hissini okuyucuya da aktardığını görebilmekteyiz. Emine Sevgi Özdamar Türkiye'de doğmuş büyümüş bir yazardır ve buna rağmen Avrupa kültürüne ciddi anlamda uyum sağlamıştır. Fakat III. nesil yazarlar genel itibarıyla Almanya'da doğup büyümüşlerdir ve Almanya'yı vatan olarak bilmişlerdir. Bu sebepten ötürü farklı bir kültüre her ne kadar uyum sağlanırsa sağlansın bir insan o kültür içinde doğmuyor ve büyümüyorsa her daim yabancı olduğunu hissedecektir çıkarımını da yapabiliriz:

*"Aynada mutluydum çünkü aynı anda birkaç yerde birden olabiliyordum. Annem, altı rahibe ve bir papaz, hep birlikte yaşıyorduk" (Özdamar, 2012: 23).*

Yine bu kısımdan da anlaşılacağı üzere yazarın kendisine gerçek dünyanın da bir yansıması olan gerçeküstü yeni bir dünya yarattığını ve bu dünyada dilediği herkesle yaşama özgürlüğüne sahip olduğunu görebiliyoruz. Aynanın aslında bir bakıma yazarın zihni olduğundan da söz edebiliriz. Çünkü yazar o anda aynaya yansımaya hatta hayatta olmayan insanları bile aynada yeniden canlandırabiliyor. Bu bağlamda da sadece kendisinin kontrol edebileceği hayali bir dünya yarattığından söz edilebilir. Ayna bu eserde çok önemli bir motiftir ve aynı zamanda da Emine Sevgi Özdamar'ın sunmuş olduğu yeni bir anlatı tarzıdır.

### 3. SONUÇ

İlk göç sürecinden bu yana Türkler'in Almanya'da oluşturdukları yazın edebiyat bilimciler tarafından üç kuşak altında toplanmaktadır. Bu kültürlerarası yazını göçün zorluklarını anlatan I. nesil yazarlar, kimlik kaygısı güderek yazan II. nesil yazarlar ve tüm bunlardan bağımsız olarak artık Almanyalı / Avrupalı Türkler diyebileceğimiz III. nesil yazarlar oluşturmaktadır. Almanya'da yazan Türk yazarlar aynı zamanda da kültürlerarası bir köprü görevi üstlenmişlerdir. Türk kültürünü Almanya'ya, Alman kültürünü de Türkiye'ye tanıtmışlardır. Çalışmamızda incelediğimiz Emine Sevgi Özdamar da II. kuşak yazarlardan sayılmaktadır ve bahsettiğimiz kültürlerarası köprü görevini oldukça başarılı bir şekilde üstlenmiştir. Birçok göçmenin aksine entegrasyon-asimilasyon ikilemi arasında boğulmadan hedef kültüre uyum sağlamayı başarmıştır. Bunu da yine çalışmamızda incelediğimiz "Aynadaki Avlu" adlı eserde görebilmekteyiz.

Emine Sevgi Özdamar II. nesil yazar olmasına rağmen "Aynadaki Avlu" adlı eserini okuyucuya sunuş bağlamında, önceki nesil yazarlardan tamamen farklı konular işleyen III. nesil yazarlar ile benzerlik göstermektedir. Söz konusu eseri "Aynadaki Avlu" bağlamında anlattığı konular II. nesil yazarların işledikleri konular ile örtüşmektedir fakat bu eserinde edebi yaratıcılıkla ortaya koymuş olduğu aynadaki hayat ve birçok Avrupalı motif bize aynı zamanda III. nesil yazarların özelliklerini de sunmaktadır. Bu açıdan Türkiye ile Almanya arasında kültürlerarası bir köprü görevi üstlenen Emine Sevgi Özdamar'ın, "Aynadaki Avlu" adlı eserinin de aynı zamanda II. kuşak edebiyat ile III. kuşak edebiyat arasında bir köprü kurduğunu söyleyebiliriz.

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## Almanya: Altmışüç Yıllık Yeni Vatan

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**Özet:** Almanya'ya ekonomik göç aslında Türkiye ile Almanya arasında yapılan anlaşma uyarınca misafir işçilerle bir süreliğine 1961 yılında başlamış iken, altmışüç yıl sonra misafirlik kalıcı yerleşime dönüşmüş, misafir olunan yer yurtlaştırmıştır artık. Altmış küsur yıllık Almanya'daki Türk varlığı eski Doğu Almanya devletinden daha uzun ömürlü olmuş ve yaşamaya da devam etmektedir. Bugün için vatanlaşan bir Almanya'dan söz etmek mümkündür. Bu süreç zarfında Türk Alman toplumu kendi toplumsal, ekonomik ve siyasal varlığını oluşturmanın yanında, kendi sanatını, kültür ve edebiyatını da oluşturmuştur. Böylelikle dört kuşaktan oluşan devasa bir edebiyat birikimi de meydana gelmiştir günümüzde. Bu edebiyat içinde altmışıncı yıl dolayısıyla retrospektif bir bakış açısıyla anmalar, kutlamalar ve de derlemeler çokça yayınlanmış, pek çok bilimsel veya kültürel toplantılar düzenlenmiş, sürecin tüm paydaşları ve aşamaları belgelendirilmeye çalışılmıştır. Belgesel yazının konusuna da giren bu çabıyla birlikte emektar gurbetçilerimize ışık tutulmuş ve unutulmamaları sağlanmıştır. Bu çalışmada da Özcan Mutlu'nun derlemiş olduğu "Almanya Nasıl Vatan Oldu?" adlı kitabı belgesel yazın örneği olarak incelenmiştir.

**Anahtar Kelimeler:** Almanya, gurbetçi, göç edebiyatı, Türk Alman Edebiyatı, belgesel yazın.

### Germany: Sixty-Three Years of New Homeland

**Abstract:** While economic migration to Germany actually started in 1961 with guest workers in accordance with the agreement made between Turkey and Germany, sixty-three years later, the guest stay turned into a permanent settlement and the place of stay became a country. The Turkish presence in Germany, which has been around sixty years old, has outlived the former East German state and continues to do so. Today, it is possible to talk about a Germany that has become a homeland. During this process, the Turkish-German community not only created its own social, economic and political existence, but also created its own art, culture and literature. Thus, a huge literary accumulation consisting of four generations has emerged today. In this literature, many commemorations, celebrations and compilations have been published from a retrospective perspective on the occasion of the sixtieth anniversary, many scientific or cultural meetings have been held, and all stakeholders and stages of the process have been tried to be documented. With this effort, which is also the subject of the documentary article, light was shed on our veteran expats and they were ensured that they would not be forgotten. In this study, "How Did Germany Become a Homeland?" compiled by Özcan Mutlu. His book was examined as an example of documentary literature.

**Key Words:** Germany, immigrant, immigration literature, Turkish German Literature, documentary literature.

### 1. GİRİŞ

Göç olgusu insanlığın ortaya çıkışından bu yana vardır ve var olacaktır. Elbette pek çok göç türü de mevcuttur. Bunlar arasında ekonomik göç de vardır ve altmışı yıllarda Türkiye'den Almanya'ya yapılan misafir işçi göçü bunun en büyük örneğidir. Bugün için beş milyon civarında bir Türk varlığından söz edilmektedir. Günümüz itibarıyla 1961 Ankara işçi göçü antlaşmasından bu yana geçen altmışüç yıllık bu göç sürecinde hatırı sayılır büyüklükte bir Türk azınlığı oluşmuştur Almanya'da. Günümüzde ise belki tarihte ikinci kez geniş çaplı kalifiye insan gücü alımı başlamıştır Almanya tarafından. Bu ikinci büyük göç dalgası daha nitelikli kalifiye eleman odaklıdır. Ne adla anılacağı zaman içinde ortaya çıkacaktır ama söz konusu olan yeniden bir ekonomik ve zorunlu olmayan göçtür.

Birinci göç sürecinin altmışıncı yıl dönümünde hemen her alanda çok farklı etkinliklerle anıldı gurbetçilerimiz. Özellikle de Almanya'ya varan ilk, birinci kuşak gurbetçilerimiz. Böylelikle Türk ve Alman kültür dünyasında çok dilli ve çokkültürlü bir etkileşim sürecinin izleri sanata ve edebiyata da yansıdı yıllarca. Bunun yanı sıra günümüzden başlayarak geriye dönük retrospektif bir bakış açısıyla derleme çalışmaları yapılmaya başlandı. Böylelikle tarih sayfalarında gurbetçilerimizin yaşamları, yaşantıları ve kendi zamanları belgelenecek bir tür Türk Alman belgesel yazınına ortaya çıkardı. "Türk Alman dostluğu ve de ilişkileri elbette 1961 yılından bugüne kadar değil, tarihte çok daha eski köklere dayanır. Ancak dostluk olarak tanımlayabileceğimiz Türk-Alman dostluğunun bu yüzüncü yılı kutlanmaktadır. Bu konuda Almanya'nın Türkiye Büyükelçisi Jürgen Schulz şöyle der:

*"Önemli bir ortaklığın temellerini atan Türk-Alman Dostluk Antlaşması'nın üzerinden bir asır geçti. Bu 100 yıl, iki ülke arasındaki derin insani bağlarla şekillendi. Gerek 1920'li ve 1930'lu yıllarda modern Türkiye'nin kurulmasına katkı sağlayan Alman öncüleri, gerekse Almanya'da yaşayan Türkiye kökenli insanlar bu benzersiz dostluğu şekillendirdi. "İşgücü Antlaşması", 1961 yılından itibaren Türkiye'den Almanya'ya*

*önemli bir göç yaşanmasına neden oldu. Bu insanlardan birçoğu için Almanya kalıcı yeni vatanları haline geldi. Bu eşsiz etkileşim o zamandan beri Almanya'nın kültürel zenginliğine önemli bir katkı sağladı ve Almanya ile Türkiye'yi daha önce olmadıkları kadar yakın bir biçimde birbirine bağladı" (J. Schulz: Cumhuriyet: 2024)*

Elbette Cumhuriyet dönemi ve de Cumhuriyetimizin yüzüncü yılı bağlamında Türk Alman dostluğundan söz edilebilir fakat Cumhuriyet öncesi Osmanlı-Alman ilişkilerini de unutmamak gerekir. Türk-Alman ilişkileri özellikle eğitim, kültür ve sanat anlamında da son gerece gelişmiştir denebilir. Eğitim ilişkileri uygulamada ortaöğretim okulları ve yükseköğretim bağlamında ülkemizdeki güzel örnekleri üzerinden ifade edilebilir, Alman Lisesi, Türk-Alman Üniversitesi gibi. Çalışmanın sınırlılığı açısından 1961 yılından bu yana mevcut olan ekonomik göç ve Almanya'ya giden / göç eden binlerce gurbetçimizin hikâyesi ile sınırlandırılmıştır. Bu altmış küsur yıllık gurbetçilik hikâyesinin belgelendirilmesi konusu, çalışmamızın da odak noktasını ifade etmektedir. Bu anlamda Türk Alman yazınının altmışıncı yılı nedeniyle yapılan pek çok derlemeler Türk-Alman belgesel yazını kavramı içerisine girer, denebilir.

## 2. TÜRK-ALMAN BELGESEL YAZINI

Belgesel yazın; belgeler, anı, gözlem ve deneyimleri merkeze alarak ya da bunlardan yola çıkarak oluşturulmuş kurgulardır diye tanımlanabilir. Bu kurgular gözlem, gezi notları, görüşme, anı vb. olabileceği gibi bir takım tarihsel bilgi, belge, görüntü vb. metinlerin tamamını da içeren derlemeler de olabilir. Ş. Bağ'a göre belgesel yazın "gerçek nitelikteki olgulara dayanan ve yazarın kurgu stratejilerine bağlı kalarak yazınsallaştırılan, belge ile kurguların kaynaştığı bir türdür" (Bağ 2014:41). Kıziler Emer ve F.N. Yılmaz da (2021) belgesel yazının uygulamalı edebiyat özelliğine dikkat çekerek St. Porombka'nın "operative Literatur" kavramına gönderme yapar;

*"Belgesel yazına yakın olan gezi notları, günceler gibi türlere ve dramda kurgusal olmayan öğelere 19. yüzyılda rastlanılmasına karşın ikincil kaynakçada (Berghahn, 1979: Kıziler Emer vd. : 197) belgesel yazının başlangıcı 20. yüzyılda 20'li ve 30'lu yıllar gösterilmektedir. Belgesel yazının ilk yaşama geçtiği 60'lı yıllarda bu yazın tekniğinin ön biçimleri olarak değerlendirilebilecek örneklerin geliştiği ülkeler Almanya, ABD ve Rusya'dır" (Heinrich, 1973: Kıziler Emer vd. 2021 s. 15).*

Türk Alman yazını bağlamında karakteristik ya da kanonik bir eser olarak gösterilebilecek en önemli yapıt G. Wallraff'ın "en alttakiler" adlı eseridir<sup>1</sup>. Yazarın iki yıl boyunca kendini Türk olarak gösterip "Ali" adı ile gizlice ağır sanayi alanında bir fabrikada çalıştığı süre zarfında edindiği gözlemler ve deneyimler sonucu oluşturduğu tipik belgesel yazın örneğidir. Böylelikle Türk Alman yazını bağlamında eser yerini almış aynı zamanda Türk Alman Belgesel Yazın türünün de en önemli özelliğini oluşturmuştur. Wallraff'ın eseri, belgesel yazın bağlamında yazın ile gazeteciliğin kesiştiği alanı da ifade eder aslında. Zira belgesel yazının en önemli kaynaklarından biri gazeteciliktir. Wallraff gazeteci / haberci niteliği ile davranış göstermiştir, kitabın verilerini hazırlarken. Bu çalışma ve yazın türü akla Fransız "experimental roman" (deneysel roman) türünü de getirmektedir. Zira Fransız yazarlar da o dönem derin ve ayrıntılı gözlemleri ve pozitif bilim verileriyle çalışmışlardır. 1960'lı yıllarda ise Almanya'da belgesel tiyatro (dokumentarisches Theater) kavramı görülmektedir. Bu bağlamda Nazi dönemi savaş suçlarına ilişkin kurgulamaların belgeselleştirildiği görülmüştür. Schmidt, W.-H. (1995) de bu yazın türünü 1925-1935 yılları arası Rus yazınındaki belgesel davranım tipleri ile karşılaştırmaktadır. Belgesel yazının tarihsel gelişimi de genellikle yirminci yüzyıl başındaki Rus gazeteci yazarların belgesel yazın tarzlarına dayandırılmaktadır (Bkz. Wilpert 2001).

Türk Alman Belgesel yazını deyince akla 1961 yılından bu yana gurbetçilerimizle başlamış olan sürecin yarattığı birikimler gelmektedir. Zira bu birikim ve deneyimlerin tamamı sadece yazın bağlamında değil, tiyatro ve sinema başta olmak üzere pek çok sanat alanında ve diğer yazın türlerinde de kendini bulmuştur. Günümüzde ise yoğun olarak altmış küsur yıllık göç sürecinin deneyimleri ve birikimlerinin belgesel yapımlarla arşivlendiği, tarihlendiği ve derlendiği görülmektedir. Bunlardan biri de 2022 yılında Doğan Kitap yayınları arasında çıkan Özcan Mutlu'nun<sup>2</sup> derlemiş olduğu "Almanya Nasıl Vatan Oldu" başlıklı eseridir. Bu eserin konu olarak seçilmesinin başlıca nedeni, spesifik olarak altmışıncı yılında gurbetçi göçü konusuna odaklanıyor olmasıdır. Söz konusu bu kitap belgesel yazın bağlamında belgesel roman, belgesel tiyatro ya da Ruz gezgin yazarlarının belgesel yazın örneklerinden veya Wallraff'ın belgesel romanından farklı olarak belli bir dönemin

<sup>1</sup> Türkçe'de "En Alttakiler" başlığıyla 1986 yılında Milliyet Yayınları arasında çıkmıştır.

<sup>2</sup> Özcan Mutlu, 18. Dönem Federal Alman Milletvekildir.

yorumlanması, anıların derlenmesiyle oluşturulan biyografik tarihsel belgeseline dönüşmektedir. Dolayısıyla altmışıncı yıla atfedilerek yayımlanan son dönem Türk Alman belgesel yazın eserlerinin çoğu tarihsel belgesel türüne yakın görünmektedir. Kaynağını ise o döneme ait olan insanların kendi sözlerinden, belgelerinden ve de dönemin yazar, şair ve çizerlerinden almaktadır.

## 2.2. Belgeselleşen Göç

Ö. Mutlu'nun kitabı Almanya Federal Cumhuriyeti Cumhurbaşkanı sayın Frank-walter Steinmeier'in bir önsözü ile başlamaktadır. Steinmeier gurbetçiler için; "onların her biri toplumumuzu zenginleştirdi. Onların her biri Almanya'nın bir parçası" demektedir. Çok kısaca gurbetçilerin Almanya'ya geldiğini, zamanla kalıcı hale geldiklerini ve ülkelerini kalkındırdıklarını ve böylelikle aslında Almanya'ya mal olduklarını yani Almanya'nın birer parçası olduklarını ifade etmektedir. Kitap sırasıyla Aydın Doğan ve yazar Özcan Mutlu'nun önsözleriyle devam etmektedir. Yazar önsözünde aslında gurbetçi göçünü özetlemektedir. Max Frisch'in ünlü " işgücü çağırdık, insanlar geldi" sözünü alıntılıyarak göç sürecinin üç kuşağını da altmış yıllık süreç içerisindeki gelişimini ve aşamalarını anlatmaktadır. Diğer önsözlerde de belirttiği gibi yazarın önsözünde de bu insanların zamanla kalıcı hale geleceğini kimsenin ön göremediği ifadesi sıklıkla vurgulanmıştır. Yazarın önsözünde dile getirdiği çarpıcı gerçekliklerden biri de hiç kuşkusuz gurbetçileri büyük bir neşe ve coşkuyla karşılamaların çabuk söndüğü ve yerini yabancı düşmanlığının aldığıdır.

Çalışmanın ana konusu olan Ö. Mutlu'nun eseri incelendiğinde; üç adet önsöz ve ardından genel olarak dört ana bölümden oluştuğu ve toplamda da kitapta farklı yazarlar tarafından ele alınmış yirmiyedi adet kitap bölümü olduğu görülmektedir. Her bir bölüm en az beş ve en çok altı bölümden oluşmaktadır. Ana bölümlerin başlıkları kitap içeriğine ve konusuna uygun olarak özgün bir biçimde adlandırılmıştır:

*"Yola Çıkmak .....23*

*Yükselişe Geçmek .....73*

*Öne Geçmek .....119*

*Varmak .....215"*

Kitabın en sonunda ise Türk ve Federal Alman Hükümetleri tarafından 30 Ekim 1961 tarihli Anlaşma metni eklenmiştir. Daha sonra kısa bir terminoloji sözlüğü ve ardından yazar ile editörlerin tanıtımı ile sonlandırılmıştır. Kitabın ana başlıklarına bakıldığında başlangıcından günümüze kadar geçen toplam dört kuşağa ait anı-denemelerin yer aldığı görülür. Kitabın en ilginç yönlerinden biri, kitap bölümlerinin Almanya bağlamında ya da Türk Alman toplumu açısından en tanınan ve bilinen isimlerinin kaleminden yazılmış olmasıdır. Buna en iyi örnek kitabın ilk iki bölümüdür: Uğur Şahin ve Özlem Türeci. Uğur Şahin Almanya'ya yolculuğunu şöyle anlatır:

*"Harikulade bir çocukluk geçirdim. 1969 kışında dört yaşımdayken annemle birlikte babamın yanına, Köln'e geldim. Sert bir kıştı. Uçaktan indiğimizde buz gibi bir soğuk karşılamıştı bizi. Suriye sınırına pek uzak olmayan, yazların sıcak, kışların ılıman geçtiği İskenderun bölgesinden geliyorduk biz (...) Köln'ün kuzeyindeki Ford fabrikasına yakın Niehl'deki bir işçi mahallesinde oturuyorduk. Babam orada montaj hattında çalışan vardiyalı işçiydi. (...) Bir ödev ne denli karmaşıkça, onu çözmekten o denli haz duyuyordum"(s.27)*

Bu ve buna benzer pek çok hayat öyküleriyle dolu bütün kitap. Bir anlamda yazarlarının ya da anlatıcılarının retrospektif bir geriye bakış açısıyla derledikleri anılardır bunlar. Hemen her hikâyede günümüz Alman toplumuna ve kültürüne bir varış anlatılır. Bu varış, Alman kültürüne uyumu tamamlamış bir varış olarak dile getirilmektedir.

## 3. SONUÇ

Sonuç olarak Türk-Alman toplumu Almanya'da altmışüç yılda oluştu. Türk-Alman toplumu denmesinin ayrıca bir anlamı olabilir çünkü yadsınan, ötekileştirilen bir azınlık değil, tersine Alman toplumu ve kültürüne uyum sağlamış ama bu uyumun yanı sıra kendi dili ve kültürünü de koruyan elbette bazen yabancı düşmanlığı içeren söylemlere de maruz kalan Avrupalı bir alt kültür toplumundan söz edilmektedir. Öyküleri de yeni vatanlarında var olma öyküsüdür bir bakıma. Bu var olma öyküsünün oldukça zorlu ve sancılı yollardan geçip geldiğini de belirtmek gerekir. Dolayısıyla ilk "yola çıkanları " daima hatırlamak ve anmak için daha nice dönüm yıllarında anılacaklar ve hiçbir zaman unutulmayacaklardır.

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## Dijital Paranın Merkez Bankası Para Politikalarına Etkisi

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**Özet:** Paranın geçirdiği tarihsel süre zarfında farklı boyutlardan yeni bir oluşumun başlangıcında yer almaktayız. 1980 yılında başlayan bilgisayar ve internetin kullanılmasıyla birlikte 2020'li yıllarda yapay zekanın da hayatımıza girmesiyle teknolojik gelişmelerin zincirleme hayat döngümüze eşlik ettiğini görmekteyiz. Teknolojinin her alanda hayatımızda olması finansal anlamda farklı inovasyonların kullanılmasıyla birlikte oluşumu sağlanan Merkez Bankası Dijital Parası, para kavramının sadece fiziksel anlamda değişmesiyle sınırlı kalmayıp birbirine bağlı olan tüm finansal oluşumu etkileyecek düzeyde bir değişimin olacağını işaret etmektedir. Dijitalleşme ekonomide ve sosyal yapıyı da içine alan her sektörü etkilemiştir. Günümüz koşullarında merkez bankalarının reel ve finansal krizlerin çözülmesinde etkin rol oynamasıyla birlikte merkez bankalarına karşı olan beklentilerde değişen koşullar sebebiyle önem kazanmıştır. Dünyayı etkileyen 2008 Krizi ve Covid19 küresel salgın sebebiyle ortaya çıkan -daralma, para politikası uygulama etkinliğini kısıtlamada etken olmuştur. Ekonomik anlamda küreselleşmenin başladığı bu dönemde finansal alanda hızlı dijitalleşmenin etkisiyle birlikte merkez bankalarının yeni finansal düzene ayak uydurmak adına merkez bankası dijital para birimini (CBDC) çıkarmaya hazırlanmaktadır. Bu çalışmanın temel amacı, merkez bankası dijital parası hakkında genel varsayımların incelenmesi, kullanılan ülkelerdeki gelişim sürecinin incelenerek parasal otoritelerin uygulamaya geçişteki stratejilerinin değerlendirilmesidir. İncelenen bu sürecin takibinde merkez bankalarının bu finansal yeniliğe yönelik yapılaşma içerisinde oldukları gözlemlenmiştir. Finansal otoriteler, merkez bankaları dijital para birimine geçişte bu sistemin öncülüğünü üstlenen ve süreci aşamalı biçimde ilerleten ülkelerin gelecek yıllarda avantajlı konuma geçebileceğini değerlendirmektedir.

**Anahtar Kelimeler:** Merkez Bankacılığı, Dijital Para, CBDC, Para Politikası

**Abstract:** During the historical period of money, we are at the beginning of a new formation from different dimensions. With the use of computers and the internet, which started in 1980, and the introduction of artificial intelligence into our lives in the 2020s, we see that technological developments accompany our chain life cycle. The concept of Central Bank Digital Money, which emerged with the use of different financial innovations with the fact that technology is in our lives in every field, indicates that there will be a change that will affect the entire financial formation that is interconnected, not only limited to the physical shape of money. The Central Bank Digital Currency, which has been created with the use of different innovations, in the financial sense, as technology is in our lives in every field, indicates that there will be a change that will not only change the concept of Money in a physical sense, but will affect all financial formations that are interconnected. The contraction caused by the 2008 Crisis and the Covid19 pandemic, which affected the world, was a factor in restricting the effectiveness of monetary policy. In this period when globalization has started in the economic sense, with the effect of rapid digitalization in the financial field, central banks are preparing to issue a central bank digital currency (CBDC) in order to keep up with the new financial order. The main purpose of this study is to examine the general assumptions about the central bank digital currency, to examine the development process in the countries where it is used, and to evaluate the strategies of monetary authorities in the transition to implementation. In the follow-up of this process, it has been observed that central banks are in structuring for this financial innovation. Financial authorities assess that countries that take the lead of this system in the transition to digital currency and advance the process gradually can take an advantageous position in the coming years.

**Keywords:** Central Banking, Digital Currency, CBDC, Monetary Policy

### GİRİŞ

Para; takas amacı taşıyan hesap birimi ve servet biriktirme gibi özelliklere sahip olan insanlığın varoluşundan itibaren ekonomik hayatı düzenleme etkisine sahip bir araç olmuştur. İnsanlar varoluş sürecinden bugüne ihtiyaçlarını ya kendileri karşılamış ya da başkaları tarafından üretimi sağlanan her oluşumu tüketerek hayatta kalmaya devam etmişlerdir. Her ihtiyacını kendi karşılayamayan insanlar başkalarının ürettiği ve ihtiyaç fazlası olan ürünleri kendi ürünleri ile değiştirerek takas ediyor ve ihtiyaçlar karşılıklı olarak karşılanabiliyordu. Söz konusu takasın olabilmesi için karşılıklı iki tarafında birbirine ihtiyaç duyması gerekiyordu. (Sekmen, 2017, s. 17). Takasın gerçekleşmesinde her ürünün değişim oranlarının (Örneğin:1 kilo ekmeğin karşılığında ne miktarda kumaş, tuz, şeker alınabileceği önceden belirlenmesi gereklidir) gerekmektedir. Örnekleyecek olursak (Aren, 1984, s. 10). Geçmiş binlerce yıl öncesinin ilkel toplulukları modern çağın topluluklarına dönüştükçe insanların ve insan topluluklarının geçim şeklide değişim sürecine girmiştir.

İnsanlığın ilkel toplum sürecinden modern çağ toplum sürecine gelene kadar toplumun düşünce yapısından, yaşamsal, kültürel olgularıyla, geçim biçimleriyle köklü ve süregelen bir değişimin olduğu gözlenmektedir. Var olan bir toplumun genel özelliklerini oluşturan bu unsurlar birbirinden beslenmekte, ancak toplulukların geçim biçimleri bu unsurların belirleyiciliğinde daha da ön plana çıkmıştır. İnsanlar varoluşun ilk aşamalarında sadece kendi ihtiyaçlarını karşılama güdüsüyle yetinmiş, sonrasında ise geliştirdiği yöntemler teknik aletlerle üretim yapmaya ve birikim yapmaya başlamıştır. Burada oluşan birikimin hangi otorite tarafından kontrol edileceği ve yönetiminin nasıl sağlanacağı sorununu oluşturmaya başlamıştır. İnsan nüfusunun ve üretilen mal çeşitliliğinin artmasıyla birlikte üretilen malların birbirleriyle ne oranda değişileceğini belirlemek, takasa değer malların eşleşmesini sağlamak ve sonrasında kullanılacağı düşünülen mal stoklama sürdürülemez hale gelmeye başlamış ve takas ekonomisi yerine para sistemli ekonomiye geçilmiştir.

Para yerine deniz kabukları, buğday, tuz, pirinç gibi mal para kabul edilen varlıklardan değerli taş, gümüş, altın gibi metal paralara, daha sonrasında da kâğıt para kullanımına geçilmiştir (Demir, Odabaşı, 2022 D:61).

Bir değişim aracı olarak kullanılan para, insan topluluklarının sosyal, kültürel değişimiyle birlikte değişime uğramıştır. Para yeni uygulama alanlarında yeni görevler üstlenmeye başlamıştır. 1980 li yıllarla bilişim teknolojilerindeki gelişmeler hız kazanmış ve bununla birlikte küreselleşmede hız kazanarak dünya üzerinde sosyal ve ekonomik değişim süreçleri başlamıştır. İnternet ve bilişim teknolojilerinin dünya üzerinde yaygınlaşması devletlerin ulus vatandaşlığını geri plana atıp şirketlerin çok uluslu bir yapıya dönüşmesine zemin hazırlamıştır. Böylelikle insanları kültürel açıdan etkileyerek tüketim alışkanlıklarını sınırlandırmış tek bir kalıba sokmuştur.

İnsanların tüketim alışkanlıklarının bile bu şekilde sınırlanmasında internet kullanımının gelişmesinin önemli bir payı vardır. İnternet kullanıcılarının şu anda dünya nüfusunun yarısına ulaştığı bir düzen oluşmaktadır (Göver, 2017: 141).

Bu bilgiler ışığında görülmektedir ki; mal ve hizmetlerin arz ve talebi sanal ortamda var olmaya başlamıştır. Şirketler tanıtımlarını, pazarlama, reklam, tanıtım işlemlerini web siteleri ve işletmelerinin sosyal medya kimlikleri üzerinden yaparak tüketicilerle online sistem üzerinde buluşturmaya başlamıştır. E-ticaret olarak tanımlanan bu durum varolan dünya düzenimizde ciddi rakamlara ulaşmıştır. “E-Commerce Foundation”, e-ticaret işlem hacminin 2016 yılında 1,5 trilyon Dolar olarak gerçekleştiğini ve bu rakamın 2017 yılında 1,8 trilyon Dolara çıkacağını ön görmüştür (www.mazarusa.com). Bu verilerin doğrultusunda e-ticaretin gelecek zaman diliminde normal ticaretten daha büyük paya sahip olacağı anlaşılmaktadır.

Küreselleşen dünyada oluşan salgın hastalıklar da ekonomik ve sosyo kültürel alışkanlıklar üzerinde etki yaratmaktadır. 2019 yılının son aylarında Çin’in Wuhan şehrinde ortaya çıkarak çok kısa süre zarfında tüm dünyayı etkisi altına alan ilk kez karşılaşılan ve daha öncesinde tecrübe edilmiş bir tedavi yönteminin bulunmadığı milyonlarca insanın bu bulaşıcı hastalığa yakalanmasına ve ölmesine sebep olan COVID-19 küresel salgını insanların birbirinden izole halde yaşamasına sosyal, ekonomik ve kültürel yaşam biçimlerini teknoloji üzerinden sanal bir yolla sürdürmelerine sebep olmuştur. Dünyanın ilk kez karşılaştığı ve küresel anlamda kriz çıkaran bu virüsün etkisi beklenenden büyük olmuştur. Bu durum karşısında bazı ekonomistler bu virüsün kapitalist sisteme son vereceğini dahi düşünmüşlerdir (Karakaş, Mehmet, 2020: D:40, 541–573).

E-ticaretin yaygınlaşmasını dahada artıran bu sosyal, kültürel, küresel dönüşümlerle birlikte bankacılık ve finans kuruluşları bu gelişmelere kayıtsız kalamayıp değişen ticaret ve tüketici alışkanlıkları doğrultusunda internet bankacılığı, mobil bankacılık, EFT, FAST, otomatik ödeme talimatları, dijital kredi kartları, vergi ödeme sistemleri gibi uygulamalar geliştirmişlerdir.

Bilişim teknolojilerindeki evrimle dünya ekonomik sisteminde pazarlama ve endüstrideki gelişimle birlikte endüstri 4.0 ve web 4.0 satın alma ve üretim, pazarlama yerel ekonomik döngüden uluslararası bir pazara açılmıştır. Banka ve finans kuruluşlarının yenilikçi politikaları bu sisteme cevap veriyor gibi görünse de tüketiciler tarafından bu kuruluşlara bağlılık gerektirmeyen komisyon masrafı olmayan daha güvenilir bir elektronik para arayışı ortaya çıkmıştır (Ertuğrul, İ. & Deniz, G.,2018:7).

## **PARANIN TARİHİ, PARA SİSTEMLERİNE BAKIŞ VE DİJİTAL PARANIN OLUŞUMU**

Para bir ülkenin siyasi ve iktisadi bağımsızlığının simgesidir ve insanlığın varoluşundan bugüne en önemli buluşu olarak kabul edilmektedir. İnsanlık tarihi boyunca ortaya çıkan savaşlar, çatışmalar, sınıflanma, üstünlük kurma, ordu ve hakimiyet anlayışı paranın hakimiyeti olgusuyla oluşmuştur. Bir devletin kendi parasını basması o devletin bağımsızlığının göstergesi olmaktadır. Tarih boyunca her devletin hükümdarı egemenliklerinin ve

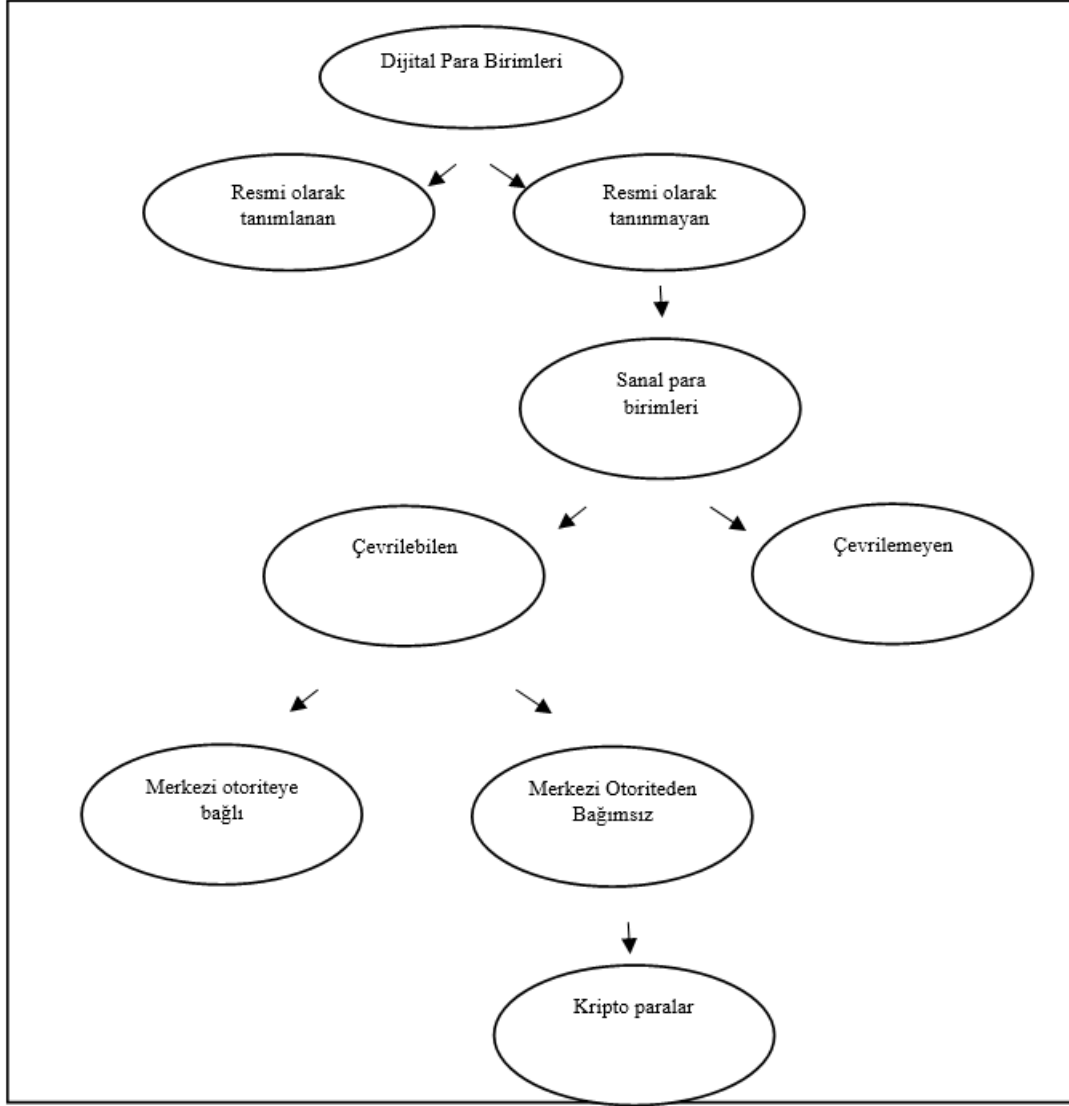
bağımsızlıklarının göstergesi olarak adlarına para bastırmışlardır. Bulduğumuz çağda ise devletler para basma yetkisini merkez bankaları öncülüğünde kullanmaktadır. Bu egemenliğin güç olgusunu kırmak isteyen güçler için en etkili yöntem egemenliği sağlayan para basma tekeli elinden alabilmek için yeni bir oluşum üretmektir. Günümüzde var olan kullanılmaya başlanan bu yöntem dijital paradır. Dijital paralar onu üretenin egemenliğinde bir oluşumdur ve devletin bu yönde otoritesine risk oluşturmaktadır (Çatlı & Şimşek, 2021).

Küreselleşen dünya ekonomisinde bilişim teknolojilerinin gelişmesi doğrultusunda ekonomik anlamda alım satım ağının farklı sistemler üzerinde kullanılması fiziki anlamda kullanımı azalan paranın bankacılık sistemi üzerindeki etkilerini baz alarak 1993 yılında Avrupa Merkez Bankaları tarafından bir araştırma yapılarak bu araştırma doğrultusunda elektronik paranın temeli varsayılacak ön ödemesi bulunan kartları içeren bir rapor hazırlanmıştır. 1998 yılında Avrupa Merkez Bankası 1993 yılında yapılan araştırma doğrultusunda bir rapor yayınlar ve raporda dikkat çeken unsurlar şunlardır; 1993 yılından itibaren kart tabanlı elektronik paralar ve yazılım tabanlı içeren elektronik paralarda da kullanılmaya başlanmıştır. Elektronik paranın yasal bir varsayımla çıkarılması para piyasasını etkileyecek ve fiyat istikrarının düzenini bozması öngörülmüştür. Elektronik para üzerinden işletilecek olan sanal sistemin güvenilirliğinin korunmasına yönelik gerekli önlemlerin alınması gerekli görülmüştür. Bu hususla ilgili olarak; Elektronik para düzenleyicileri için denetim mekanizması oluşturulmalı ve bu işlemin taraflarının hak ve yükümlülükleri belirlenmelidir. Gerekli görülen tüm idari tedbirler alınıp kara para aklanması önlenmeli, elektronik para fiziksel paraya dönüştürülebilir, merkez bankaları bu rezervlere müdahale edebilmeli (Avrupa Merkez Bankası Raporu, 1998: 1-2).

Dijital paranın farklı şekilde tanımları bulunmaktadır. Dijital para, parasal bir değeri, elektronik para üreticisi dışındaki işletmelere ödeme yapmak üzere elektronik ortamda depolanmasıdır ([www.ecb.europa.eu](http://www.ecb.europa.eu)). Dijital ortamda depolanması sağlanan, transferi olan paralara dijital para denilmektedir (A. Wagner, 2014). International Monetary Fund (IMF) 2016 tarihinde hazırlanan raporda dijital paranın, dijital ortamda yer aldığı ve bir değer karşılığı olduğunu ifade edilmiştir. Golden ve Gosper'e 2017'ye göre dijital para "Dijital bir varlıktır ve fiziksel olarak var olmayan, bilakis dijital olarak var olan değişim yöntemi" şeklinde tanımlanmıştır. Başka bir tanımda ise dijital para; internet veri tabanının olan dijital ortamda bulunan, yalnızca elektronik ortamda muhafaza edilip internet ortamında kullanılabilen, itibari paranın tüm özelliklerini taşıyan para türü olarak ifade edilmiştir. (Barimeks, 2019). Dijital para, bir değer dijital olarak temsilidir. İnternet ya da mobil uygulamalarla dijital ortamda üretilir, saklanır ve transferi sağlanır. Bu işlemleri merkez bankası aracılığıyla kamu sektörü yapabilir. Özel sektör de dijital para üretimi yapabilir (Adrian ve Mancini-Griffoli, 2021; Aktaran GİF Küresel Durum Raporu 2021). Merkez bankası dijital parası (CBDC), devletin güvencesi sağlanarak merkez bankası tarafından dijital ortamda üretimi sağlanan ve kâğıt paranın yerini alan dijital paradır (Atlantic, council, 2023).

IMF (Uluslararası Para Fonu) 2016'da yayımlanan raporda dijital para için bir sınıflandırma yapılmıştır. Bu sınıflandırmayla dijital ortamda bir karşılığı temsil eden karşılıklar dijital para olarak tanımlanır. Dijital paraların itibari para üzerinden tanımlanması sağlanan e-para ve Paypal örnek gösterilebilir. İtibari para birimi karşılığı olmayanlar ise sanal para birimi olarak tanımlanmaktadır. Sanal para birimlerinin internet ortamından dış dünyayla ilişkisine göre çevrilebilen ya da online olarak oyun paraları olarak kullanılan çeşitleri vardır. Çevrilebilen sanal para birimleri merkezi ve merkezi olmayan olmak üzere iki grupta yer alır. Merkezi olmayan sanal para birimleri şifre bilimini doğrulama sistemi olarak kullanan kripto paralardır.

Şekil 1: Dijital Para Birimlerinin Sınıflandırılması



Kaynak: Oura vd., 2016, s. 8

## MERKEZ BANKACILIĞI, PARA İLE İLGİLİ AMAÇLAR

Merkez bankaları ekonomik sistemlerin para politikası uygulayıcısıdır. Merkez bankasının temel amacı fiyat istikrarını sağlamak, uzun dönemde ise banka ve para sisteminde istikrarı gözetmektir. Merkez bankaları genel para politikaları çerçevesinde ekonomiye nominal çıpa sağlayıcısıdır. Nominal çıpa ile politika uygulayıcılarının fiyat istikrarını sağlarken kullanabilecekleri değişken oluşur (Jahan, 2018: 72).

Merkez bankasının temel nominal çıpa sağlayıcıları; döviz kuru hedeflemesi, enflasyon hedeflemesi ve parasal hedeflemedir. Döviz kuru hedeflemesi; para politikasının döviz kuru aracılığıyla yürütülmesidir. Bu sistemde ulusal para enflasyonun düşük olduğu bir ülkenin para birimiyle ilişkilendirilerek ithalata konu olan malların fiyatlarının artmasına engel olunarak enflasyonu kontrol altına almak amaçlanır. Parasal hedefleme; merkez bankaları tarafından enflasyonu düşürmek amaçlı para arzı parasal taban, serbest rezervler, ticari banka rezervlerinin artış hızına sınırlandırma getirmesidir. Enflasyon hedeflemesi; fiyat istikrarını sağlamak için merkez bankasının para politikası araçlarını nasıl yürüteceğini açıklamasıdır (Yalta, 2020: 197-200)

Merkez bankalarının uyguladıkları para politikasıyla özel sektörün finansal stratejilerini oluşturan, yol gösteren şeffaf çıpa oluşur. Ekonomide fiyat istikrarının sağlanabilmesi için nominal çıpa yerine döviz kuru kullanılmaktayken esnek döviz kuru rejiminin esas alınmasıyla birlikte enflasyon üzerinde kontrol sağlamak amacıyla bu sistem hedeflenmiştir. Finansal piyasaların yenilenmesiyle birlikte esnek döviz kuru rejimiyle birlikte parasal hedefleme yerine esnek döviz kuru rejimi uygulanmaya başlayan birçok ülke enflasyonu

doğrudan hedefleyerek bu sistemi kullanmışlardır (Jahan, 2018: 72). Merkez bankaları belirli bir süre öncesinde belirledikleri enflasyon oranını nominal çıpa olarak hedeflemişlerdir. Uygulamaya konulduğunda fiyat istikrarı ve makroekonomik istikrarı sağlayacak diğer unsurlar arasındaki kısa vadeli dönüşümleri düzenlemek amacıyla optimal kontrol yöntemini gösterir (Bordo ve Levin, 2017: 17). Merkez bankalarının şeffaflık çerçevesinde yaptığı nominal çıpa uygulaması avantaj oluşturmaktadır. Merkez bankalarının belirli zaman dilimlerinde gerçekleştirdikleri enflasyon hedeflemesi başarılı sonuçlar elde etmiştir. Merkez bankalarının genel yükümlülükleri incelendiğinde fiziki konumda bulunan banknotlar ve merkez bankasının yükümlülüklerini içeren elektronik formu olan takas karşılıklarıyla oluşmaktadır. Merkez bankaları banknotlar ve rezervler konusunda tekeli olmasından dolayı genel para politikalarını belirleyici durumdadır.

## **MERKEZ BANKASI PARASI KARŞILIĞINDA ÜRETİLEN DİJİTAL PARA (CBDC) VE PARA POLİTİKASINA ETKİSİ**

Teknolojik gelişmelerin hayatımızın her alanına entegre bir biçimde yayılmasından dolayı paranın dijital bir boyutu da ortaya çıkmıştır. Günümüzde özel kuruluşların çıkardığı dijital paralar merkez bankalarının kontrolünde değildir. Merkez bankaları parasal otoritesini kaybetmemek için dijital parasını çıkarma yolunda çalışmalara başlamışlardır. Günümüz dünya ekonomisi sisteminde 46 ülke kendi dijital parasını oluşturmak ve hizmete sunmak için adımlar atmaktadır. 32 ülke çalışmalarını tamamlamış geliştirme aşamasına geçmiştir, 21 ülke pilot bir sistemle uygulamaya başlamış ve 11 ülkede merkez bankası dijital parasını çıkarmıştır (Atlantic Council, t.y.).

Merkez bankası dijital parası (CBDC) nominal bir seviyede sabitlenerek, tüm dünya ekonomisinde kolay erişimi sağlanacak şekilde düzenlemelerle, kamu ve özel işletmelerin yasal ödeme aracı olarak resmileştirilmelidir. CBDC günümüzde finansal sistemde dalgalı ilerleyişi olan özel kuruluşlar tarafından üretilen Bitcoin, Ethereum ve Ripple gibi dijital paralardan ayrılmış olacaktır. Yasalarla desteklenen CBDC diğer dijital paralara göre daha güvenilir bir imaj kazanacaktır (Bordo ve Levin, 2017).

Merkez bankası dijital parasının gerekliliğini öne süren ekonomistlerin belli başlı savundukları görüşler şunlardır; finansal işlem ücretlerini düşürmesi, dünyanın bir ucundan öbür ucuna ödeme kolaylığı sağlaması, değişen dünya düzeninde yeniliklere teşvik sağlayan para politikalarının uygulanmasında iyileştirmelerle dijital işlem gizliliği sağlama ve güvenilirliği artırıcı etkilerinin olması yönleriyle CBDC'nin gerekliliğini dikkat çekmektedirler (Wong ve Maniff, 2020).

Merkez bankalarının CBDC için belirlediği belli başlı özellikler vardır. Bu özellikler; nakit özelliği taşıması, istenilen her yerde bulundurulabilmesi elektronik bir cüzdanda ve evrensel olması, ticari bankalara bağlı olup herhangi bir kredi kartı kullanıp onun yıllık ücretlerine maruz kalma, transfer işlemlerinde bir işlem ücreti ödeme gibi sorunlara maruz kalmadan finansal erişimi kolaylaştıracak yapıda olmasıdır (McKinsey & Company, 2023: 3).

CBDC'yi Bjerg (2017) çalışmasında şu şekilde tanımlamıştır: Finansal sistemdeki kullanıcıların tamamı tarafından kullanılabilen evrensel olarak herkese hitap edebilen merkez bankası tarafından ihraç edilen dijital para birimidir. Bjerg'in bu yorumu aslında şunu açıklamaktadır: Ekonomide bulunan mevcut para ve özelliklerini sınıflandırdığımızda şu bilgiye ulaşırız fiziksel para, elektronik olmayan paradır fakat bankanın parası ve merkez bankası rezerv parası sistemi elektrondur. Merkez bankası rezerv parasının erişimi herkese açık değildir ve sadece bankaların ulaşımına açık olduğu bilinmektedir. Banka parası ise özel bankalar tarafından oluşturulur. Dijital para tüm bu ayrımların birleştiği noktadadır.

Verimli olacak bir merkez bankası dijital parası; maliyetsiz bir değişim aracı olmasıyla birlikte faizle bağlantısı sağlanıp kısa vadeli devlet tahvilleri gibi risksiz varlıklara endeksli getiri sağlamasıyla merkez bankası dijital parası faiz oranını para politikası belirleyicisi konumuna taşıyabilir. CBDC' nin çıkarılmasıyla birlikte fiziki paranın finansal piyasalardan kademeli olarak kaldırılmasıyla birlikte faiz belirleyicisi olma konusunda dijital parayı daha etkin konuma taşır. CBDC ile uygulanan para politikasının etkinliğini vefiyat istikrarını sağlamak ancak sistemli ve şeffaf bir uygulamayla gerçekleştirilebilir (Bordo ve Levin, 2017).

2021 yılında Dünya Bankasının hazırlamış olduğu rapor detaylarında CBDC' nin tasarımında para politikalarının etkilerinin değerlendirilmesinin gerekliliğine değinilmiştir. Burada ki mevzu CBDC' nin pozitif reel faiz oranına sahip olduğu durumda bunu tercih edenler için daha cazip olacağı, negatif faiz oranına sahip bir CBDC' nin ise tüketicilerin tasarruftan vazgeçip harcama yapmayı tercih etmeleriyle birlikte toplam talepte artırıcı bir etki meydana gelmesine sebep olarak, büyümeyi teşvik edici bir ortam oluşacaktır. Negatif faiz uygulaması her ne kadar ekonomi için büyümeyi teşvik etmiş olsa da kullanıcılar için caydırıcı etki oluşturmaktadır (World Bank

Group, 2021). CBDC' nin faiz içeren bir tasarımla çıkarılması para politikasında bir aracı olarak kullanılmasını sağlar.

Meaning, Clayton ve Barker' e (2021) göre CBDC değişken faiz oranıyla tasarlanmalı ve böylelikle merkez bankası, ticari bankalar ve banka dışı kuruluşların farklı faiz oranları belirlemeyle enflasyonu kontrol altına almak, fiyat istikrarı sağlamak adına para politikası belirleyici olabilir (Meaning, J., Dyson, B., Barker, J., Clayton, E. 2021).

Merkez bankası dijital parasının geleceğini sağlam temeller üzerine kurmak için öncelikli amaç etkin bir para politikası uygulamaktır. Para politikası günün şartlarında geleneksel veya geleneksel olmayan olarak zamana dayalı seçilmelidir. Dijital paranın küresel ekonomide kullanım alanlarının artması ve yüksek işlem hacmine sahip olması para politikalarının etkinliğini kısıtlayıcı etki oluşturmaktadır. Bu durum karşısında merkez bankalarının dijital para birimine geçmesi, bireysel CBDC hesaplarının açılması ve bu hesapların faizle ilişkilendirilip para politikası etkinliği kazandırılmalıdır (Kangal, N. 2023: 113).

## SONUÇ

Yapılan bu çalışmanın sonucunda gerek bu konuda araştırma yapan ekonomistlerin, gerek finansal kuruluşların CBDC hakkında ortak bir tanımı mevcut olmadığı anlaşılmaktadır. Merkez bankası dijital parasının en sade tanımı; merkez bankası gibi yasal bir otoritenin tedavülde olan parasının dijital ortamdaki karşılığı olarak tanımlanabilir. CBDC merkez bankası sisteminde yasal bir düzenle çıkarılır, evrensel olarak birleştirilebilir, dijitaldir. Merkez bankalarının CBDC' ye gereksinin duyma nedenleri şu şekilde özetlenebilir; finansal sistemin dijitalleşmeye başlamasıyla ödeme araçları ve bu sistemin ilerleyişindeki rekabet ortamı, nakit para basma maliyetlerinin azalma imkanının olması, para politikasının verimliliğinin artacağı düşünülmesi, ekonomideki paranın kayıt altında tutulabileceği ve böylelikle suç organizasyonlarının önüne geçilebilme ihtimalidir.

Teknolojinin her alanda hayatımızda başrol olması finansal hizmetlerinde şekil değiştirmesine sebep olmuştur, merkez bankaları değişen dünya düzeninde faaliyetlerini sürdürmek otoritesini korumak amaçlı CBDC' yi araştırmaya çalışmalar yürütmeye başlamıştır. Ekim 2020 yılında BIS (Uluslararası Mutabakat Bankası) ve 7 merkez bankasının birlikte yayınladığı rapor sonucunda CBDC' nin merkez bankalarının uyguladıkları politikalarında güçlük oluşturmaması ve kamunun hedeflerine ulaşması konusunda destek sağlaması, merkez bankasının mevcutta bulunan düzenindeki nakit ve rezervleriyle uyumlu olup birbirini tamamlar nitelikte olması gerektiği, finansal sistemdeki yenilik ve verimliliği artırıcı güven ortamına sahip olması gerektiği sonucuna ulaşılmıştır. Bütün bu detaylar ele alındığında CBDC nakit paranın genel özelliklerinin tümünü taşımalıdır yani ödeme aracı olarak kullanılabilir, güven sistemiyle teknolojik iyi bir donanıma sahip olmalıdır, tüketicilerin hesaplarının yasal bir kimlikle oluşturulabilmesi, her durumda erişimin kolay olması gerekmektedir, sınır ötesi işlemlere izin verilmesi gerekir, transferinin kolay olması doğrudan kullanıcılarla eşleşmesi gerekmektedir, faizle ilişkilendirilip talep oluşturulması CBDC kullanımını avantajlı konuma dönüştürebilir, mevcut politika düzeninde hem faizli hem faizsiz hesapların kullanılmasına imkan sağlanmalıdır.

Merkez bankası dijital parası para politikasında etkinliği artırıcı etki oluşturabilir. Dijital paranın kullanımıyla birlikte merkez bankası çarpanını, para arzını, yapısını zamanla ve mevcut konumu içinde ne şekilde dağıldığı hakkında bilgi edinilerek merkez bankası para politikası üzerinde yetkinlik sağlanabilir. CBDC faizle ilişkilendirilirse ve faiz getirisi olursa para politikası aracı olma özelliği kazanır. CBDC' nin çıkarılmasıyla birlikte itibari paranın yerini özel kuruluşların ihraç ettiği dijital para birimleri alırsa merkezi otoritenin maliye politikası üzerinde etkisi artış gösterecektir.

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## İnsani Gelişme Endeksi Bileşenlerinin Türkiye İçin Sınanması: Bir Zaman Serisi Analizi

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**Özet:** Bu çalışmanın amacı, 1990-2020 döneminde İnsani Gelişme Endeksinin bileşenlerinin Türkiye ekonomisi için etkilerini araştırmaktır. İnsani Gelişme Endeksinin denkleminde sermaye oluşumu, karbondioksit salınımı, ithalat, yenilenebilir enerji tüketimi, DYY, ekonomik büyüme yer almaktadır. ADF ve PP testleri kullanılarak değişkenlerin durağanlık özellikleri incelenmektedir. Değişkenler arasında uzun dönem denge ilişkisi Johansen eş bütünleşme analizi ile araştırılmaktadır. Sonuçlar Johansen eş bütünleşme testinin kullanılmasına olanak sağlamaktadır. Elde edilen sonuçlar modelde kullanılan değişkenler arasında uzun dönemli bir ilişkinin varlığını göstermektedir. Eş bütünleşme ilişkisinin varlığı ortaya konulduktan sonra nedensellik ilişkisi araştırılmıştır. Nedensellik analizi Granger nedensellik yaklaşımı ile gerçekleştirilmiştir ve değişkenler arasında simetrik nedensellik ilişkisi bulunamamıştır. Ampirik bulgular bağımsız değişkenlerin İnsani Gelişme Endeksinin belirleyicileri olduğu sonucunu doğrulamaktadır. Çalışmadan elde edilen bulgular politika önerilerinin sunulmasında kullanılabilir olacaktır.

**Anahtar Kelimeler:** İnsani Gelişme Endeksi, Johansen Eşbütünleşme Testi, Ekonomik Büyüme, Granger

### Testing Human Development Index Components for Turkey: A Time Series Analysis

**Abstract:** The study explores the effects of the components of the Human Development Index for the Turkish economy in the period 1990-2020. The equation of the Human Development Index includes capital formation, carbon dioxide emissions, imports, foreign direct investments, economic growth and renewable energy use. The stationarity properties of the variables are explored using ADF and PP tests. The long-term equilibrium link between variables is investigated with Johansen cointegration analysis. The findings allow the use of the Johansen cointegration test. The results obtained show the existence of a long-term link between the variables. Causality analysis is performed by Granger causality approach and no symmetrical relationship is found between the variables. Empirical findings confirm the conclusion that independent variables are determinants of the Human Development Index. The findings obtained from the study can be used to present policy recommendations.

Key Words: Human Development Index, Johansen Cointegration Test, Economic Growth, Granger

### 1.GİRİŞ

İnsani Gelişme Endeksi (İGE), Birleşmiş Milletler Kalkınma Programı (UNDP) nın 1990'lı yılların başından itibaren geliştirdiği ve raporlarında yayınladığı temel kalkınma göstergelerinden biridir. Bu endeks, ülkelerin sürdürülebilir kalkınma düzeyini değerlendirmek için kullanılır ve üç temel bileşeni içerir: Bu bileşenler uzun ve sağlıklı bir hayat, bilgi ve yetenek, standart bir yaşamdır. Bu bileşenler ülkedeki insan ömrünü, doğum öncesi ve sonrası sağlık hizmetlerine erişimi, beslenme düzeyini ve genel sağlık durumunu, okuryazarlık oranlarını, temel eğitim düzeyini ve yükseköğrenim imkanlarına erişimi ölçer. Standart bir hayat bileşeni de kişi başına GSYİH ve satın alma gücü paritesine dayalı olarak yaşam standardını değerlendirir. İGE, bu üç temel bileşeni birleştirerek bir ülkenin genel insan gelişme seviyesini ölçer. Endeks, ülkeleri düşük, orta ve yüksek insan gelişme düzeylerine göre sınıflandırır. İGE, sadece ekonomik büyüme değil, aynı zamanda eğitim, sağlık ve yaşam standardı gibi insan odaklı faktörleri de dikkate alarak kapsamlı bir değerlendirme sunar. İGE, dünya genelindeki ülkeler arasında kalkınma eşitsizliklerini anlamak ve sürdürülebilir kalkınma hedeflerine ulaşma çabalarını değerlendirmek için önemli bir araçtır

İnsani Gelişme Endeksi (İGE), sermaye oluşumu, ekonomik büyüme, karbon salınımı ve yenilenebilir enerji gibi faktörler bir ülkenin sürdürülebilir kalkınma hedeflerine ulaşma çabalarını etkileyen önemli unsurlardır. İşte bu faktörler arasındaki ilişkilere dair bazı temel noktalar bulunmaktadır. Sermaye oluşumu, bir ekonominin büyümesi için kritik bir faktördür. Yatırımların artması, üretkenlik ve istihdam düzeylerini artırabilir, dolayısıyla ekonomik büyüme sağlanabilir. Ancak, sermaye oluşumu aynı zamanda çevresel etkileri de içerebilir. Sürdürülebilir bir ekonomik büyüme, doğal kaynakları daha verimli kullanmayı ve çevre dostu teknolojilere yönelmeyi gerektirir. Ekonomik büyüme ve karbon salınımı arasında geleneksel olarak, bir pozitif ilişki bulunmuştur. Artan üretim ve enerji talebi genellikle fosil yakıtların kullanımını içerir, bu da karbon dioksit ve



diğer sera gazlarının atmosfere salınımına neden olur. Ancak, sürdürülebilir kalkınma hedefleri doğrultusunda, teknolojik inovasyon ve enerji verimliliği gibi önlemlerle ekonomik büyüme ile karbon salınımı arasındaki ilişkiyi zayıflatmak mümkündür. Yenilenebilir enerji kaynakları, karbon salınımını azaltmada önemli bir rol oynar. Geleneksel enerji kaynaklarının aksine, rüzgâr, güneş, hidroelektrik ve diğer yenilenebilir kaynaklar karbon salınımını sıfıra yakın seviyelere indirebilir. Bu nedenle, bir ülke yenilenebilir enerji kullanımını artırarak ekonomik büyümeyi sürdürülebilir kılabılır ve çevresel etkileri azaltabilir. Bu faktörler arasındaki denge, ülkelerin sürdürülebilir kalkınma hedeflerine ulaşma çabalarında önemli bir rol oynar. İnsani Gelişme Endeksi, bu faktörleri bir araya getirerek ekonomik, sosyal ve çevresel boyutlarıyla bir ülkenin kalkınma performansını değerlendirir. Sürdürülebilir bir gelecek için, ekonomik büyüme, sermaye oluşumu, karbon salınımı ve yenilenebilir enerji gibi unsurların birbirleriyle uyum içinde olması önemlidir.

Bu araştırmanın amacı, 1990-2020 döneminde İnsani Gelişme Endeksinin bileşenlerinin Türkiye ekonomisine etkilerini araştırmaktır. İnsani Gelişme Endeksinin denkleminde DYY, sermaye oluşumu, karbondioksit salınımı, ithalat, yenilenebilir enerji tüketimi, ekonomik büyüme yer almaktadır. Çalışmada birim kök testi olarak ADF ve PP birim kök testleri kullanılmıştır. Değişkenlerin bütünleşme dereceleri belirlenmiştir. Değişkenler arasındaki eş bütünleşme ilişkisi için Johansen testi uygulanmıştır. Birim kök testlerinden elde edilen sonuçlar Johansen eş bütünleşme analizinin yapılmasına olanak sağlamaktadır. Nedensellik analizi için Granger nedensellik testine başvurulmuştur. Ekonometrik analiz sonucundaki bulgular bağımsız değişkenlerin İnsani Gelişme Endeksinin üzerinde etkilerinin olduğu sonucunu doğrulamaktadır. Çalışmada elde edilen sonuçlar Türkiye Ekonomisine yönelik politika önerilerinde kullanılabilmesine olanak tanımaktadır.

## 2. AMPİRİK LİTERATÜR

Literatürde ampirik çalışmalar incelendiğinde insani gelişme endeksini inceleyen çok sayıda çalışma bulunmaktadır. İnsan gelişme endeksinin sermaye oluşumu, doğrudan yabancı yatırımlar, ihracat, karbondioksit salınımı, ekonomik büyüme ve yenilenebilir enerji değişkenlerinden ne ölçüde etkilediğine yönelik çalışmalar sınırlı sayıdadır.

Öztürk ve Oktar (2017), İnsani gelişme- gelir dağılımı ilişkisini 1990-2015 dönemi için ARDL sınır testi ile araştırmışlardır. Elde edilen sonuçlara göre insani gelişme endeksi ile gelir dağılımı arasında ters U hipotezinin geçerli olduğu, Türkiye’de insani gelişme endeksi arttıkça gelir dağılımında adaletsizliğin belli bir süre zarfında arttığı sonucuna ulaşmışlardır

Appiah vd (2019), Afrika ülkeleri için 1990-2015 yılları arasında insani gelişmenin ekonomik büyüme üzerindeki etkisini test etmişlerdir. Panel veri ekonometrisi kullanılarak elde edilen sonuçlara göre; İnsani gelişme endeksinin ekonomik büyüme ve kalkınma üzerinde etkisi istatistiksel olarak anlamlıdır. Aynı zamanda pozitif yönlü bir ilişkinin varlığını da ortaya koymaktadır.

Chikalipah ve Makina (2019), 1970-2015 yılları arasında Zambiya Ekonomisini araştırmışlardır. VECM ve Gregory-Hansen eş bütünleşme analizi yönetimi kullanmışlardır. Değişkenler arasındaki eşbütünleşmenin yanı sıra ekonomik büyüme ve insani gelişme arasında iki yönlü bir ilişkinin varlığı ortaya konulamamıştır.

Çoban (2019), Ticari dışa açıklık-insani gelişme ilişkisini araştırmıştır. Dengeli panel veri analizi yöntemi ile V4 ülkeleri kapsamında yaptığı araştırmada 1995-2014 dönemine ait veriler kullanılmıştır. Yapılan araştırmada insani gelişme endeksini ticari dışa açıklık yanı sıra kamu eğitim harcamaları, ekonomik büyüme, nüfus artış ve yabancı sermaye yatırımları, gibi bağımsız değişkenlerinde modele dahil edilmiştir. V4 ülkeleri olan Slovakya, Polonya, Macaristan ve Çekya’da ticari dışa açıklığın insani gelişme endeksini pozitif etkilediği sonucuna ulaşmıştır.

Gümüş (2020), OECD ülkeleri üzerine insani gelişmişlik endeksi ve finansal gelişmişlik endeksinin ilişkisini Pedroni ve Kao Eşbütünleşme testi ile araştırmıştır. Yapılan araştırma sonucuna göre insani gelişme endeksi ile finansal gelişme endeksi arasında eşbütünleşme bir ilişkinin varlığını araştırılmış ve eş bütünleşme ilişkisi bulunmuştur. Bu tespite dayanarak Granger nedensellik analizi yapılmış, değişkenler arasında bir nedensellik ilişkisine rastlanmamıştır.

Srivastava ve Talwar (2020), İnsani gelişme endeksi, doğrudan yabancı yatırımlar-ekonomik büyüme ilişkisini 2012-2017 döneminde 30 ülke üzerinde araştırmışlardır. Panel DOLS ve FMOLS regresyon modelleri kullanılarak yapılan araştırmada İnsani gelişme endeksi ve doğrudan yabancı yatırımlar arasında anlamlı bir ilişki bulunmuş olup ekonomik büyüme ile bulanamamıştır.

Altınöz ve Umut (2021), Finansal gelişmişliğin insani gelişme endeksi üzerinde etkisini en iyi yükselen piyasa ekonomileri için araştırmışlardır. 1990-2018 Dönemi için PVAR (Panel Vector Autoregression) yaklaşımı tekniği ile yapılan araştırmada Finansal gelişmede meydana gelen bir artışın insani gelişme endeksi üzerinde bir artış yaratacağı, ayrıca değişkenler arasında iki yönlü bir nedenselliğe rastlandığı sonucuna ulaşmışlardır.

Bucak (2021), AB15 ve Türkiye ekonomisi ni panel veri analizi yöntemi ile 1995-2014 döneminde araştırmıştır. Yapılan analiz sonuçlarına göre değişkenler arasında eş bütünleşme ilişkisinin varlığı belirlenmiştir. Değişkenler arasında bir nedensellik olduğu sonucuna da ulaşılmıştır

Durgun ve Durgun (2023) Gelir dağılımındaki eşitsizliği ve insani gelişme endeksi ilişkisini Türkiye Ekonomisi için (1990-2019) dönemi için ARDL sınır testi ve nedensellik analizi ile araştırmışlardır. Bulgulara göre insani gelişme ile gelir eşitsizliği arasında uzun dönemli bir ilişkinin varlığı ortaya konulmuştur. İnsani gelişmeden gelir eşitsizliğine yönelik tek yönlü bir nedenselliğe rastlanmıştır.

Gönüllü (2024), Ekonomik kalkınma ve İnsani gelişme endeksi arasındaki ilişkiyi kırılmalı beşli olarak tanımlanan ülkeler üzerinde 1990-2021 yılları için araştırmıştır. Yaşam süresi, eğitim süresi, cinsiyet eşitsizliği ve GSYİH değişkenlerinin kullanıldığı araştırmada panel eş bütünleşme testi yöntemi kullanılan araştırmada ekonomik kalkınma ile insani gelişme endeksi arasında anlamlı bir ilişkiye rastlanılmıştır.

### 3. MODEL, VERİ SETİ VE BULGULAR

Bu çalışmanın temel amacı, 1990-2020 döneminde İnsani Gelişme Endeksinin bileşenlerine Türkiye ekonomisinin etkilerini araştırmaktır. İnsani Gelişme Endeksinin denkleminde sermaye oluşumu, DYY, karbondioksit salınımı, ihracat, yenilenebilir enerji tüketimi, ekonomik büyüme yer almaktadır. Bu sebeple aşağıdaki gibi bir doğrusal regresyon modeli kullanılmıştır.

$$HDI_t = \beta_0 + \beta_1 LNCAP_t + \beta_2 LNCO2_t + \beta_3 LNEX_t + \beta_4 LNFDI_t + \beta_5 LNGDP_t + \beta_6 LNREW_t \varepsilon_t \quad (Eş.1)$$

Yukarıda yazılı olan modelde

HDI : İnsani gelişme endeksi

LNCAP<sub>t</sub>: Brüt sermaye oluşumunun GSYİH 'ya oranı

LNCO2<sub>t</sub>: Karbondioksit oluşumları kişi başına metrik ton

LNEX<sub>t</sub> : Mal ve hizmet ihracatı GSYİH'ya oranı

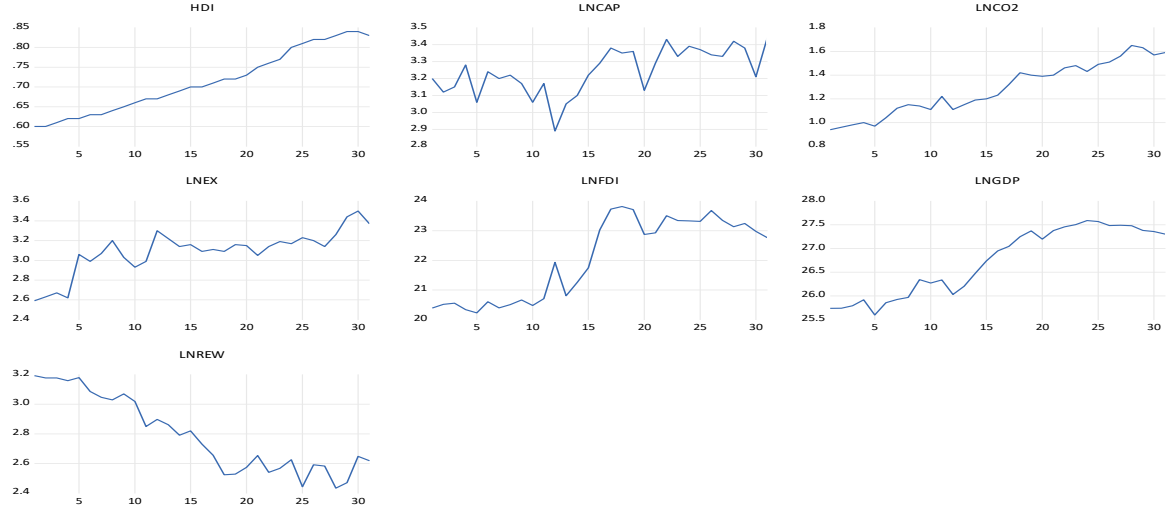
:LNFDI<sub>t</sub>: Doğrudan yabancı yatırımları net girişler ABD doları

LNGDP<sub>t</sub> : Gayri Safi Yurt İçi Hasıla (2015 ABD doları cinsinden)

LNREW<sub>t</sub> : Yenilenebilir enerji tüketimi (toplam nihai enerji tüketimine oranı)

olarak ifade edilmektedir. Elde edilen veriler Dünya Bankası (World Development Indicator 2024) veri tabanından temin edilmiş olup seriler doğal logaritması alınarak modele dahil edilmişlerdir. Bu çalışmada 1990-2020 yıllarına ait yıllık veriler kullanılmıştır. Serilerin yıl aralığının 1990-2020 yılları arasında seçilme nedeni Dünya Bankası veri tabanında elde edilen verilerin bu tarih aralığından elde edilemesinden kaynaklanmaktadır. İnsani gelişme endeksine ait seriler UNDP internet sitesinden elde edilmiştir. UNDP tarafından insani gelişme endeksi verileri hazırlanmaktadır. Diğer serilerin doğal logaritmaları alınarak model oluşturulmuştur. Bunun başlıca nedeni değişkenlerin esneklik olarak tahmin edilmesi ve yorumlanabilmesidir. Analize konu olan değişkenlerin zaman yolu grafikleri aşağıda sunulmaktadır.

Grafik :1 Değişkenlerin zaman yolu grafiği



Tablo-1 Değişkenlerin Tanımlayıcı İstatistikleri

	HDI	LNCAPI	LNCO2	LNEIX	LNFDI	LNGDP	LNREW
Mean	0.713548	3.244194	1.284194	3.093226	22.05957	26.73345	2.791703
Median	0.700000	3.240000	1.230000	3.140000	22.76449	26.95042	2.730464
Maximum	0.840000	3.440000	1.650000	3.500000	23.81644	27.58790	3.193353
Minimum	0.600000	2.890000	0.940000	2.590000	20.22569	25.59579	2.433613
Std. Dev.	0.079939	0.133935	0.221281	0.219930	1.364207	0.707365	0.255651
Skewness	0.240173	-0.535609	0.031668	-0.835748	-0.132200	-0.227763	0.296662
Kurtosis	1.733962	2.778791	1.706432	3.603014	1.252997	1.394444	1.627744
Jarque-Bera	2.368378	1.545402	2.166550	4.078468	4.032490	3.597699	2.887032
Probability	0.305994	0.461764	0.338485	0.130128	0.133155	0.165489	0.236096
Sum	22.12000	100.5700	39.81000	95.89000	683.8466	828.7370	86.54281
Sum Sq. Dev.	0.191710	0.538155	1.468955	1.451077	55.83185	15.01095	1.960730
Observations	31	31	31	31	31	31	31

Tablo 1’de çalışmada kullanılan değişkenlerin tanımlayıcı istatistikleri yer almaktadır. Tanımlayıcı istatistikler mod, medyan, çarpıklık, basıklık, standart hata ve Jarque Bera normallik testi sonuçlarından oluşmaktadır.

### 3.1. Metodoloji

Ekonometrik metodolojide ilk olarak değişkenlerin birim kök testleri yapılmaktadır. Serilerin durağanlık analizleri ve bütünleşme dereceleri ADF ve PP birim kök testleri ile kullanılarak yapılmaktadır. Serilerin bütünleşme dereceleri belirlendikten sonra değişkenler arasında eş bütünleşme ilişkisi Johansen eş bütünleşme yaklaşımı ile araştırılmıştır. Nedensellik analizi için Granger nedensellik yaklaşımından istifade edilmiştir.

#### 3.1.1. Birim Kök Testleri

Serilerin durağan olmamaları doğru sonuçlar verilmesine engel teşkil etmektedir. Değişkenler arasında sahte regresyon ortaya çıkacak ve doğru sonuçlar elde edilemeyecektir. Kullanılan değişkenlerin istatistiksel olarak

analiz edilebilmesi için birim kök testlerinin yapıp durağan olma durumları her bir değişken için test edilmektedir. Bu amaç doğrultusunda Dickey-Fuller (1981), Phillips-Perron (1988) ve KPSS (1992) testlerine başvurulmuştur.

$$\Delta Y_t = \alpha_1 + \alpha_2 t + \gamma_{Y_{t-1}} + \sum_{i=1}^p \Delta Y_{t-i} + \varepsilon_t \quad (\text{Eş.2})$$

Çalışmada ADF (1981) testinden farklı olarak Phillips ve Perron (1988) tarafından geliştirilmiş PP testide kullanılmaktadır. PP test istatistiğini hesaplamak için non-parametrik düzenlemelere gereksinim duyulmaktadır. Otokorelasyon, test istatistiğinin asimptotik dağılımını etkilememektedir. ADF (1981) testinden daha güçlü bir test olup ADF testi ile eş asimptotik dağılıma sahiptir.

$$\Delta X_t = \alpha_0 + \alpha_1 x_{t-1} + \alpha_2 t + \sum_{k=1}^m \beta_k \Delta X_{t-k} + u_t \quad (\text{Eş.3})$$

PP ve ADF birim kök testlerinden elde edilen sonuçlar da; test istatistiği değerleri Mackinnon kritik değerleriyle karşılaştırılarak durağan olup olmadığı sonucuna ulaşılmaktadır.

Tablo 2: Birim Kök Sonuçları

Değişkenler	ADF testi	Sonuç	PP testi	Sonuç
	<i>t</i> -istatistiği		<i>Adj. t</i> -istatistiği	
HDI	-0,135	-	-0,014	-
LNCAP	-2,646	-	-2,638	-
LNCO2	-0,838	-	-0,728	-
LNEX	1,180		-2,291	
LNFDİ	-1,300		-1,289	
LNGDP	-1,174		-1,174	
LNREW	-1,634		-1,474	
$\Delta$ HDI	-4,348 ***	I(1)	-4,363***	I(1)
$\Delta$ LNCAP	-8,342 ***	I(1)	-8,860***	I(1)
$\Delta$ LNCO2	-6,172 ***	I(1)	-8,310***	I(1)
$\Delta$ LNEX	-3,035 **	I(1)	-6,672***	I(1)
$\Delta$ LNFDİ	-5,363 ***	I(1)	5,370***	I(1)
$\Delta$ LNGDP	-5,619 ***	I(1)	-5,618***	I(1)
$\Delta$ LNREW	-5,881***		-6,505***	I(1)

Tablo 2’de değişkenlerin birim kök testleri sonuçları yer almaktadır. ADF ve PP birim kök testi sonuçlarına göre değişkenlerin her biri birinci farklarında durağan oldukları sonucu bulunmuştur. Bu bulgular Johansen eşbütünleşme yaklaşımının uygulanmasına imkân tanımaktadır

### 3.1.2. Johansen Eşbütünleşme Testi

Eşbütünleşme ilişkisinin varlığı Johansen (1988) nin geliştirdiği test ile ölçülebilmektedir. Bu prosedür aşağıdaki gibi bir VAR analizi yapılmasına dayanmaktadır:

$$Y_t = \sum_{i=1}^p A_i Y_{t-i} - 1 + \beta X_t + v_t$$

Burada  $X_t$  ve  $Y_t$  düzey değerlerdir. Durağan olmayan bu serilerin birinci farkları alındığında durağan hale gelmesi beklenir. Ve Denklem

$$\Delta Y_t = \Pi Y_{t-1} + \sum_{i=1}^{p-1} \gamma_i Y_{t-i} + \beta X_t + v_t$$
 Şeklini almaktadır.

Seriler arasında bir eş bütünleşme ilişkisinin olup olmadığına bakmak için iz (trace) ve maksimum özdeğer istatistiklerine bakmak gerekmektedir.

Tablo 3: VAR Gecikme Uzunluğu Belirleme Kriterleri

Lag	LogL	LR	FPE	AIC	SIC	HQ
0	159.6193	NA	6.33e-14	-10.52547	-10.19543	-10.42211
1	311.3400	219.7334*	5.88e-17	-17.60965	-14.96936*	-16.78275
2	375.7120	62.15226	3.99e-17*	-18.66979*	-13.71924	-17.11934*

Johansen eşbütünleşme testi için ilk olarak uygun gecikme uzunluğunun bulunması gerekmektedir. Bunun için gerekli olan VAR modeli yardımı ile SIC kriterine göre uygun gecikme uzunluğu 1 olarak belirlenmiştir. Tablo 3'te SIC kriterine göre uygun gecikme uzunluğu 1 olarak belirlenmiştir.

Tablo 4: Johansen Eşbütünleşme Testi Sonuçları (1990-2020)

Yokluk Hipotezi	İz İstatistiği	,05 için kritik değer	P
Eşbütünleşme yoktur	185,798*	125,615	0,000
Ençok 1 eşbütünleşme vardır	123,360*	95,753	0,002
Ençok 2 eşbütünleşme vardır	79,296*	69,818	0,007
Yokluk Hipotezi	Max. Özdeğer	,05 için kritik değer	P
Eşbütünleşme yoktur	62,438*	46,231	0,000
Ençok 1 eşbütünleşme vardır	44,064*	40,077	0,001
Ençok 2 eşbütünleşme vardır	34,754*	33,876	0,003

Not: \* 0,05 yanılma ile anlamlıdır.

Tablo 4 de Johansen eşbütünleşme testinin sonuçları yer almaktadır. Model 2 için değişkenler arasında iz istatistikleri ve max özdeğer istatistiklerine bakıldığında en az 3 eşbütünleşme ilişkisinin olduğu sonucuna ulaşılmaktadır.

Tablo:5 VECM (1) Tahmin Sonuçları

Panel A: Uzun Dönem Denklemi	
Sabit	0,033 (-2,779)**
Lncap	1,407 (-8,213)
Lnco2	-0,638( 1,971)
Lnex	-0,389 (3,064)
Lnfdi	-0,106 (5,277)*
Lngdp	-0,725 (6,585)
Inrew	-1,958 (0,185)
Panel B: Kısa Dönem Denklemi	
VECT <sub>t</sub>	-0,0029 (-0,159)**
ΔLncap	-0,0243 (-1,276)**
ΔLnco2	-0,0124 (-0,305)**
ΔLnex	-0,0015 (-0,099)**
ΔLnfdi	-0,0034 (-1,315)***
ΔLngdp	-0,0009 (-0,061)**
ΔInrew	-0,0134 (-0,013)**
Panel C : Tanısal Testler	
R <sup>2</sup>	0.395
Adjusted-R <sup>2</sup>	0.183
F-istatistiği	1.869
Breusch-Godfrey LM testi	57,170(0.303)
ARCH LM testi	1,241 (0.202)
J-B normality test	3,674 (0.997)
Ramsey RESET testi	0.822 (0.373)

Tablo 5 de Johansen eş bütünüleşme analizine ait uzun ve kısa dönem tahmin sonuçları ve tanısal testler yer almaktadır. Kısa dönem denkleminde bakıldığında hata düzeltme katsayısı negatif ve istatistiksel olarak anlamlıdır. Uzun dönem denkleminde bakıldığında doğrudan yabancı yatırımların insani gelişme endeksi üzerinde etkisi istatistiki olarak anlamlıdır.

Tablo 5'te uzun ve kısa dönem tahmin sonuçlarına bakıldığında kısa dönemde sermaye oluşumunun, karbondioksit salınımının, doğrudan yabancı yatırımların, ihracatın, ekonomik büyümenin ve yenilenebilir enerjinin insani gelişme endeksi üzerinde kısa dönem etkisi istatistiksel olarak anlamlıdır. Vektör hata düzeltme katsayısı da istatistiki olarak anlamlı ve negatiftir. Bu durum hata düzeltme mekanizmasının bu denklem için çalıştığını göstermektedir. İnsani gelişme denkleminde meydana gelen dengesizlikler uzun dönemde dengeye gelecektir

Hata terimlerine ilişkin tanimsal testlere bakıldığında modelin doğru kurulduğu, otokorelasyon ve değişen varyans probleminin olmadığı, normal dağılım gösterdiği sonucuna ulaşılmıştır.

Tablo:6 Granger Nedensellik Test Sonuçları

Hipotezler	Ki Kare	Olasılık	Nedensellik
Lncap → HDİ	1,557	0,212	Yok
Lnco2 → HDİ	0,091	0,762	Yok
Lnex → HDİ	0,007	0,930	Yok
Lnfdi → HDİ	1,699	0,192	Yok
Lngdp → HDİ	0,002	0,958	Yok
Lnrew → HDİ	0,265	0,606	Yok
HDİ → Lncap	1,084	0,297	Yok
HDİ → Lnco2	0,939	0,332	Yok
HDİ → Lnex	0,094	0,758	Yok
HDİ → Lnfdi	1,168	0,279	Yok
HDİ → Lngdp	2,592	0,107	Yok
HDİ → Lnrew	0,313	0,575	Yok

Tablo 6'da Granger nedensellik analizi sonuçlarını göstermektedir. Yapılan analize göre sermaye oluşumu, karbondioksit salınımı, ihracat, doğrudan yabancı yatırımlar, ekonomik büyüme, yenilenebilir enerji tüketimi değişkenleri ile insani gelişme endeksi arasında bir nedenselliğe rastlanılamamıştır.

#### 4. SONUÇ

Bu çalışmada insani gelişme endeksi bileşenlerinin Türkiye ekonomisi üzerindeki etkisi 1990-2020 yılları döneminde araştırılmıştır. Çalışmada insani gelişme endeksi bağımlı değişken olarak çalışmada yer almış olup sermaye oluşumu, karbondioksit salınımı, ihracat ekonomik büyüme, doğrudan yabancı yatırımlar, yenilenebilir enerji bağımsız değişkenler olarak denkleme eklenmiştir. Değişkenlerin durağanlık analizleri ADF ve PP testleri kullanılarak araştırılmış her bir değişkenin bütünleşme dereceleri I (1) olarak belirlenmiştir. Değişkenler arasında eşbütünleşme ilişkisinin varlığı Johansen eş bütünleşme ile araştırılmıştır. Değişkenlerin durağanlık dereceleri Johansen eş bütünleşme analizi için yeterli görülmüştür. Ampirik sonuçlar insani gelişme endeksi ile bağımsız değişkenler arasında eşbütünleşme ilişkisinin varlığı belirlenmiştir.

Çalışmada elde edilen ampirik sonuçlara göre; i) değişkenlerin tümü I(1) seviyede durağan olduğunu ve Johansen eşbütünleşme ilişkisi için kullanılabileceğini, ii) tanimsal testlerin modelin doğru kurulduğunu değişen varyans ve otokorelasyon sorununun olmadığını ve normallik testinin sağlandığını, iii) Kısa dönemde bağımsız değişken olarak ithalat, ihracat, ekonomik büyüme, doğrudan yabancı yatırımların insani gelişme endeksi üzerinde istatistiksel olarak anlamlı bir ilişkinin olduğu tespit edilmiştir. Vektör hata düzeltme katsayısının istatistiksel olarak anlamlı ve negatif işaretli olması uzun dönemde hata düzeltme mekanizmasının çalıştığı sonucuna bizi ulaştırmaktadır. iv) uzun dönemde doğrudan yatırımların insani gelişme endeksi üzerinde etkisinin istatistiksel olarak anlamlı olduğu sonucuna ulaşılmıştır. v) Granger nedensellik analizi sonucuna göre insani gelişme endeksi ile bağımsız değişkenler (sermaye oluşumu, karbondioksit salınımı, ihracat, doğrudan yabancı yatırımlar, ekonomik büyüme, yenilenebilir enerji) arasında bir nedensellik ilişkisi bulunamamıştır

Bu ampirik sonuçlara göre insani gelişme endeksi ile sermaye oluşumu, karbondioksit salınımı, ihracat, doğrudan yabancı yatırımlar, ekonomik büyüme, yenilenebilir enerji tüketimi arasında eş bütünleşme ilişkisi bulunmuştur. Kısa dönemde değişkenler arasında ilişkiler istatistiksel olarak anlamlıdır. Uzun dönemde doğrudan yabancı yatırımlar ile insani gelişme endeksi arasında anlamlı bir ilişki bulunmuş olup diğer değişkenler ile insani gelişme endeksi arasında anlamlı bir ilişkiye rastlanmamıştır.

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## Finansal Gelişmenin Belirleyicileri: Türkiye Örneği İçin Bir Zaman Serisi Analizi

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**Özet:** Bu çalışma, 1973-2022 döneminde finansal gelişmenin belirleyicilerinin Türkiye Ekonomisi örneğinde etkilerini araştırır. Finansal gelişme denkleminde; ithalat, ihracat, ekonomik büyüme, enflasyon ve doğrudan yabancı yatırımlar yer almaktadır. Yapılan araştırmada birim kök testleri olarak PP ve ADF kullanılmış ve değişkenlerin durağan olup olmadıkları araştırılmaktadır. Serilerin bütünlüşme dereceleri bulunduktan sonra arasında uzun dönemli bir ilişkinin varlığı ARDL sınır testi ile incelenmektedir. Sonuçlara göre seriler I(1) bütünlüşme derecesine sahip olup bu durum ARDL sınır testinin kullanılmasına olanak tanımaktadır. Sonuçlar değişkenler arasında uzun dönemli bir ilişkinin varlığını göstermektedir. Ampirik bulgular bağımsız değişkenlerin finansal gelişmenin belirleyici oldukları sonucunu doğrulamaktadır. Çalışmadan elde edilen sonuçlar kullanılarak Türkiye için bazı politika önerileri sunmak mümkündür.

**Anahtar Kelimeler:** Finansal Gelişme, Ekonomik Büyüme, ARDL, Türkiye

### Determinants of Financial Development: A Time Series Analysis for the Turkish Case

**Abstract:** The study investigates the effects of the determinants of financial development in the example of the Turkish Economy in the period 1973-2022. In the financial development equation; imports, exports, economic growth, inflation and foreign direct investments. In the research, PP and ADF were used as unit root tests and it was investigated whether the variables were stationary or not. After the degree of integration of the series is found, the existence of a long-term relationship between the series is examined with the ARDL bounds test. According to the results series have I(1) degree of integration, which allows the use of the ARDL bounds test. The results show the presence of a long-term link among the variables. Empirical findings confirm the conclusion that independent variables are determinants of financial development. It is possible to present some policy suggestions for Turkey based on the results.

**Keywords:** Financial Development, Economic Growth, ARDL, Türkiye

### 1. GİRİŞ

Finansal gelişme bir ekonomide finansal piyasalarının gelişmiş olma durumunu ifade etmektedir. Finansal piyasalarda araçların kullanılan araçların çeşitli olması finansal gelişmişliğin bir göstergesi olarak kabul edilmektedir. Finansal gelişmişliği sağlamış bir ülkenin reel sektöre sağlayacağı fonların hızlı ve kolay erişilebilirliğinin sağlanması finansal sisteminin gelişmesi ile doğrudan ilişkilidir. Finansal sistemi gelişmiş bir ülkenin reel kesime kolay kredi sağlayabilme, hızlı ve az maliyetli kaynak yaratabilmesi söz konusu olduğu için bu durum ekonomik büyüme göstergelerine de yansımaktadır. Finansal sistemin gelişmiş olması sorunsuz işleyen finansal sistemin varlığını ortaya koyarken ekonomik büyüme üzerinde de olumlu bir etki yaratacağı yapılan araştırmalarda ortaya çıkmaktadır.

Bazı ülkelerde finansal sistem çok gelişmiş iken bazı ülkelerde finansal sistemin yeterli seviye de olmadığı ortaya konan göstergelerde görülmektedir. Finansal gelişme ile ekonomik büyüme arasında ilişkiyi inceleyen literatürde çok sayıda çalışma bulunmaktadır. Yapılan çalışmaların pek çoğunda finansal gelişme ekonomik büyümeyi pozitif yönde etkileyen bir değişken olduğu görülmekte iken bazı çalışmalarda ise finansal gelişme ekonomik büyümeyi ters yönde etkilemektedir. Literatürde bazı çalışmalarda ise finansal gelişme ile ekonomik büyüme arasında bir ilişkinin olmadığı sonucuna da ulaşılabilmektedir. Finansal gelişmenin etkisi ülkelerin buldukları ekonomik gelişme aşamasına göre de farklılık göstermektedir. Gelişmiş ülkeler için finansal aracılık hizmetinde verimliliğin etkisi ekonomik büyüme açısından daha önemlidir. (Madaleno, Ahmed, Doğan, Javeed ve Vasa, 2023, s. 7)

1980'li yılların başında ortaya çıkan gelişmiş ve gelişmekte olan ülkeleri de yakından ilgilendiren liberalleşme hareketleri uluslararası sermaye akınlarına ve ülkelerin birbiriyle olan ticaretlerine yansıdı. Bu ticaretin gerçekleşmesi de finans sektörünün özellikle bankacılık işlemlerinde maliyetlerin minimum seviyeye indirilmesi likidite sorunlarının ortadan kaldırılmasına da vesile oldu. Finans sektörünün gelişimi ekonomik işlem hacminin geniş ve kapsamlı olması ile de ilişkilidir. (Barutçu ve Arslan, 2016, s. 407)



İthalat ve ihracat kavramları ile ekonomilerin dış dünyaya ne oranda entegre olduğunun finansal gelişme üzerinde etkisinin de araştırılması gerekmektedir. İthalat yapan ülkenin ithalat hacminin gayri safi yurtiçi hasılaya oranlanması ithalat ticaret yoğunluğunu ortaya koyarken, ihracatının gayrisafi yurtiçi hasılaya oranlanması da ülkenin ihracat ticaret yoğunluğunu göstermektedir. Ülkenin ithalat ve ihracat oranları ile hangi tür ticaretin finansal gelişmeyi ne oranda etkileyeceği konusu da bu araştırma için önem çeken unsurlardan bir tanesidir. Dışa açıklığın finansal gelişme üzerindeki etkisini inceleyen pek çok çalışma olması teorik olarak bağlantının bulunmasına rağmen bazı çalışmalarda ilişkinin nedeni tam olarak da belirlenememiştir. Ampirik literatürde ithalat ve ihracat kavramlarının özellikle dışa açıklık konusunda finansal gelişmeyi etkileyen araştırmalara rastlamak mümkündür.(Barutçu ve Arslan, 2016, s. 408)

Doğrudan yabancı yatırımlar sermayeyi yenilemek teknolojik gelişmeleri sağlayabilmek ve ekonomik kalkınmayı desteklemek için gereklidir. DYY girişi doğrudan ve dolaylı olarak finansal gelişmeden etkilenir. O yıllarda gelişmekte olan ülkelerden biri de Türkiye'dir. 1980 döneminden sonra ortaya çıkan doğrudan yabancı yatırımlar yaşanan makro ekonomik sorunlar ve istikrarsızlıklar ile amaçlanan dereceye ulaşamamıştır. Finansal piyasaların serbestleşmesi de beraberinde finansal krizleri de getirmiştir. Türkiye finansal sisteminin sağlam bir yapıya ulaştırıncaya kadar krizlerden yüksek derece etkilenirken özellikle 2001 krizinden sonra finansal piyasalarının yeniden yapılandırılmaya gitmesi sonucu yaşanan krizlerden daha az etkilenir hale de gelmiştir.(Felek, Yayla, İdari ve 2018, t.y., s. 65)

Makroekonomik göstergelerden finansal gelişmeyi en çok etkileyen değişkenlerden bir tanesi de enflasyondur. Enflasyon değişkeni ile faiz oranları bütçe dengesi özelleştirme ve döviz kuru değişkenleri gibi diğer faktörleri de finansal gelişmeyi etkisi olan değişkenler arasına ekleyebiliriz. Finansal gelişme ve enflasyon ilişkisi ekonometrik olarak incelendiği için enflasyon da meydana gelen bir artışın finansal gelişmeye olumsuz yönde etkisi olacağı görüşü literatürde hâkim görüştür. Enflasyonun reel anlamda etkisi araştırıldığında finansal sistem içerisinde finansal piyasaları olumsuz yönde etkilemektedir.(Türkmen ve Ağır, 2020, s. 585)

Bu çalışma 1973-2022 döneminde finansal gelişmenin belirleyicilerinin Türkiye Ekonomisi örneğinde etkilerini araştırma için yapılmıştır. Finansal gelişme denkleminde; ithalat, ihracat, ekonomik büyüme, enflasyon ve doğrudan yabancı yatırımlar yer almaktadır. Çalışmada ADF ve PP birim kök testleri kullanılmış ve serilerin durağanlık seviyeleri incelenmiştir. Serilerin bütünleşme derecelerinin belirlenmesinden sonra değişkenler arasında eşbütünleşmenin varlığı ARDL sınır testi ile araştırılmıştır. Ampirik bulgular hem uzun hem de kısa dönemde bağımsız değişkenlerin finansal gelişme arasında eş bütünleşme ilişkisinin olduğu sonucunu doğrulamaktadır. Bu nedenle ampirik bulgular Türkiye Ekonomisi için bazı politika önerileri geliştirmek için dayanak noktası olabilmektedir.

## 2- AMPİRİK LİTERATÜR

Ampirik çalışmalar incelendiğinde; finansal gelişme, ekonomik büyüme, enflasyon, doğrudan yabancı yatırımlar ve dış ticaret ilişkisini inceleyen çok sayıda çalışma bulunmaktadır.

Felek vd. (2016) Türkiye'ye AB doğrudan yabancı yatırımlar üzerinden finansal gelişmişliğin ekonomik büyüme üzerinde etkisini inceleyen 2005-2015 dönemi için çeyreklik veriler kullanılarak çalışma yapılmıştır. Temel bileşenler analizi yöntemi ile gerçekleştirilen analize göre finansal gelişme ve ekonomik büyüme tek başlarına doğrudan yabancı yatırımları etkilemediği birlikte doğrudan yabancı yatırımları üzerinde etkili oldukları sonucuna ulaşılmıştır.

Munemo (2017) Gelişmekte olan ülkelerde doğrudan yabancı yatırımların ve iş kurmanın finansal piyasa gelişiminin rolü araştırılmıştır. 92 Gelişmekte olan ülke üzerine yapılan araştırmada doğrudan yabancı yatırımların finansal piyasa gelişimi için eşik seviyesinin bulunduğu bu eşik seviyesini geçtikten sonra finansal piyasaların gelişimine katkı sunacağı sonucuna ulaşılmıştır.

Türkmen ve Ağır (2020) enflasyon-finansal gelişme arasındaki ilişkiyi 1985-2018 dönemi için araştırmışlardır. Dinamik panel veri analizi yönetimi kullanılan bu çalışmada yüksek enflasyon oranına sahip ülkelerde ekonomilerde düşük enflasyonlu ülkelere göre belirsizlik yarattığı için finansal gelişmenin olumsuz yönde etkilendiği sonucuna ulaşılmıştır. Doğrudan yabancı yatırımların, ekonomik büyüme üzerinde bir etkisinin var olabileceğinin durumunun gerçekleşmesi için ülkenin asgari düzeyde bir mali kalkınmaya ulaşması ve bundan sonra etkili olacağı sonucuna ulaşılmıştır.

Osei ve Kim (2023) Finansal gelişme ve doğrudan yabancı yatırımın büyüme etkisi üzerine yaptıkları 1990-2019 yılları için 75 ülkeyi kapsayan bir araştırma yapmışlardır. Araştırmada doğrusal ve doğrusal olmayan panel veri

analizi yönetimini kullanmışlar. DYY ve ekonomik büyüme arasındaki bağlantının ülkelerin yapısal özelliklerine ve finansal gelişme aşamalarına bağlı olarak farklılık gösterdiği sonucuna ulaşmışlardır.

Yalçın ve Çiftçi (2023), Türkiye ekonomisinde finansal gelişme-ekonomik büyüme ilişkisini 1990-2020 döneminde araştırmıştır. ARDL sınır testi yöntemi ile yaptıkları analizde iki değişken arasında istatistiksel olarak anlamlı ve pozitif bir ilişkinin varlığını ortaya koymuşlardır.

Karataş ve Ergül (2023) konuyu Türkiye ekonomisi için 1990-2021 döneminde araştırmışlardır. ARDL sınır testi yöntemi ile yaptıkları analizlerde uzun dönemde söz konusu iki değişken arasında anlamlı bir ilişkinin olmadığı, kısa dönemde ise negatif yönlü bir ilişkiye rastlamışlardır. Aynı çalışmada uzun ticari dışa açıklığın ekonomiyi pozitif yönde etkilediği kısa dönemde ise ticari dışa açıklığın ekonomik büyüme üzerinde etkisinin olmadığı sonucuna ulaşmışlardır

Göv ve Yılcı (2023) 1990-2019 dönemi için gelişmekte olan 30 ülke özelinde ekonomik büyüme, enerji tüketimi, dış ticaret ve finansal gelişme ilişkisini nedensellik analizi ile araştırmışlardır. Lasso ve Kasso grafiksel nedensellik analizi yaklaşımına göre ekonomik büyümeden dış ticarete Kasso özelinde tek yönlü lasso özelinde çift yönlü nedensellik ilişkisi bulunmuştur. Yazarlar finansal gelişmeden ekonomik büyümeye doğru bir nedenselliğe işaret eder.

Kim ve Lin (2023) finansal gelişmenin enflasyon ve gelir eşitsizliği arasındaki ilişkiyi olup olmadığını ampirik olarak araştırmışlardır. 1970-2019 döneminde 62 ülke için panelregresyon modeli kullanılarak yapılan araştırmada enflasyonun finansal gelişme üzerindeki etkisi araştırılmış finansal gelişmesini tamamlayamamış ülkeler üzerindeki daha fazla etkili olduğu görüşü ortaya çıkmaktadır.

### 3. MODEL VE VERİ SETİ

Çalışmanın amacı finansal gelişmenin belirleyicilerini olan ithalat, ihracat, ekonomik büyüme, enflasyon ve doğrudan yabancı yatırımların Türkiye ekonomisi üzerinde etkilerini araştırmaktır. Bu sebeple aşağıdaki gibi bir doğrusal regresyon modeli kullanılmıştır.

$$LNFD_t = \beta_0 + \beta_1 LNİM_t + \beta_2 LNEX_t + \beta_3 LNGDP_t + \beta_4 LNENF_t + \beta_5 FDI_t + \varepsilon_t \quad (\text{Eş. 1})$$

Yukarıda yazılı olan modelde

LNFD<sub>t</sub>: Geniş Para Arzı'nın Gayrisafi Yurt İçi Hasılaya Yüzde Oranı,

LNİM<sub>t</sub>: Mal ve Hizmet İthalat Gayir Safi Yurt İçi Hasılaya Yüzde Oranı,

LNEX<sub>t</sub>: Mal ve Hizmet İhracat Gayrisafi Yurt İçi Hasılaya Yüzde Oranı,

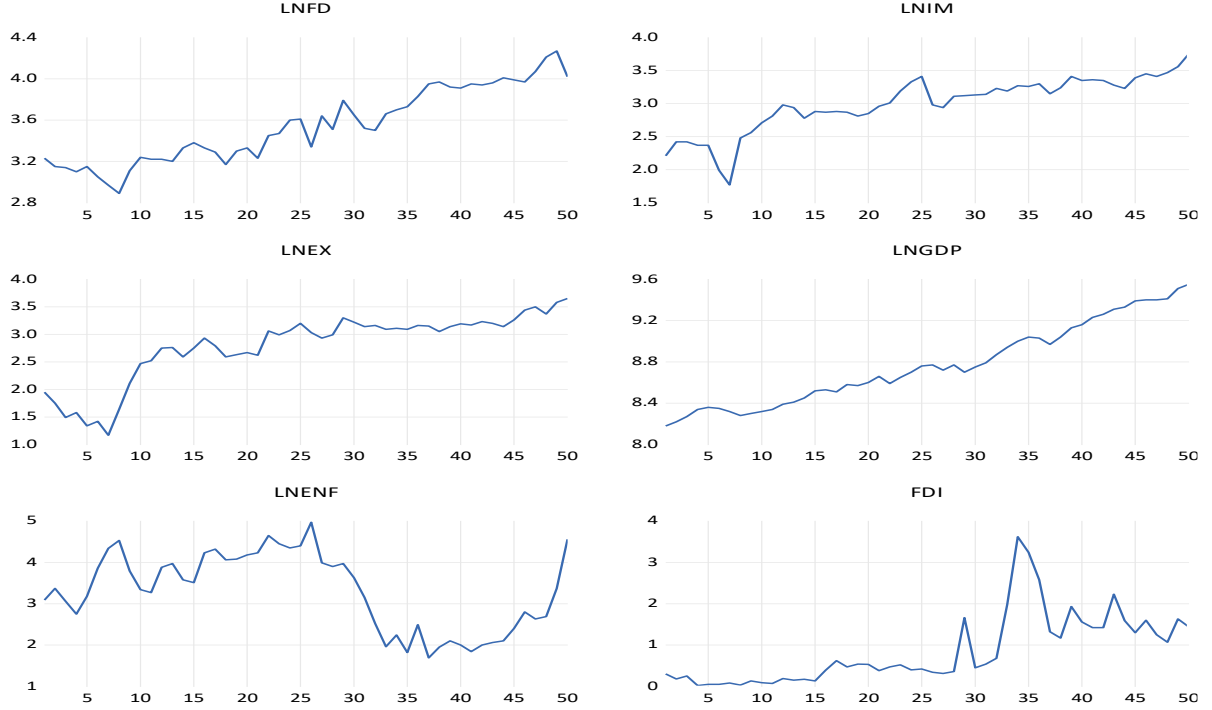
LNGDP<sub>t</sub>: Kişi Başına Gayri Safi Yurt İçi Hasıla (2015 ABD doları cinsinden)

LNENF<sub>t</sub>: GSYİH Deflatörü Yıllık Yüzde Oranı

FDI<sub>t</sub>: Doğrudan Yabancı Yatırımlar Net Girişlerin GSYİH'ya Yüzde Oranı

olarak ifade edilmektedir. Elde edilen veriler Dünya Bankası veri tabanından temin edilmiş olup seriler doğal logaritması alınarak modele dahil edilmişlerdir. Bu çalışmada 1973-2022 yıllarına ait yıllık veriler kullanılmıştır. Serilerin yıl aralığının 1973-2022 yılları arasında seçilme nedeni son elli yılın verileri olmasıdır. 2023 yılına ait verilerin Dünya Bankası veri tabanında yer almamasından kaynaklanmaktadır. Doğrudan yabancı yatırımlara ait serinin doğal logaritmasının alınmama sebebi logaritması alındığında negatif değerler ortaya çıkmasından dolayıdır. Diğer serilerin doğal logaritmaları alınarak model oluşturulmuştur. Bunun başlıca nedeni değişkenlerin esneklik olarak tahmin edilmesi ve yorumlanabilmesidir. Analize konu olan değişkenlerin zaman yolu grafikleri aşağıda sunulmaktadır.

Grafik-1 Modelde kullanılan serilerin zaman yolu grafikleri



Tablo-1 Değişkenlerin Tanımlayıcı İstatistikleri

	LNFD	LNIM	LNEX	LNGDP	LNENF	FDI
Mean	3.543	2.999	2.783	8.773	3.306	0.866
Median	3.505	3.115	3.040	8.710	3.370	0.495
Maximum	4.270	3.750	3.650	9.550	4.970	3.620
Minimum	2.890	1.770	1.170	8.180	1.690	0.020
Std. Dev.	0.361	0.415	0.626	0.395	0.937	0.855
Skewness	0.191	-0.907	-1.172	0.376	-0.191	1.310
Kurtosis	1.852	3.550	3.378	1.955	1.743	4.341
Jarque-Bera	3.049	7.485	11.735	3.456	3.593	18.053
Probability	0.218	0.024	0.003	0.178	0.166	0.000
Sum	177.170	149.940	139.130	438.670	165.300	43.320
Sum Sq. Dev.	6.397	8.457	19.231	7.649	43.065	35.825

Tablo 1’de çalışmada kullanılan değişkenlerin tanımlayıcı istatistikleri yer almaktadır. Tanımlayıcı istatistikler mod, medyan, çarpıklık, basıklık, standart hata ve Jarque Bera normallik testi sonuçlarından oluşmaktadır.

### 3.1.Ekonometrik Metodoloji

Bu çalışma için ekonometrik metodoloji birim kök testlerinin yapılması ve serilerin bütünleşme derecelerinin belirlenmesi, değişkenler arasında bir eş bütünleşme ilişkisinin olup olmadığı ve bir nedensellik ilişkisinin bulunup bulunmadığı olarak üç adımlı bir strateji uygulanmıştır. İlk olarak değişkenlerin durağanlık analizleri ADF ve PP birim kök testleri ile yapılmış ve serilerin bütünleşme dereceleri I(1) olarak belirlenmiştir. İkinci adımda; değişkenler arasında eşbütünleşmenin varlığı ARDL sınır testi ile incelenmiştir. Seriler arasında eş bütünleşme ilişkisinin varlığı ortaya konulmuştur. Üçüncü adımda değişkenlerin değişkenlerin parametreleri EKK (En Küçük Kareler) tekniği ile tahmin edilip nedensellik ilişkisi araştırılmıştır.

### 3.1.1. Birim Kök Analizi

Zaman serisi analizi yaparken serilerin durağan olmamaları doğru sonuçlar verilmesine engel teşkil etmektedir. Değişkenler arasında sahte regresyon ortaya çıkacak ve doğru sonuçlar elde edilemeyecektir. Kullanılan değişkenlerin istatistiksel olarak analiz edilebilmesi için birim kök testlerinin yapıp durağan olma durumları her bir değişken için test edilmektedir. Bu amaç doğrultusunda Dickey ve Fuller (1981) ve Phillips ve Perron (1988) ve KPSS (1992) testlerinden istifade edilmiştir.

$$\Delta Y_t = \alpha_1 + \alpha_2 t + \gamma_{Y_{t-1}} + \sum_{i=1}^p \Delta Y_{t-i} + \varepsilon_t \quad (\text{Eş.2})$$

Denklemden "Y" bağımlı değişkeni "Δ" fark işlemini, t trend terimini ve ε<sub>t</sub> hata terimini temsil etmektedir.

Çalışmada ADF (1981) testinden farklı olarak Phillips ve Perron (1988) tarafından geliştirilmiş PP testide kullanılmaktadır. PP test istatistiğini hesaplamak için non-parametrik düzenlemelere gereksinim duyulmaktadır. Otokorelasyon, test istatistiğinin asimptotik dağılımını etkilememektedir. ADF (1981) testinden daha güçlü bir test olup ADF testi ile eş asimptotik dağılıma sahiptir.

$$\Delta X_t = \alpha_0 + \alpha_1 x_{t-1} + \alpha_2 t + \sum_{k=1}^m \beta_k \Delta X_{t-k} + u_t \quad (\text{Eş.3})$$

PP ve ADF testlerinden elde edilen test istatistiği değerleri Mackinnon kritik değerleriyle karşılaştırılarak durağan olup olmadığı sonucuna ulaşılmaktadır.

Tablo 2: Birim Kök Bulguları

Değişkenler	ADF testi	Sonuç	PP testi	Sonuç
	t- istatistiği		Adj. t-istatistiği	
LNFD	-0.2123	-	-0,5415	-
LNİM	-1,4682	-	-1,2277	-
LNEX	-0,9438	-	-0,9947	-
LNGDP	0,7987		1,0615	
LNENF	-2,8730		-1,4823	
FDİ	-2,1302		-1,9860	
Δ LNFD	-5,1187 ***	I(1)	-16,6857***	I(1)
Δ LNİM	-6,0841 ***	I(1)	-7,6414***	I(1)
Δ LNEX	-4,8278 ***	I(1)	-6,3005***	I(1)
Δ LNGDP	-6.7035 ***	I(1)	-6,6998***	I(1)
Δ LNENF	-5.7242 ***	I(1)	-5,6839***	I(1)
Δ FDİ	-5.7632 ***	I(1)	-13,2555***	I(1)

Tablo 2’de değişkenlerin birim kök testleri sonuçları yer almaktadır. Değişkenlerin her biri birinci farklarında durağan oldukları sonucuna varılmıştır. Sonuçlar ARDL eşbütünlük testinin yapılmasına imkân tanımaktadır

### 3.1.2. ARDL Sınır Testi Analizi

ARDL sınır testi yaklaşımı değişkenlerin bütünlük derecelerinin farklı olmaları durumunda kullanılabilen Pesaran, Shin ve Smith (2001) bir eşbütünlük yaklaşımıdır. Küçük örneklem için sonuçları güven veren bir ve az sayıda oluşan veri setlerinin kullanımına da uygun bir eş bütünlük yaklaşımıdır.. Pesaran vd (2001) değişkenler arasında durağanlık derecelerinin I(0) ve I(1) olup olmadığına bakılmaksızın hem düzey hem de fark düzey olan serilerin beraber analizine fırsat veren otoregresif dağıtılmış gecikme modelini önermişlerdir. ARDL modeli küçük örneklemde doğru sonuçlar veren bir analiz yönetimi olduğu için bu testten yararlanılmıştır.

Tablo 3: VAR Gecikme Uzunluğu Belirleme

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-44.90611	NA	3.68'e-07	2.213309	2.451828	2.302660
1	168.9140	362.5646	1.64'e-10	-5.518001	-3.848372*	-4.892548
2	206.7254	54.25109	1.64'e-10	-5.596756	-2.496017	-4.435201
3	253.4432	54.84268	1.28e-10	-6.062749	-1.530899	-4.365091
4	314.0514	55.33790*	7.07e-11*	-7.132670*	-1.169709	-4.898909*

ARDL sınır testi yaklaşımı ile araştırma yapmak için öncelikle uygun gecikme uzunluğunun bulunması gerekmektedir. Bunun için ilk olarak bir VAR modeli tahmin edilir ve bu VAR modeli ile uygun gecikme sayısı ve model seçim kriteri belirlenir. Bu model için model seçim kriteri AIC belirlenmiş ve uygun gecikme uzunluğu 4 olarak belirlenmiştir. Tablo 3'te AIC kriterine göre uygun gecikme uzunluğu 4 olarak belirlendiği görülmektedir.

Tablo 4: Sınır Testi Bulguları (1973-2022)

Bağımlı değişken	LNFD	
Gecikme uzunluğu	[4,3,3,3,0,3]	
F istatistiği	8,77***	
Anlamlılık seviyesi	Alt I(0)	Üst I(1)
1%	3,955	5.58
5%	2.9	4.218
10%	2.435	3.60

Tablo 4'te ARDL sınır testi sonuçları gösterilmektedir. Çalışmada ARDL sınır testi analizi sonuçlarına göre F-istatistik değeri üst kritik değeri aştığı için değişkenler arasında bir eşbütünlük ilişkisinin varlığına hükmedilmiştir.

Tablo 5: Uzun Dönem Tahminleri

Panel A: Değişkenler	Katsayılar
Sabit	-3.067***
LNİM	0.866***
LNEX	-0.250**
LNGDP	0.573***
LNENF	-0,134***
FDİ	-0,149***

Panel B: Tanısal Testler	
R <sup>2</sup>	0.981
Adjusted-R <sup>2</sup>	0.964
F-istatistiği	59.038***
Breusch-Godfrey LM testi	0,905 (0.418)
ARCH LM testi	1,241 (0.202)
J-B normality test	0.881 (0.655)
Ramsey RESET testi	0.822 (0.373)

Tablo 5'te uzun dönem tahminleri gösterilmektedir. Elde edilen uzun dönem tahmin sonuçlarına göre ithalat ve ekonomik büyüme değişkenleri pozitif ve %1 düzeyde anlamlı bulunmuştur. İhracat, enflasyon, doğrudan yabancı yatırımlar değişkenleri negatif ve %1 seviyede anlamlı bulunmuştur. Bu sonuçlar finansal gelişme ile ithalat, ihracat, ekonomik büyüme, enflasyon ve doğrudan yabancı yatırımlar arasında eşbütünlük ilişkisini kanıtlar. Ayrıca Panel B'de tanısal test sonuçlarına yer verilmiştir. Elde edilen sonuçlara göre kurulan modelin uygun bir model olduğu, değişken varyans ve otokorelasyon probleminin olmadığı ve modelin normal dağılım gösterdiği sonucuna ulaşılmıştır.

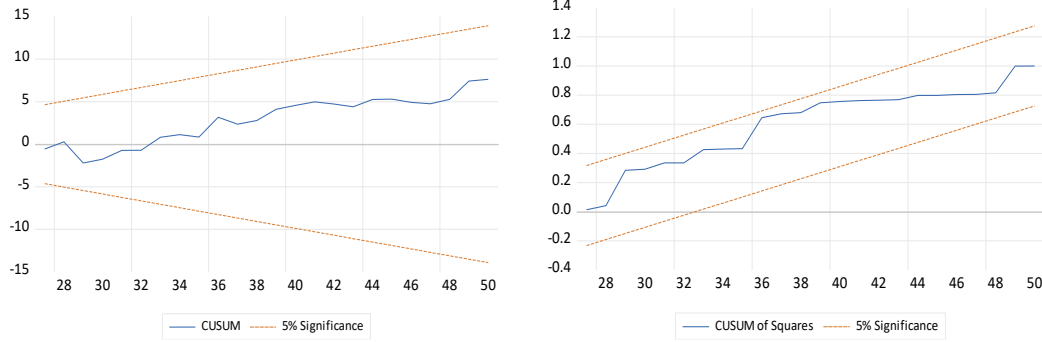
Tablo 6: Kısa Dönem Tahminleri

Değişkenler	Katsayılar
Sabit	-3,067***
DLNFD	0,513**
DLNİM	0,350***
DLNEX	0,012
DLGDP	-1,610***
DFDİ	-0,008
ECT(-1)	-1,133***

Tablo 6'da kısa dönem tahmin sonuçları gösterilmektedir. Bu sonuçlara göre kısa dönemde ithalat değişkeni pozitif ve istatistiksel olarak anlamlıdır. Ekonomik büyüme değişkeni negatif ve istatistiksel olarak anlamlıdır.

Bunlarla birlikte hata düzeltme katsayısının negatif ve %1 seviyede anlamlı olması değişkenler arasında eşbütünleşme ilişkisinin varlığını kanıtlar niteliktedir.

Grafik :2 CUSUM ve CUSUM2 Test Grafikleri



Yapılan analizde çıkan sonuçların uzun dönem parametrelerinin istikrarlı olup olmadıklarını incelemek amacıyla CUSUM ve CUSUM<sup>2</sup> test sonuçlarına bakılmaktadır. Grafik 2' de elde edilen test sonuçları gösterilmektedir. Bu sonuçlara göre uzun dönem parametreleri %1 anlamlılık seviyesinde istatistiksel olarak anlamlı ve istikrarlıdır.

#### 4. SONUÇ VE DEĞERLENDİRME

Bu çalışmada finansal gelişmenin belirleyicilerinin Türkiye ekonomisi üzerindeki etkisi 1973-2022 yılları döneminde araştırılmıştır. Çalışmada finansal gelişmeyi temsilen geniş para arzının gayrisafi yurt içi hasılaya oranı dikkate alınmıştır. Bu bağımlı değişkenin yanısıra ithalat, ihracat ekonomik büyüme, doğrudan yabancı yatırımlar finansal gelişme denklemine bağımsız değişkenler olarak eklenmiştir. Değişkenlerin durağanlık analizleri ADF ve PP testleri kullanılarak araştırılmış her bir değişkenin bütünleşme dereceleri I (1) olarak belirlenmiştir. Eşbütünleşme analizi için ARDL sınır testinden yararlanılmıştır. Değişkenlerin durağanlık dereceleri ARDL sınır testini uygulamak için yeterli görülmüştür. Ampirik sonuçlar finansal gelişmenin belirleyicileri olan ithalat, ihracat, ekonomik büyüme, enflasyon ve doğrudan yabancı yatırımlar ile eşbütünleşme ilişkisinin varlığı belirlenmiştir.

Çalışmada elde edilen ampirik sonuçlara göre; i) değişkenlerin tümü I(1) seviyede durağan olduğunu ve ARDL sınır testinin eş bütünleşme ilişkisi için uygunluğunu, ii) tanısallık testlerin modelin doğru kurulduğunu değişen varyans ve otokorelasyon sorununun olmadığını ve normallik testinin sağlandığını, iii) Uzun dönemde bağımsız değişken olarak ithalat, ihracat, ekonomik büyüme, doğrudan yabancı yatırımların finansal gelişmenin belirleyicisi olduklarını, iv) uzun dönemde ihracat ,enflasyon DYY ve finansal gelişme arasında negatif ve anlamlı ilişki olduğu, kısa dönemde ise ekonomik büyümenin finansal gelişmeyi negatif etkilediği sonucuna ulaşılmıştır.

Bu ampirik sonuçlara göre finansal gelişme ile ithalat, ihracat, ekonomik büyüme, enflasyon ve doğrudan yabancı yatırımlar arasında bir eş bütünleşme ilişkisinin varlığı ortaya konulmuştur. Kısa dönemde ithalat ve ekonomik büyüme ile finansal gelişme arasında ilişki anlamlıdır.

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## Türkiye'de Banka Kredileri ile BİST Toplam Piyasa Değeri İlişkisinin Granger Nedensellik Testiyle Araştırılması<sup>1</sup>

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**Özet:** Bankalar, ekonomik sistem içerisinde reel sektör ve finans sektörünün en temel kurumlarından biridir. Bu kurumlar, finansal piyasaların para piyasası ve sermaye piyasası faaliyetlerinin de temel aktörleri arasında yer almaktadır. Sermaye piyasası ise uzun vadeli fon ihtiyacı olanlar ile tasarruflarını uzun vadeli olarak değerlendirmek isteyenlerin bir araya gelerek fon transferine olanak sağlayan pazar yerleridir. Hem bankalar hem de sermaye piyasalarının faaliyetleri ülkelerin finansal gelişimi ve dolayısıyla da büyüme ve kalkınmasıyla doğrudan ilgilidir.

Literatürde, bankacılık sektörü ve sermaye piyasası ilişkisi ve bu alanların birbirilerine rakip mi yoksa birbirinin tamamlayıcısı mı oldukları gibi konular geniş bir araştırma alanı bulmuştur. Bu doğrultuda çalışmamızda Türkiye’de bankacılık sektörü ve sermaye piyasası arasında bir ilişki olup olmadığı araştırılmaktadır. Bu kapsamda Türkiye’nin 2002-2012 yıllarını kapsayan BİST toplam piyasa değeri (sermaye piyasasını temsilen) ve toplam kredi (bankacılık sektörünü temsilen) verileri kullanılarak Granger Nedensellik Testi gerçekleştirilmiştir.

Analiz sonucunda toplam piyasa değerinde krediye doğru bir Granger nedensellik ilişkisi tespit edilmiştir. Bu sonuç literatürde sermaye piyasasının bankacılıkla ilişkili olduğu ve bankacılığı etkileyebildiğini ortaya koyan çalışmalarla uyumludur. Bu veriler doğrultusunda Türkiye’de kredi piyasası ve bankacılık sektörüne yönelik geliştirilecek politikalarda; sermaye piyasasının, bankacılık sektörünün Granger nedeni olduğunun göz önüne alınması gerektiği ifade edilebilir.

**Anahtar Kelimeler:** Sermaye Piyasası, Banka Kredileri, Bankacılık Sektörü, BİST, Granger Nedensellik Testi

**Abstract:** Banks are one of the fundamental institutions of the real sector and the financial sector in economic system. These institutions play a crucial role in the activities of financial markets, including both money markets and capital markets. Capital markets, on the other hand, are marketplaces that allow those who need long-term funds and those who want to invest their savings in the long term to come together and transfer funds. The activities of both banks and capital markets are directly related to the financial development of countries, and thus, to their growth and development.

In the literature, issues such as the relationship between the banking sector and capital markets and whether these areas are rivals or complementary to each other have found a wide area of research. In this context, our study investigates whether there is a relationship between the banking sector and the capital market in Türkiye. For this purpose, Granger Causality Test was carried out using Türkiye's BIST total market capitalization (representing the capital market) and total loans (representing the banking sector) data covering the years 2002-2012.

As a result of the analysis, a Granger causality relationship from total market value to loans was determined. This result is compatible with studies in the literature that reveal that the capital market is related to banking and can affect banking. Based on this data, it can be stated that in developing policies for the credit market and banking sector in Türkiye, the influence of the capital market on the banking sector, as evidenced by Granger causality, should be taken into account.

**Keywords:** Capital Markets, Bank Loans, Banking Sector, BIST, Granger Causality Test

### 1. GİRİŞ

Finansal piyasalar tasarruf açığı olanlar ile tasarruf fazlası olanları bir araya getirerek fon alışverişine imkan sağlayan sistemlerdir. Sermaye piyasaları ve bankacılık sektörü finansal piyasaların temel aktörleri arasında gösterilebilir. Sermaye piyasaları uzun vadeli fon alışverişinin gerçekleştiği pazarlar olarak nitelendirilebilir. Bankalar ise mevduat ve katılım fonu toplamak, kredi vermek, ödeme işlemlerini gerçekleştirmek gibi çeşitli finansal hizmetler sağlayan finansal aracı niteliğindeki kurumlardır. Bankacılık sektörü ve sermaye piyasalarının gelişimi ülkelerin finansal sistemindeki ilerlemeleri desteklemektedir. Finansal sistemdeki ilerleme ise büyüme ve kalkınmaya katkı sağlayabilmektedir.

Bankaların ve sermaye piyasasının finansal sistemdeki rolleri, akıllara bankacılık sektörü ve sermaye piyasaları arasında bir ilişki var mıdır? Sorusunu getirmektedir. Bu kapsamda çalışmanın amacı bankacılık sektörü ile sermaye piyasası arasında bir ilişki olup olmadığını tespit etmektir. Literatürde yer alan çalışmalar dikkate

<sup>1</sup> Bu çalışma ikinci yazarın danışmanlığında yürütülmekte olan doktora tezinden türetilmiştir.



alınarak bankacılık sektörü ve sermaye piyasasını temsil eden değişkenler seçilmiş ve Granger Nedensellik Testi kullanılarak ilişkinin varlığı test edilmeye çalışılmıştır.

## 2. KAVRAMSAL ÇERÇEVE

Araştırmamıza konu olan bankacılık sektörü ve sermaye piyasasına ilişkin kavramlar bu bölümde açıklanmaktadır.

### 2.1. Bankacılık Sektörü

Bankalar mevduat toplama ve kredi verme başta olmak üzere ödeme işlemleri, para transferleri gibi faaliyetleri yerine getirerek finansal piyasalardaki kaynak dağılımının düzenlenmesi, asimetrik bilginin ve işlem maliyetlerinin azaltılması gibi kritik görevleri yerine getiren kurumlardır (Aydın, 2023; Altuğ, 2000; Battal, 2004). Bunların yanında bankalar sermaye piyasası araçlarının alım ve satımı, saklama hizmetleri, vadeli işlemler, banka ve kredi kartları gibi ödeme araçları sunma, üçüncü kişiler adına teminat ve garanti verme işlemleri, aracılık faaliyetleri, yatırım danışmanlığı, portföy yöneticiliği gibi birçok para ve sermaye piyasası faaliyetine ilişkin hizmet sunmaktadır (Kartal, 2018).

Bankalar faaliyet türlerine göre mevduat bankası, katılım bankası, yatırım bankası, kalkınma bankası, ihracat ve ithalat bankası, takas ve saklama bankası gibi sınıflandırılmaktadır (Aydın vd., 2012). Sermaye yapılarına göre ise bankalar özel sermayeli bankalar, kamu sermayeli bankalar ve yabancı sermayeli bankalar olarak ayrıma tabi tutulabilir (Atkualp, 2019; Arabacı, 2018; Koyuncu, 2011).

Bankalar faaliyette bulunmaları öncesinde ve sonrası bazı kurum ve kuruluşlarla etkileşim içerisinde olabilmektedir. Bu etkileşimin karşı tarafı olan kurumlar, gözetim, denetim, sigorta ve kuruluş birliği gibi nitelikleriyle bankalarla ilişki içerisindedir. Bankacılık Düzenleme ve Denetleme Kurumu, Tasarruf Mevduatı Sigorta Fonu, Türkiye Cumhuriyet Merkez Bankası, Türkiye Bankalar Birliği ve Türkiye Katılım Bankaları Birliği bankalarla ilgili kurumlar olarak sıralanabilir.

### 2.2. Sermaye Piyasası

Sermaye piyasası da bankacılık sektörü gibi finansal piyasaların önemli paydaşları arasında yer almaktadır. Uzun vadeli fon ihtiyacı olan ekonomik birimler ile tasarruflarını uzun vadeli olarak değerlendirmek isteyen ekonomik birimleri bir araya getirerek fon alışverişine olanak sağlayan piyasalar sermaye piyasaları olarak tanımlanabilir (Narayanawamy vd., 2017). Hisse senetleri, tahviller, katılma senetleri, varantlar, varlığa dayalı menkul kıymetler, ipoteye dayalı menkul kıymetler ve kira sertifikaları gibi birçok varlık sermaye piyasasındaki işlemleri konu olabilmektedir (Sermaye Piyasası Kurulu, 2022).

Sermaye piyasaları faaliyet gösterdiği ekonomilerden oldukça kritik bir misyon üstlenmektedir. Finansman ihtiyacı olan şirketler bankalardan kredi temin edebildiği gibi bunun yerine doğrudan sermaye piyasasından da kaynak sağlayabilmektedir.

Sermaye piyasasından sağlanan fonlar daha uzun vadeli tasarruflara dayandığı için uzun yıllarda geri dönüş sağlayabilecek yatırımların finansmanında verimli bir kaynak olabilmektedir. Tasarruf sahipleri açısından ise birikimlerini, oldukça çeşitli alanlarda faaliyet gösteren şirketlerde değerlendirme imkanı sağlayabilmektedir. Diğer yandan bankaların kredi için riskli gördükleri ancak geleceği parlak olabilecek şirketlerin sermaye piyasasından kaynak sağlayabilmesi de ekonomiler için olumlu sonuçlar doğurabilir. Türev piyasaların bazı finansal risklere karşı önlem alınmasına imkan vermesi, portföy çeşitlendirmesi sağlaması, finansal varlıklarla ilgili sağlıklı fiyat oluşumunun temini, risk dağıtımı, kamu borçlanma araçları vasıtasıyla uzun vadeli tasarruf gerektiren ulaşım, altyapı gibi alanlara kaynak sağlanabilmesi sermaye piyasasının diğer önemli fonksiyonları olarak eklenebilir.

Özet olarak tasarrufların uzun vadeli yatırımlara, yatırımların ise ekonomik büyüme ve kalkınmaya dönüşebilmesi sürecinde fiyat oluşumunun sağlıklı şekilde gerçekleştiği, güven ve istikrara dayalı şeffaf bir sermaye piyasasının oldukça önemli olduğunu ifade etmek mümkündür (Bekaert ve Harvey, 1998).

## 3. TEORİK ÇERÇEVE VE HİPOTEZ GELİŞTİRME

Çalışmanın teorik çerçevesi ve hipotezi bu bölümde ele alınmaktadır. Etkin Piyasalar Hipotezi çerçevesinde Bankacılık Sektörü ve Sermaye Piyasası ele alınarak bu bağlamda oluşturulan hipoteze yer verilmiştir.

Etkin piyasalar hipotezi özetle piyasada oluşan fiyatların mevcut tüm bilgiyi yansıttığı görüşüne dayanmaktadır (Fama, 1970). Yansıttıkları bilginin derecesine göre piyasaların etkinlik düzeyleri değişse de fiyatların bilgiyi yansıtma gücü arttıkça piyasa etkinliğinin arttığını ifade etmek mümkündür. Piyasada yer alan bilgilere bir kısım

kimseler erişebiliyor iken belirli bir kısım bu bilgiden yoksun kalıyor ise bu durum Asimetrik Bilgi Problemine sebebiyet verebilecek ve piyasa etkinliğini olumsuz etkileyebilecektir (Akerlof, 1970).

Literatürde bankaların asimetrik bilgi sorununu azaltıcı rollerinin üzerinde duran çalışmalar mevcuttur (Drucker ve Puri, 2007; Yılmaz ve Kayalica, 2008). Bunun yanında bankaların piyasa etkinliği ve işleyişi konularına katkı sunabileceği hususlardan bazıları listelenmiştir (Akın ve Ece, 2011; Günay, 2011):

- Bankalar sermaye piyasası faaliyetleriyle sağlıklı fiyat oluşumuna yardımcı olabilmektedir.
- Bankalar bilgiye erişim olanakları ve bilginin yayılması yoluyla özellikle bireysel yatırımcıların maruz kaldığı asimetrik bilgi sorununun çözümüne destek verebilmektedir.
- Bankalar bazı kaynaklarını sermaye piyasasında değerlendirerek bu piyasanın ürün çeşitliliğine katkı sağlayabilmektedir.
- Bankalar varlıklarını menkul kıymetleştirme yoluyla piyasalara güvenilir sermaye piyasası aracı sunabilmektedir.
- Vade ve risk kriterlerine göre bankaların kaynak aktarmak istemeyeceği yatırımların sermaye piyasalarından finansman sağlaması banka kredi politikalarını daha verimli hale getirebilir.

Bahsi geçen teoriler ile banka ve piyasa uygulamaları dikkate alınarak araştırmanın hipotezi aşağıdaki şekilde oluşturulmuştur:

H<sub>1</sub>: Bankacılık sektörü ile sermaye piyasası arasında bir ilişki vardır.

#### 4. METODOLOJİ

Araştırmanın amacı ve önemi, ilgili literatür, veri seti, yöntemi ve bulguları bu bölümde incelenmiştir.

##### 4.1. Araştırmanın Amacı ve Önemi

Finansal piyasaların en temel unsurlarından olan sermaye piyasaları ve bankalar birçok bilimsel araştırmanın konusu olmuştur. Bu alanlarla etkileşim içerisinde olan etmenler, olaylar ve durumlar araştırılarak hem bankacılık sektörü hem de piyasalar hakkında daha fazla açıklayıcı bilgiye erişilmeye çalışılmıştır. Bu çalışma da daha önceki literatüre katkı sağlamayı ve bundan sonraki çalışmalara ışık tutmayı hedeflemektedir. Bu doğrultuda çalışma kapsamına bankacılık sektörü ve sermaye piyasası arasında bir ilişki olup olmadığının öğrenilmesi amaçlanmaktadır.

Türkiye’de bankacılık sektörü ve sermaye piyasası ilişkisini ele alan çalışmaların büyük bölümünde ampirik analiz yapılmadığı, analiz yapılan çalışmanın üzerinden ise yaklaşık yirmi yıl geçtiği söylenebilir. Bu yönüyle de sermaye piyasası ve bankacılık ilişkisini son dönemde ele alan güncelliği ve yöntemiyle farklılaşan çalışmalardan biri olması düşünülmektedir.

Araştırma sonucunda elde edilecek bulguların finans alanında çalışan akademisyenlere, finansal piyasalarla ilgili politika yapıcılara ve sektör profesyonellerine bilgi sunacağı değerlendirilmektedir.

##### 4.2. Literatür İncelemesi

Araştırma alanıyla ilgili literatür incelediğinde çalışmaların bir bölümünün bankacılık sektöründen sermaye piyasasına doğru bir ilişki olduğu ortaya konulmaktadır (Çetintaş ve Barışık, 2003; Arize vd., 2018; Ngo ve Le, 2020).

Bunun yanında sermaye piyasasından bankacılık sektörüne doğru bir ilişkinin varlığının tespit edildiği çalışmalar da bulunmaktadır (Bossone ve Lee, 2004; Anjali ve Thomachan, 2014; Dima vd., 2014; Tsen, 2021; Chu, 2020; Akkaynak, 2023).

Diğer taraftan sermaye piyasası ve bankacılık sektörü arasında iki yönlü ilişkinin varlığını ortaya koyan çalışmalara ulaşılabilmektedir (Pradhan vd., 2014; Kalu vd., 2020).

Son olarak bankacılık sektörü, sermaye piyasası ve bu alanların büyüme ile ilişkisini ele alan çalışmalar da literatürde mevcuttur (Yılmaz ve Kayalica, 2008; King ve Levine, 1993; Atje ve Jovanović, 1993; Beck ve Levine, 2004; Valickova vd., 2015).

### 4.3. Veriler

Türkiye'nin 2002-2012 yıllarını kapsayan aylık BİST Toplam Piyasa Değeri (sermaye piyasasını temsilen) ve Toplam Kredi (bankacılık sektörünü temsilen) verileri kullanılarak analiz gerçekleştirilmiştir. Veriler Bankacılık Düzenleme ve Denetleme Kurumu ve Borsa İstanbul internet sitelerinden temin edilmiştir.

Tablo 1: Verilerin Listesi

Değişken	Kısaltma	Açıklama
BİST Toplam Piyasa Değeri	DLOGPIYASADEGERİ	Borsa İstanbul'da işlem gören payların toplam piyasa değeri.
Toplam Kredi	DLOGKREDİ	Türkiye'de bankacılık sektörü kredilerinin toplamı.

Kaynak: BDDK, BİST

### 4.4. Yöntem

Sermaye piyasası ve bankacılık sektörü arasında ilişki olup olmadığına yönelik tasarlanan araştırma kapsamında Granger Nedensellik (1969) testi kullanılmıştır. Granger nedensellik "X'in geçmiş değerlerine bakılarak yapılan Y öngörüsü, X' dikkate alınmaksızın yapılan öngörüye göre daha başarılı sonuçlar vermesi halinde X, Y'nin Granger nedenidir" şeklinde ifade edilebilir. Granger nedensellik uygulanacak verilerin durağan olmaları veya durağanlaştırılmaları gerekmektedir (Granger 1988).

Zaman serileriyle ilgili analizlerde sonuçların sağlıklı şekilde elde edilebilmesi için kullanılan değişkenlerin birim kök testine tabi tutulması gerekmektedir. Bu doğrultuda verilerin logaritmik farkları alınmış ve bu haliyle birim kök testleri yapılmıştır. Bu kapsamda Augmented Dickey Fuller-ADF (1979) birim kök testi ve Phillips-Perron-PP (1988) birim kök testlerinden yararlanılmıştır. Birim kök testi sonuçları ile verilerin seviyede durağan oldukları tespit edildikten sonra iki değişkenle var modeli kurularak uygun gecikme uzunluğu tespit edilmiştir. Daha sonra VAR modelinin durağan olup olmadığı AR kök polinomları dikkate alınarak incelenmiş ve otokorelasyon testi de yapıldıktan sonra son olarak Granger nedensellik analizi uygulanmıştır (Köycü, 2023).

### 4.5. Bulgu ve Yorumlar

Araştırmaya konu veriler Augmented Dickey Fuller-ADF birim kök testi ve Phillips-Perron-PP birim kök testi sonuçlarına göre seviyede durağan –yani I(0)- çıkmıştır. Tablo 2 incelendiğinde ADF ve PP birim kök testi olasılık değerleri incelendiğinde sonuçların 0,01'den küçük olması nedeniyle verilerin birim köklü olduğuna dair  $H_0$  hipotezi reddedilmiştir.

Tablo 2: Birim Kök Testi Sonuçları (ADF-PP)

Değişken	ADF Testi Olasılık Değeri	PP Testi Olasılık Değeri
DLOGPIYASADEGERİ	0,00	0,00
DLOGKREDİ	0,00	0,00

Değişkenlerin seviyede durağan oldukları tespit edildikten sonra en uygun gecikme uzunluğu 5 farklı bilgi kriteriyle tespit edilmeye çalışılmıştır. Bu kapsamda Tablo 3'ten görüleceği üzere LR (Sequential Modified LR test statistic), FPE (Final prediction error) ve AIC (Akaike information criterion) bilgi kriterlerinin kesişim uzunluğu olan 6, uygun gecikme uzunluğu olarak tespit edilmiştir.

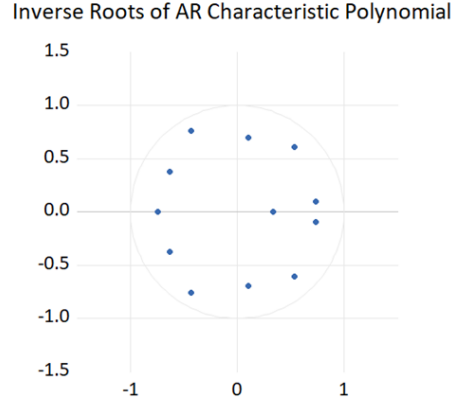
Tablo 3: Uygun Gecikme Uzunluğu Sonuçları

Lag	LogL	LR	FPE	AIC	SC	HQ
0	391.6984	NA	3.06e-06	-7.021594	-6.972773*	-7.001789
1	398.2244	12.69920	2.92e-06	-7.067107	-6.920646	-7.007692*
2	401.9698	7.153348	2.94e-06	-7.062519	-6.818417	-6.963494
3	406.8565	9.157132	2.89e-06	-7.078496	-6.736754	-6.939861
4	408.6323	3.263564	3.01e-06	-7.038420	-6.599037	-6.860175
5	411.8661	5.826732	3.05e-06	-7.024615	-6.487591	-6.806760
6	425.9538	24.87554*	2.55e-06*	-7.206375*	-6.571710	-6.948910
7	428.5769	4.537265	2.62e-06	-7.181566	-6.449261	-6.884492
8	429.8718	2.193121	2.75e-06	-7.132825	-6.302879	-6.796141

Uygun gecikme uzunluğu belirlendikten sonra 6 gecikmeli VAR (Vector Otoregresif) modeli oluşturularak modele ait AR (autoregressive) karakteristik polinomun ters kök analizi aracılığı ile modelin durağanlığı test

edilmiştir. Tablo 4'te görüldüğü gibi tüm noktalar daire içerisinde yer aldığından modelin durağan olduğu anlaşılmaktadır.

Tablo 4: AR Karakteristik Polinomun Ters Kök Analiz Sonucu



Çalışmaya otokorelasyon testi ile devam edilmiş 6. gecikmede LM testinin olasılık değeri 0,8412 çıkmış; bu değer 0,05'den büyük olduğu için otokorelasyon probleminin olmadığı sonucuna ulaşılmıştır.

Yukarıda bahsedilen testler yapıldıktan sonra Granger nedensellik analizi gerçekleştirilmiştir. Tablo 5'te görünen ve bağımlı değişken olarak kredinin seçildiği sonuçlara göre, olasılık değerinin 0,05'ten küçük olması nedeniyle Piyasa Değerinin, Kredilerin Granger nedeni olduğunu ifade etmek mümkündür.

Tablo 5: Granger Nedensellik Analizi Sonuçları-1 (Bağımlı Değişken: Kredi)

Değişken	Ki-Kare Değeri	Olasılık Değeri
DLOGPIYASADEGERİ	32,40472	0,00

Piyasa Değerinin bağımlı değişken olarak seçildiği analize ise Tablo 6'da yer verilmiş olup olasılık değerinin 0,05'tan büyük olması Kredi verisinden Piyasa Değeri verisine doğru bir Granger nedensellik ilişkisinin olmadığı sonucunu vermiştir.

Tablo 6: Granger Nedensellik Analizi Sonuçları-2 (Bağımlı Değişken: Piyasa Değeri)

Değişken	Ki-Kare Değeri	Olasılık Değeri
DLOGKREDİ	4,734241	0,5783

Çalışma sonucunda Piyasa Değeri değişkeninden Kredi değişkenine doğru bir Granger nedensellik ilişkisi tespit edilebilmişken, tam tersi yönde bir ilişkinin varlığından söz edilmemektedir. Bu sonuç araştırma hipotezinin desteklendiğini göstermektedir.

## 5. SONUÇ ve ÖNERİLER

Araştırma bankacılık sektörü ve sermaye piyasası arasında bir ilişki olup olmadığı sorusuna cevap aramak üzerine tasarlanmıştır. Bu kapsamda sermaye piyasasını temsilen "BIST Toplam Piyasa Değeri" ve bankacılık sektörünü temsilen ise "Toplam Kredi" verileri kullanılarak granger nedensellik analizi yapılmış ve sermaye piyasasından bankacılık sektörüne doğru bir granger nedensellik ilişkisi olduğu tespit edilmiştir. Bu sonuç literatürde yer alan Bossone ve Lee (2004), Dima ve diğerleri (2014); Ngo ve Lee (2020) ile uyumludur.

Sermaye piyasasıyla ilgili gerçekleştirilecek politikalar ve alınacak kararların bankacılık sektörünü etkileyebileceği dikkate alınmalıdır. Diğer yandan farklı finans sistemlerine (banka ve piyasa odaklı sistemler) ve finansal gelişim seviyelerine sahip ülkeler için de bu alanın araştırılması daha geniş kapsamlı çıkarımlar yapılabilmesine imkan verebilecektir. Bunların yanında değişken sayısının artırılması ve analize konu yıl sayısının genişletilmesi ile araştırma konusunun tekrar incelenmesi ve sonuçların test edilmesi mümkündür.

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## Borusan Limanı'nın 'Çevresel Performansı ve Yeşil Liman Uygulamaları'

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**Özet:** Küresel ölçekte yük taşımacılığının büyük bir kısmının deniz yolu taşımacılığı ile gerçekleştiği ve bu sebepten ötürü limanların dünya ticareti için önemli bir konuma sahip olduğu yadsınamaz bir gerçekliktir. Günümüzde sürdürülebilirlik kavramı her alanda olduğu gibi denizcilik endüstrisinde de kendine yer edinmeyi başarmıştır. Bu kapsamda limanlarda sürdürülebilir uygulamaları temsil eden Yeşil Liman / Eko Liman kavramı ön plana çıkmaktadır. Borusan Limanı, liman idari binalarında kullanılan aydınlatma sistemlerinden liman ya da gemi atıklarının çevreci uygulamalarla geri dönüşümüne kadar olan pek çok kalemde değişim ve dönüşümler yapmıştır. Bu araştırmanın temel amacı, Borusan Limanı'nın Yeşil Liman kapsamında çevresel performansının yıllara göre değişimini incelemektir. Söz konusu bu araştırma ile Yeşil Liman konusunda yapılan çalışmalara çeşitlilik kazandırmak ve bunu bir örnek olay üzerinde inceleyerek literatüre katkı sağlamak ayrıca hedeflenmiştir. Veriler nitel araştırma yöntemlerinden olan doküman (metin) analizi ile elde edilmiştir. Elde edilen veriler şekiller ve tablolarla desteklenmiştir. Bunun haricinde Maxqda Nitel Veri Analizi yazılımından da bu süreçte istifade edilmiştir. Borusan Limanı, faaliyetleri sonucu oluşturduğu karbon miktarını düşürmek amacıyla ekipman ve donanım iyileştirmelerinin yanında kullandığı enerjinin yenilenebilir olması için yatırımlar yapmaktadır. Geri dönüşüm tesisleri kurarak çeşitli atıkların yeniden değerlendirilmesinin yolunu açmıştır, orman varlığının korunması için de uygulamaları mevcuttur. Borusan Limanı özelinde yapılan bu araştırma, limanın yıllara göre çevresel performans görünümünü ortaya koyması bakımından önemlidir. Bunun yanında Borusan Limanı'nda sürdürülebilir enerji kullanımı açısından uygulanan faaliyetler vurgulanmıştır.

**Anahtar Kelimeler:** Deniz İşletme Yönetimi, Deniz İşletmeciliği, Yeşil liman, Doküman analizi, Çevresel Performans

### Borusan Port's 'Environmental Performance and Green Port Practices'

**Abstract:** It is an undeniable reality that most of the global freight transport is carried out by maritime transport and for this reason, ports have an important position for world trade. Today, the concept of sustainability has managed to gain a place in the maritime industry as in every field. In this context, the concept of Green Port / Eco Port, which represents sustainable practices in ports, comes to the fore. Borusan Port has made changes and transformations in many items ranging from lighting systems used in port administrative buildings to the recycling of port or ship wastes with environmentally friendly practices. The main purpose of this research is to investigate the changes in the environmental performance of Borusan Port within the scope of Green Port over the years. With this research, it is aimed to diversify the studies on Green Port and to contribute to the literature by examining it on a case study. The data were obtained by document (text) analysis, which is one of the qualitative research methods. The data obtained are supported by figures and tables. In order to reduce the amount of carbon it generates as a result of its activities, Borusan Port makes investments to ensure that the energy it uses is renewable as well as equipment and hardware improvements. It has also paved the way for the re-evaluation of various wastes by establishing recycling facilities, and there are also practices for the protection of forest assets. This research specific to Borusan Port is important in terms of revealing the port's environmental performance outlook over the years. In addition, the activities implemented in Borusan Port in terms of sustainable energy use are emphasised.

**Key Words:** Maritime Business Management, Maritime Management, Green port, document analysis, Environmental Performance

#### 1. GİRİŞ

Küresel anlamda yük taşımacılığının büyük bir kısmı deniz yolu taşımacılığıyla gerçekleştirilmektedir. Bu durum göz önüne alındığında limanlar dünya ticareti için önemli bir noktada kendilerine yer edinmişlerdir. Limanları; buldukları bölge ya da bölgeleri küresel sisteme entegre eden, yüke ve gemiye etkin bir şekilde hizmet sağlayan, kara ve deniz tesislerinin yer aldığı, ticari faaliyetlerin gerçekleştiği büyük birer ekosistem olarak tanımlamak mümkündür (Danışman ve Özalp, 2016). Deniz taşımacılığı faaliyetleri, iki önemli majör unsur tarafından gerçekleştiğini söylemek mümkündür. Bu unsurlar: gemi ve limandır. Gemiler, hem bayrak devletinin hüküm ve uygulamalarını hem de uluslararası mevzuatların gerekliliklerine uymak zorundadırlar. Limanlar ise bağlı oldukları ülkelerin hüküm ve kurallarına göre hizmetlerini yürütmektedirler (Akın, 2020).

Denizcilik sektöründe sürdürülebilir büyüme önemli olduğu her platformda dile getirilmektedir. Brundtland raporunda sürdürülebilir büyüme; gelecek nesillerin gereksinimlerini giderme kabiliyetinden taviz vermeden bugünün mevcut ihtiyaçlarını karşılamaktır (Jastrzabek, vd. 2018). Denizcilik sektörünün önemli bir parçası olan liman işletmelerinde sürdürülebilirlik bakımından önem verilmesi gereken bazı hususlar mevcuttur. Bu hususlar:

enerji yönetimi, atık yönetimi, ekipman yönetimi, iş güvenliği ve sosyal çevre ile ilişki yönetimi şeklinde belirtilebilir. Günümüzdeki ve gelecekteki muhtemel ihtiyaçları giderirken ilgili paydaşların menfaatlerini etkin bir şekilde karşılayabilen limanlar sürdürülebilir limanlar olarak tanımlanması mümkündür (Aregal vd., 2018). Sürdürülebilir liman konsepti “Yeşil Liman” etiketi ile öne çıkmaktadır (Alnıpak ve Yorulmaz, 2019). Yeşil Liman (Ekolojik Liman / Eko Liman) çevre dostu uygulamaların tüm liman operasyon süreçlerine entegre edilerek kaynakların sürdürülebilirliğini sağlamaktır (Lam ve Van, 2012). Yeşil Liman konseptinin temel amacı çevreye duyarlı faaliyetlerde bulunmak ve limanlar arasında çevre bilincinin artması için elde edilen deneyim ya da bilginin yaygınlaşmasına ön ayak olmaktır.

Avrupa Deniz Liman Örgütü (ESPO) tarafından yayımlanan raporda limanların çevresel öncelikleri yıllara göre sıralanmıştır. Bu rapora göre 2022 yılında ehemmiyeti artan kıstasların önem derecesine göre sıralanışı şu şekildedir: iklim değişikliği, hava kalitesi, enerji verimliliği, gürültü, su kalitesi, yerel toplumla ilişki, gemi atıkları, liman atıkları, liman gelişimi ve tarama operasyonları şeklindedir (ESPO, 2022). Diğer yıllara ait sıralamalar ise tablo 1’de görülmektedir.

Tablo 1: Limanların En Önemli 10 Çevresel Önceliği

	2019	2020	2021	2022
1	Hava Kalitesi	Hava Kalitesi	Hava Kalitesi	İklim Değişikliği
2	Enerji Tüketimi	İklim Değişikliği	İklim Değişikliği	Hava Kalitesi
3	İklim Değişikliği	Enerji Verimliliği	Enerji Verimliliği	Enerji Verimliliği
4	Ses	Ses	Ses	Ses
5	Yerel Toplumla İlişkiler	Yerel Toplumla İlişkiler	Yerel Toplumla İlişkiler	Su Kalitesi
6	Gemi Atığı	Gemi Atığı	Su Kalitesi	Yerel Toplumla İlişkiler
7	Liman Atıkları	Su Kalitesi	Gemi Atığı	Gemi Atığı
8	Arazi ile İlgili Liman Gelişimi	Liman Atıkları	Tarama Operasyonları	Liman Atıkları
9	Tarama Operasyonları	Tarama Operasyonları	Arazi ile İlgili Liman Gelişimi	Arazi ile İlgili Liman Gelişimi

Kaynak: ESPO, 2022.

Limanların çevresel önceliklerinin yıllara göre dağılımının gösterildiği tabloda, 2022 yılı öncelikleri Maxqda 24 nitel veri analiz yazılımı kullanılarak bir kelime bulutu oluşturulmuştur. Boyutlandırma tekrar sıklığına göre yapılmıştır. Minimum tekrar sıklığı 1 olarak belirlenmiştir. Boyutu diğerlerine göre daha büyük olan kelimeler merkezde olacak şekilde kelime bulutu şekillendirilmiştir. İle ve ilgili kelimeleri hariç listesine eklenmiştir ve analiz kapsamında değerlendirilmemiştir. Analiz sonucu doğrultusunda liman ve kalite kavramları öne çıkmaktadır. Bu durum şekil 1’de görülmektedir.



Şekil 1: Çevresel Öncelikler

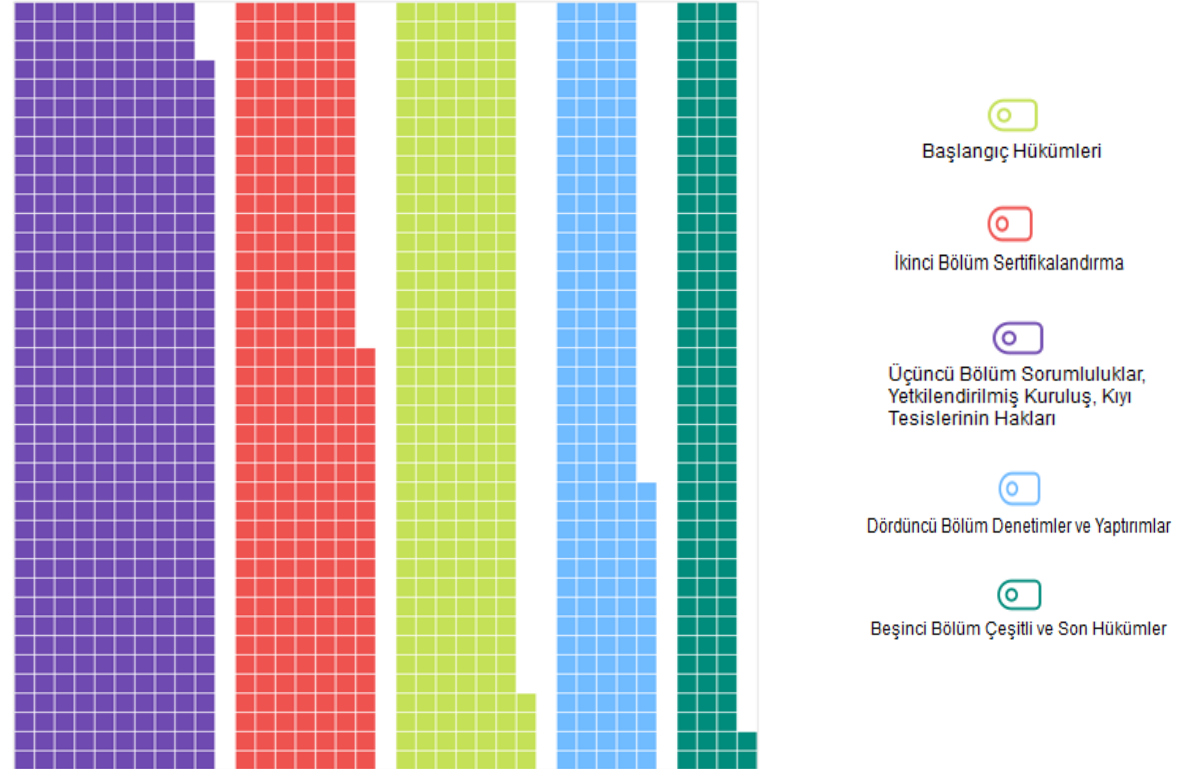


Türkiye’de Yeşil Liman unvanına sahip olabilmek için bazı gerekliliklerin karşılanması gerekmektedir. Aşkın (2023) yapmış olduğu çalışmada bir limanda bulunması gereken şartların neler olması gerektiğini şu şekilde sıralamıştır;

- Yeşil Liman projesi, bir zorunluluk dâhilinde hayata geçirilen bir proje değildir. Liman işletmelerinin kendi kararları doğrultusunda elde ettikleri bir etikettir.
- Yeşil Liman unvanına edinmek isteyen söz konusu liman işletmesi ilk olarak geçerli/geçici işletme izni belgesine sahip olması gerekmektedir.
- Liman işletmesi, uluslararası sefer yapan gemilere hizmet veren liman işletmelerine yönelik olarak oluşturulan, “Uluslararası Gemi ve Liman Tesisi Güvenlik (ISPS) Koduna” sahip olmalıdır.
- ISO 9001, ISO 14001 ve OHSAS 18001 kalite sistemlerine sahip olmalı ve entegre yönetim sistemini kurmalıdır.

Yeşil Liman Sertifikası Yönetmeliği, 18 Kasım 2023 tarihinde Resmî Gazete’ de yayınlanarak güncellenmiştir (Yeşil Liman Sertifikası, 2023). Bu yönetmeliğin içeriği Maxqda yazılımı ile şekil 2’deki gibi metin portresi oluşturulmuştur. Yönetmeliğin içeriği; başlangıç hükümleri, sertifikalandırma, sorumluluklar, denetimler ve yaptırımlar, son olarak çeşitli ve son hükümler olarak şekillendirilmiştir.

Şekil 2: Mevzuat Portresi

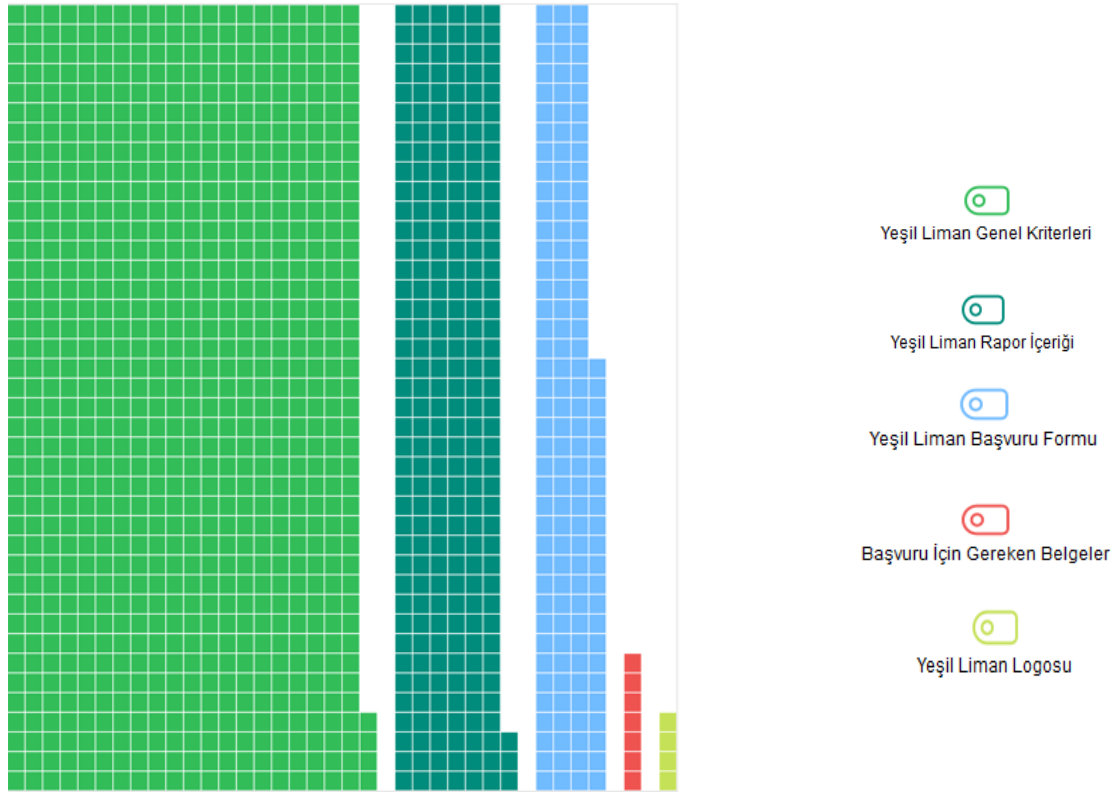


Kaynak: Resmi Gazete

Belge portresinde beş adet farklı renkle görselleştirilmiş sütunlar görünmektedir. Renkli sütunların uzunlukları ile genişlikleri, yönetmelik kapsamında ilgili bölümlerin içeriği ile doğru orantılıdır. Her bir renk, Maxqda yazılım programında ilgili belgenin alt kodlarını ifade etmektedir. Başlangıç hükümlerinde yönetmeliğin amacı, kapsamı, dayanağı ve tanımlar yer almaktadır. İkinci bölümde; sertifika başvurusu ve düzenlenmesine, sertifikanın yenilenmesi ve iptaline ilişkin hususları kapsamaktadır. Üçüncü bölüm de sorumluluklar, yetkilendirilmiş kuruluş ve kıyı tesislerinin hakları adlı başlık yönetmelik kapsamında en fazla alanı kapsayan konu olmuştur. Bu başlık altında kıyı tesislerinin sorumluluklarına, yetkilendirilmiş kuruluşlara ve kıyı tesislerinin haklarına yer verilmiştir. Dördüncü bölümde denetimler ve yaptırımlara ilişkin konulara değinilmiştir. Beşinci bölüm çeşitli ve son hükümler bu başlık altında değerlendirilmiştir ve yönetmelik kapsamında en az bahsedilen bölümü oluşturmaktadır.

Yönetmelikle birlikte Yeşil Liman kavramı ile ilgili ekler paylaşılmıştır. Bu ekler tek bir dosya içinde bulunmaktadır. Maxqda yazılımı kullanılarak bu eklerin bulunduğu ilgili dosyanın portresi hazırlanmıştır. Bu durum şekil 3'te ifade edilmiştir. Paylaşılan ek dosyanın içeriğinde; başvuru için olması gereken belgeler, yeşil liman başvuru formu, yeşil liman rapor içeriği, yeşil liman genel kriterleri ve yeşil liman logosu sırasıyla yer almaktadır.

Şekil 3: Ek Portresi



Kaynak: Resmi Gazete

Şekil 3'te görünmekte olan belge portresinden anlaşılacağı üzere paylaşılan ekte en fazla yeri Yeşil Liman genel kriterleri almaktadır. Bu kısımda liman idari binalarında ve liman sahasında karşılanması gereken hususlardan, liman adına oluşturulacak hatıra ormanına kadar pek çok kritere yer verilmiştir. İkinci olarak Yeşil Liman rapor içeriği en fazla yeri alan ikinci başlıktır. Bu başlık altında yer alan alt başlıklar şu şekildedir: üst politika beyanı, sorumluluklar ve kaynaklar, çevre yönetimi; enerji, doğal kaynakların korunması ve kullanımı, sera gazları yönetimi, kirliliğin önlenmesi, atık yönetimi, enerji yönetimi (yenilenebilir enerji üretimi/tüketimi), tehlikeli yük yönetimi, en iyi uygulamalar ve sosyal sorumluluk projeleridir. Bunların haricinde başvuru formu, başvuru için gereken belgeler ve Yeşil Liman logosu yer almaktadır.

Günümüzde çevre bilinci ve sürdürülebilirlik kavramları oldukça önemli bir konu olarak karşımıza çıkmaktadır. Bu durum pek çok alanda sürdürülebilirlik merkezinde dönüşümü öncelikli hale getirmiştir. Sürdürülebilirlik ve çevre bilincinin limancılık sektörüne yansması ise Yeşil Liman başlığı altında şekillenmektedir. Dolayısıyla bu araştırmanın gerekçesi ve ana problemi Borsan Limanı'nın faaliyetleri sonucu oluşturduğu karbon salınımının yıllar bazında değerlendirilmesidir. Bunun yanında Yeşil Liman kapsamında yapmış olduğu projelerin neler olduğu da bu araştırma kapsamında değerlendirilmiştir. Bu araştırma ile ülkemizdeki yeşil limanlardan biri olan

Borusan Limanı'nın çevresel performansı ve Yeşil Liman uygulamalarındaki faaliyetlerinin incelenmesi amaçlanmıştır. Yapılan bu araştırma, örnek bir vaka incelemesidir. Dolayısıyla Yeşil liman olma hedefi taşıyan liman işletmeleri için bu durum güncel hâliyle işlenmiştir. Yapılan bu araştırmanın, Yeşil liman farkındalığının yaygınlaşmasına pozitif yönde katkı sağlaması beklenmektedir.

### 1.1. Literatür Taraması

Akademik çalışmalarda limanlarda sürdürülebilirlik ve yeşil liman kavramları hakkında bazı çalışmalar yapılmıştır. Yapılan bu çalışmalardan birkaçı aşağıda yer almaktadır.

Akın, 2020'de yeşil limanlarda performans kriterlerinin değerlendirilmesi üzerine nicel bir araştırma yapmıştır. Bulanık Analitik Hiyerarşi Süreci metodundaki Chang'ın geliştirmiş olduğu analiz yönteminden yararlanmıştır. Türkiye limanlarının çevresel önceliklerinin bulanık AHS analizine göre ana kriterlerin önem sırası şu şekildedir: atık yönetimi, çevresel kalite, enerji ve kaynak kullanımı, yaşam alanı kalitesi ve yeşil alan, sosyal katılım şeklinde sıralanmıştır. Alt ana kriterlerin önem sırası ise şu şekildedir: tehlikeli atık elleçleme, su kirliliği, hava kirliliği, toprak ve sediment kirliliği, enerji kullanımı, liman personeli eğitimi, su tüketimi, genel atık elleçleme, toplumsal tanıtım ve eğitim, gürültü kirliliği biçiminde sıralandığı analiz sonucunda görülmektedir (Akın, 2020).

Lam ve Li, 2019'da çalışmalarında, dünyanın büyük limanlarının yeşil pazarlama durumunu araştırmayı amaçlamışlardır. Yeşil pazarlama teorilerine göre bu limanların yeşil pazarlama durumları stratejileri, yapıları ve işlevleriyle yansıtılmakta olduğunu tespit etmişlerdir. Çapraz vaka analizi yöntemi kullanarak, kıyaslama için çeşitli limanlardaki modelleri ve eğilimleri belirlemek ve dolayısıyla yeşil pazarlama yönelimini türetmek için gerçekleştirildiğini belirtmişlerdir. Çalışmalarının sonucunda, 30 vakanın yarısından fazlasının aktif olarak yeşil pazarlamayla meşgul olduğunu göstermiştir. Çalışmada ayrıca limanlar stratejilere daha çok, yapılara ve işlevlere daha az odaklanır şeklinde bir görüş beyan etmişlerdir. Limanların yeşil pazarlama çabalarındaki üç temel unsuru birbirine bağlaması çalışmalarında tavsiye edilmektedir. (Lam ve Li, 2019).

Sanrı, 2021'de 2009-2020 yıllarını kapsayan yeşil limanlar üzerine içerik analizi yapmıştır. Bu doğrultuda 2009-2020 yılları arasında yeşil liman konusuna odaklanan akademik makaleler incelemiştir. 2009-2020 yılları arasında akademik dergilerde yayınlanan toplam 23 yayın incelemenin odağına alınmıştır. Denizcilik sektöründe sürdürülebilirliğin önemi göz önünde bulundurulduğunda limanlarda bu konuya olan ilginin özellikle 2015 yılından sonra arttığı gözlemlenmiştir. Rotterdam Limanı'nın güneş enerjisi, rüzgâr enerjisi, jeotermal enerjisi ve biyokütle enerjisi gibi sürdürülebilir enerji kaynaklarını kullanarak karbondioksit emisyonunu azaltmayı hedeflemektedir. Çalışma neticesinde liman ulaştırma ağı bakımından ve çevresel uygulamaların etkinliği bakımından en gelişmiş limanlar: Rotterdam, Los Angeles ve Hamburg limanları olmuştur (Sanrı, 2021).

Keske, 2021'de yeşil liman olabilme potansiyelleri açısından limanların ANP-BOCR yöntemi ile değerlendirilmesi konusunda bir çalışma yapmıştır. Buna göre: Yeşil liman performans ölçütleri arasında en fazla öneme sahip kriterin Hava Kirliliğini Azaltmak olduğu tespit edilmiştir (Keske, 2021).

Kaya, 2022'de sürdürülebilir kalkınma için yeşil limanlar konusunu ele almıştır örnek çalışma olarak ise Samsun Port'u incelemiştir. Çalışmasında SWOT analizinden yararlanılarak güçlü ve zayıf yönleri vurgulanmıştır. Ayrıca Samsun Port'un fırsatları ve tehditleri ortaya konulmuştur (Kaya, 2022).

Parhamfar vd., 2023'te yaptıkları: Yenilenebilir enerji teknolojilerinin yeşil limanlarda uygulanmasının teknik ve ekonomik perspektifler üzerine bir çalışma yapmışlardır. Makale, yeşil liman kavramını incelemekte ve yenilenebilir enerji teknolojilerini bu tesislere entegre edilmesinin fizibilitesini araştırarak limanlardaki yenilenebilir enerji teknolojilerinin uygulamalarının potansiyelleri, zorlukları ve ekonomik analizini yapmışlardır. Yenilenebilir enerji teknolojilerinin denizcilik sektöründe sürdürülebilir hedeflere ulaşılmasına önemli ölçüde katkıda bulunabileceğini ve daha verimli ve çevre dostu limanların oluşturulmasının önünü açabileceğini göstermektedir (Parhamfar vd, 2023).

Lin vd., 2022' de yapmış oldukları çalışmada: Yeşil Liman araştırmalarının gelişimini ortaya koyan bir bilgi haritalama analizi çalışması yapmışlardır. Bu çalışmada üç tür ortak atıf analizi gerçekleştirilmiştir. İlk olarak, odak alanındaki atıfların yapısını anlamak için atıfta bulunan referansların ortak atıf analizi yapılmıştır. İkinci olarak, atıf kayıtlarını tahmin ederek etkili yazarları belirlemek için atıf yapılan yazarların ortak atıf analizi yapılmıştır. Son olarak, yayınlarda sık görülen kelimeleri analiz etmek ve tematik ilişkileri anlamak için eş oluşum analizi yapmışlardır. Buna göre yapılan birinci araştırmada: 1992-2021 yılları arasında yayınlanan makale sayısında bir artış olduğunu gözlemlenmiştir, yeşil liman araştırmalarının hızla arttığını ve güncel bir konu olmaya devam edeceği görülmüştür. Yapılan ikinci analiz sonucunda: 81 ülke ya da bölgeden yeşil liman

araştırması yapıldığı görünmektedir. Çin, Amerika Birleşik Devletleri ve İtalya en fazla araştırmaya sahip üç ülkedir. Ayrıca Amerika Birleşik Devletleri, İtalya ve Birleşik Krallık en çok makale yayınlayan ülkeler olmuştur. Araştırma üzerinde en büyük etkiye sahip üç ülke. Kurumlarla ilgili olarak, Şanghay Denizcilik Üniversitesi, Hong Kong Politeknik Üniversitesi ve Dalian Üniversitesi Teknoloji Enstitüsü en çok makale yayınlayan üç kurum oldukları saptanmıştır. Üçüncü araştırmanın çıktıları ise şu şekilde olmuştur: Yeşil liman araştırma alanındaki yazarlar ve makaleler. Eşleştirme analizine dayanarak yeşil liman alanındaki en önemli makaleler Corbett JJ., Eyring V. ve Lam JSL. Diğer etkili yazarlar arasında Liu H. Styhre L. Winkel R. ve Davarzani H. bulunmaktadır. Jihong Chen, Wenyuan Wang ve Yan Zhang'ın merkezde olduğu ilk üç büyük paylaşımcı küme, Beatriz Tovar ve Tony R Walker'ın merkezde olduğu daha küçük paylaşımcı kümeler tespit edilmiştir. Tüm bu yazarlar çalışmalarlarıyla yeşil liman araştırmalarının temelini oluşturmuşlardır (Lin, 2022).

Alzahrani, 2022 yılında yapmış olduğu çalışmada: Suudi limanlarında çevresel sürdürülebilirliğe ulaşmak için yeşil liman stratejilerinin uygulanması hakkında çalışma yapmıştır. Bu çalışmada veriler yarı yapılandırılmış görüşmeler yoluyla toplanmıştır ve SWOT analizinin sistematüğinden yararlanılarak dağınık bilgiler anlamlılık kazanmıştır. Buradan hareketle çıkarımı yapılan 4 adet yargı şu şekildedir.

- Yeşil Liman stratejisinin uygulanması ve sürdürülebilirlik kavramının anlaşılması büyümeyi sağlar.
- Bu çalışma ile, liman operasyonlarının sonucu olan çevresel sorunlara ilişkin kritik parametreleri (hava kirliliği, su kirliliği, gürültü kirliliği vb.) ortaya koyan ve bunlara ilişkin çözümleri ya da alınması gereken tedbirleri ortaya koymaktadır.
- Suudi Arabistan Krallığı'nın 2030 vizyonu ve deniz taşımacılığı faaliyetlerinin geliştirilmesine yönelik gelecekteki stratejik planlar gözden geçirilmiştir. Bu çalışma, Avrupa'nın en önde gelen ticari ve endüstriyel limanlarına odaklanmıştır.
- Bu çalışma aynı zamanda çevresel öncelikleri de tanımlamaktadır. Suudi limanlarında: akan Hava kalitesi, iklim değişikliği, enerji verimliliği, gürültü, deniz biyolojisi ve ekosistemi, gemi atıkları, çöp/ liman atıkları, su kalitesi gibi öncelikleri de göz önüne sermektedir (Alzahrani, 2022).

Pineda vd., 2020'de Kolombiya'da yeşil limanların yapılandırılması için ana faktörlerin analizi başlığı altında bir çalışma yürütmüşlerdir. Bu çalışma boyunca yarı yapılandırılmış görüşmeler baz alınarak bir vaka çalışması gerçekleştirilmiştir. Buradan hareketle: Kolombiya'da yeşil limanlar için özel bir politika bulunmadığından, temiz teknolojilere yapılan yatırımlar, liman personelinin sürdürülebilirlik konusunda eğitilmesi ve çevresel indikatörlerin izlenmesi gibi daha önemli faktörlere odaklanmak gerekmektedir; bu faktörler bazı limanların yeşil liman olarak sertifikalandırılmasını ve iyi çevresel uygulamaları gösteren adaylıklar ve izinler almasını sağlamıştır (Pineda, 2020).

Jastrzabek vd., 2018 yılında Polonya deniz limanları ve yeşil liman konsepti üzerine bir çalışma yapmışlardır. Buradaki temel amaçları liman temsilcilerinin yeşil liman kavramıyla ilgili farkındalık düzeyini saptamak temel amaçlarıdır. Anket çalışması yapılmıştır bu doğrultuda amaçlı örneklemenin kullanılmasına karar vermişlerdir. Limanda sürdürülebilir kalkınma konularıyla ilgilenen toplam 18 çalışanı içeren bir veri grubu oluşturulmuştur. Polonya'da üç limanda yapılan anketin sonuçları ile en son EcoPorts çalışmasının sonuçlarının karşılaştırıldığında, limanların yeşillendirilmesine yönelik kıstasların uygulanmasındaki öncelikler ve hedeflerde bazı önemli farklılıklar olduğunu göstermektedir. Hem limanda hem de gemiler tarafından üretilen atıkların azaltılmasına yönelik faaliyetlerin değerlendirilmesi farklılıklar gözlemlenmiştir. Bu konu EcoPorts ağının ilk 10 önceliği arasında yer alırken, Polonya limanları çalışmasında yer almamaktadır. Yapılan ankette, liman temsilcilerinin %83'ünün sürdürülebilir kalkınma kavramıyla karşılaştığını görülmektedir. Daha sonra, katılımcılara Yeşil Liman kavramı hakkındaki bilgileriyle ilgili bir soru sorulmuştur. Katılımcıların %61'i bu kavramla tanıştıklarını, %11'i tam olarak ne hakkında olduğunu bildiklerini, %50'si ise ne hakkında olduğunu bilmedikleri anket sonuçlarıyla ölçülmüştür (Jastrzabek vd., 2018).

Maxqda nitel veri analizi yazılımı ile yukarıdaki literatür çalışmalarının kelime bulutu ile gösterimi şekil 4'te görünmektedir. Bu gösterimde boyutlandırma tekrar sıklığına göre şekillendirilmiş olup boyutu diğer kelimelere göre daha büyük olan sözcükler merkezde olacak şekilde kelime bulutu yapılmıştır.

#### Şekil 4: Literatür Taraması



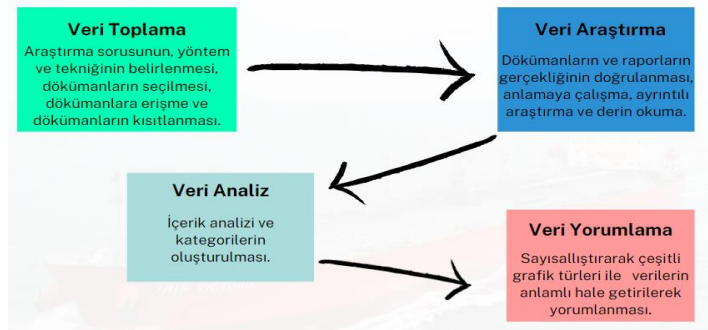
Şekil 4'te Maxqda yazılımının MAXDİCTO sekmesi üzerinden kelimelerin frekans analizleri gerçekleştirilmiştir. Bu noktada bazı kelimeler (ve, veya, ya da, ile gibi) hariç listesine alınmıştır. Minimum tekrar sıklığı 3 olarak belirlenmiştir. En çok tekrar eden 62 kelime kullanılarak şekil 4'teki kelime bulutu oluşturulmuştur. Liman (57), Yeşil (49), çevresel (27), limanlar (20), limanların (14), sürdürülebilir (12) ve çevre (9) kelimeleri en çok tekrar eden kelimelerdir. Türkçe'nin sondan eklemli dil kümesinde yer almasından dolayı çevresel, limanların ve sürdürülebilir gibi kelimeler de frekans analizine tabii tutulmuştur.

## 2. MATERYAL VE YÖNTEM

Yapılan araştırmada Borusan Limanı'nın, Yeşil Liman olma yolunda kaydettiği adımların neler olduğunu belirterek Ulaştırma ve Altyapı Bakanlığı tarafından verilen "Yeşil Liman / Eko Liman" sertifikasını alma sürecini ele almıştır. Bu aşamada veriler nitel araştırma tekniklerinden biri olan Doküman / Metin incelemesi ile sağlanmıştır. Doküman incelemesi: Yazılı belge ve metinlerin sistematik bir şekilde analiz edilmesi için kullanılan bir nitel araştırma tekniğidir. Doküman incelemesi, basılı ve elektronik kaynaklar dâhil olmak üzere tüm belgeleri gözden geçirmek ve değerlendirmek için kullanılan düzenli bir yöntemdir. Doküman analizinin önemli işlevlerinden biri de bir değişim ve gelişimin rahatlıkla gözlemlenebilmesini kolaylaştırmasıdır (Kıral, 2020). Sanrı, 2021 yılında Yeşil limanlar üzerine bir içerik analizi yapmıştır. Yaptığı araştırma 2009-2020 yıllarını kapsamaktadır.

Bu araştırmada, Borusan Limanı ve Borusan Lojistiğin istatistiksel duyurular, broşürler ve raporlarının incelenmesi ile Borusan Limanı'nın çevresel performansının 2020 – 2022 yılları arasındaki değişimi gözlemlenmeye çalışılmıştır. Araştırma sürecinde ilk olarak araştırma sorusu belirlenmiştir. Akabinde araştırma yöntemleri değerlendirilmiş ve Doküman Analizi araştırmanın yöntemi olarak belirlenmiştir. Araştırma konusu kapsamında ilgili verilere ulaşılmış ve uygun olan veriler değerlendirme kapsamına alınmıştır. Ulaşılan bilgilerin anlaşılabilirliğini optimum seviyeye ulaştırmak için ayrıntılı ve derin okuma gerçekleştirilmiştir. Bu esnada veriler Yeşil Liman kavramı ve liman işletmelerinde sürdürülebilirlik parametreleri dâhilinde iki ana kategoriye ayrılmıştır. Elde edilen bilgiler çeşitli tablo ve grafiklerle açıklanmıştır. Bu araştırma süreci şekil 5'te resmedilmiştir.

Şekil 5: araştırma süreci



### 3. BULGULAR

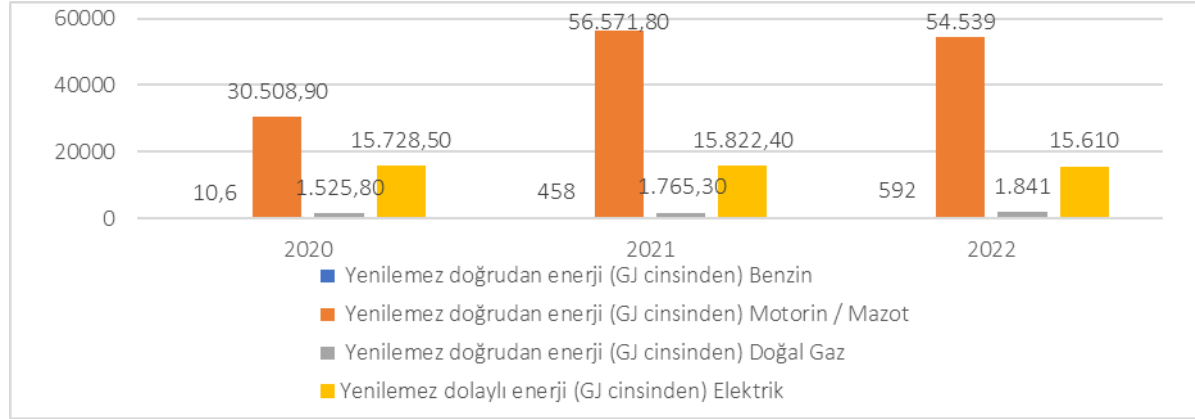
#### 3.1. Borusan Limanı Çevresel Performans Göstergeleri

Bu başlık dahilinde Borusan Limanı'nın; enerji, emisyon değerleri, türüne göre atık miktarları, çekilen toplam su hacmi ve atık su deşarjı gibi faktörler değerlendirilecektir.

##### 3.1.1. Yenilemez Doğudan ve Dolaylı Enerji Değerleri

Borusan Limanı'nın 2020 – 2022 yılları arasında; benzin, motorin / mazot, doğal gaz ve elektrik giderleri Gigajoule (Gj) cinsinden şekil 6'da gösterilmiştir. Benzin kullanımına bakıldığında 2020 yılında 10,6 Gj düzeyindedir. 2022 yılına gelindiğinde ise bu rakam benzin kullanımında 592 Gj düzeyine çıkmıştır. Motorin kullanımına bakıldığında ise 2020 yılında 30.508 Gj düzeyinde bir kullanım söz konusu olmuştur. Bu durum 2022 yılında 54.539 Gj seviyesini görmüştür. Doğal Gaz kullanımı ise 2020'de 1.525 seviyesinden 1.841 Gj seviyesine çıkmıştır 2022 yılı kullanımlarında. Elektrik kullanımına bakacak olursak 2020 yılında 15.728 Gj seviyesini görmüştür. Bu durum 2022 yılında 15.610 Gj'lük kullanım değerini yakalamıştır.

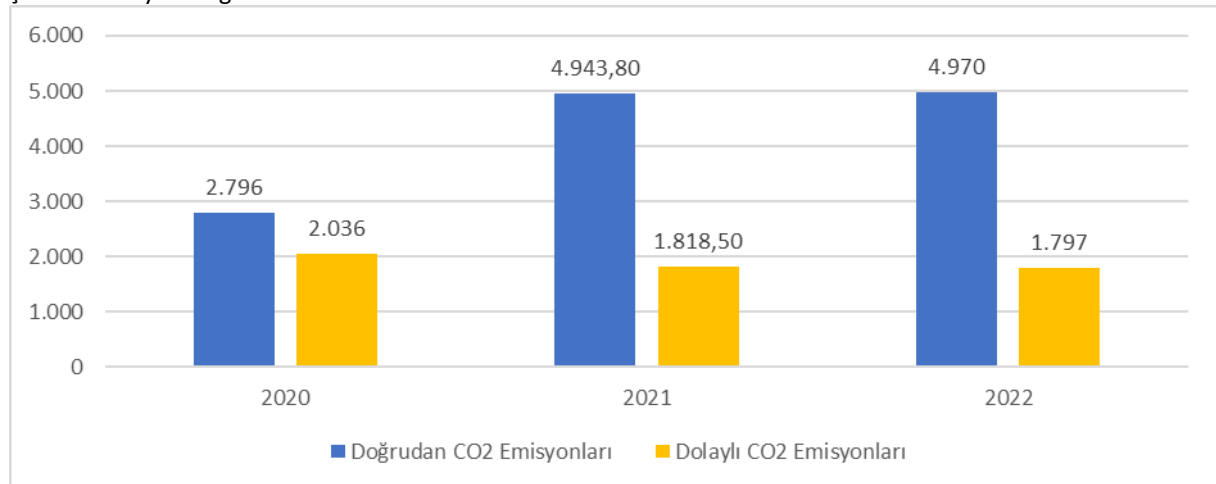
Şekil 6: Enerji Değerler



##### 3.1.2. Emisyon Değerleri

Borusan Limanı 2020 – 2022 yılları arasında gerçekleşen doğrudan ve dolaylı emisyonları şekil 7'de gösterilmektedir. Karbon ayak izi noktasında, Borusan Limanı ürün ya da hizmetlerini sunarken enerji ve fosil kaynak kullanımı sonucu ortaya çıkan sera gazı emisyonlarının ton cinsinden karşılık geldiği karbondioksit (tCO<sub>2</sub>), şekil 7'de görünmektedir. Dolaylı karbondioksit emisyon değerlerinde bir düşüş gözlemlenmektedir. Doğrudan karbondioksit emisyon değerlerinde ise söz konusu yıllarda artış söz konusudur.

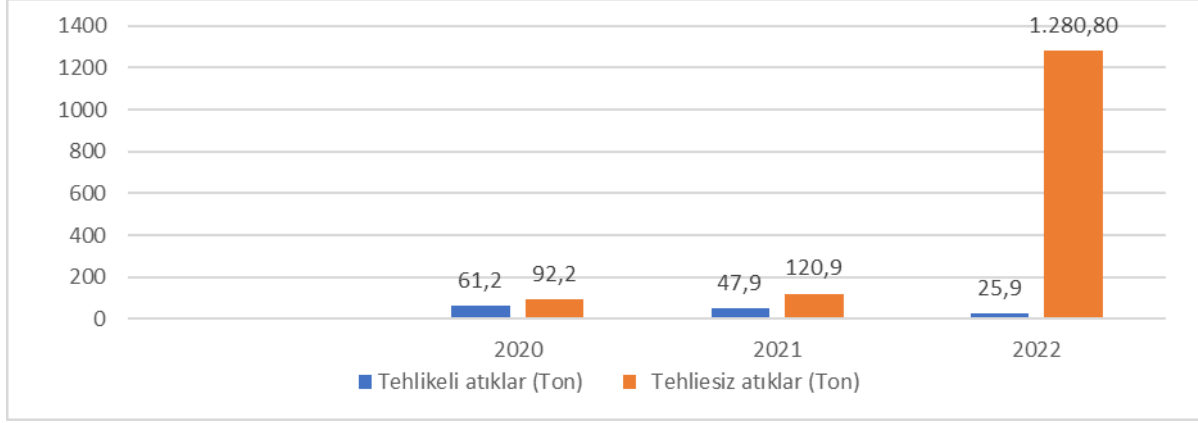
Şekil 7: Emisyon Değerleri



### 3.1.3. Türüne Göre Atık Miktarları

Tehlikeli atıklar başlığı altında Borusan Limanı incelendiğinde durum şekil 8’deki gibidir. Ton cinsinden atıkların miktarlarındaki değişim verilmiştir. Tehlikeli atıklar 2020 – 2022 yılları arasında düşüş trendinde olduğu görülmektedir. Tehlikesiz atıklar noktasında ise 2022 yılında ciddi bir artış gözlemlenmiştir.

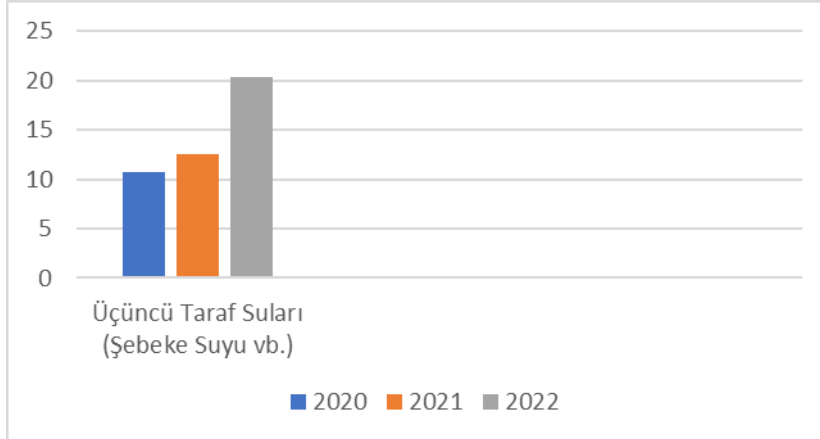
Şekil 8: Atık Türüne Göre Miktarı



### 3.1.4. Çekilen Toplam Su Hacmi

Borusan Limanında alınan toplam su miktarı Megaton cinsinden şekil 9’da belirtilmiştir. Yer altı suları ve yağmur suyu bakımından çekilen su miktarı liman raporlarında “mevcut değil şeklinde kodlanmıştır.” Bu sebepten ötürü sadece üçüncü taraf verileri derlenmiştir. 2020 yılında çekilen su miktarı 10,7 megalitredir. 2021 yılında bu değer 12,5 megalitre ve 2022 yılına gelindiğinde bu değer 20,3 megalitreleri bulmuştur.

Şekil 9: Toplam Su Hacmi

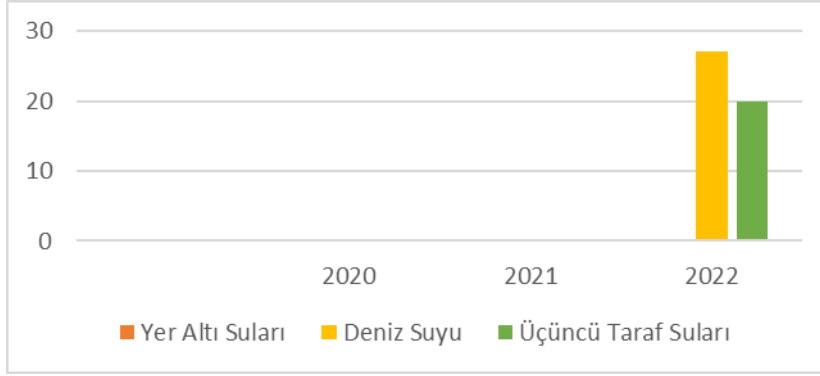


### 3.1.5. Atık Su Deşarjı

Borusan Limanı’nda edilen atık su deşarjı verileri üç alanda incelenmiştir. Bunlar: Yer altı suları, deniz suyu ve üçüncü taraf suları şeklinde kategorize edilmiştir. Yer altı suları bakımından incelendiğinde son üç yıla ait veriler “mevcut değil şeklinde kodlanmıştır.” Değeri bilinen alanlar: deniz suyu ve üçüncü taraf sularıdır. Bu iki alana ait veriler ise sadece 2022 yılında bir değerlemeye uğramıştır. Bu değerlere ait durum şekil 10’da gösterilmiştir. 2022 yılında deniz suyundan 27 megalitre su deşarjı yapılmıştır. 2022 yılında üçüncü taraf sularından 20 megalitre su deşarjı yapılmıştır.

Borusan Limanı deniz sahasında gerçekleşebilecek olası bir kaza durumunda deniz kirliliği acil müdahale ekibi, absorban ve emici malzemeler ile deniz bariyeri mevcuttur. Bu ekiple birlikte Borusan Limanı kaza durumunda vakaya yönelik zaman kaybetmeden etkin müdahalelerde bulunabilmektedir (Borusan Grubu, 2022)

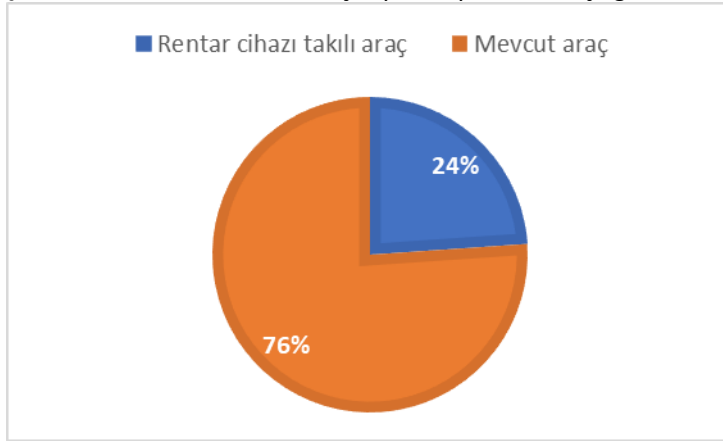
Şekil 10: Atık Su Deşarj



### 3.2. Borusan Limanı'nın da Sürdürülebilir Enerji Kullanımı Açısından Yaşanan Değişim ve Dönüşümler

Borusan Limanı makine sahasında bulunan 35 makineden 11 iş makinesine (Stacker ve Ağır çekici) Rentar yakıt tasarruf ve emisyon azaltma cihazı takılmıştır. Bu durum yüzdelik değer olarak şekil 11'de görülmektedir. Borusan Limanı'nda ilgili araç sahasında yakıt tasarruf ve emisyon azaltma cihazı takılı araç oranı yüzde 24 olmuştur.

Şekil 11. Rentar cihazı takılı araç sayısının yüzdelik karşılığı



### 3.3. Borusan Grubu'nun BM 2030 Sürdürülebilir Kalkınma Hedefleri Doğrultusunda Yapmış olduğu Proje ve Uygulamalar

Borusan Limanı, BM'nin 2030 hedefleri dâhilinde projeler gerçekleştirmektedir. Bunlardan Yeşil Liman projesiyle ilgili olanların bazıları tablo 2'de görünmektedir. Bu projeler: ağaçlandırma, çeşitli geri dönüşüm tesisleri ve ürün ya da hizmet üretimi sırasında gerçekleşen doğrudan ve dolaylı enerji ihtiyacını mümkün olduğunca çevreci yollarla elde etmeyi çalışmaktadır.

Tablo 2. BM 2030 kalkınma hedefleri (Borusan Grubu, 2022)

BM 2030 sürdürülebilir Kalkınma Hedefleri	Proje ve Uygulamalar
SKH 11. Sürdürülebilir şehir ve yaşam alanları	Yeşil Liman Projesi
SKH 13. İklim eylemi	Üretimde Doğal Gaz ve Elektrik kullanımı, Ağaçlandırma Çalışmaları
SKH 14. Sudaki yaşam	Atık Azaltma ve Bertaraf projeleri
SKH 15. Karsal yaşam	Atık Azaltma ve Bertaraf projeleri ve Ağaçlandırma Çalışmaları



### 3.4. Kalite ve Entegre Yönetim Sistemleri

Gemlik'te bulunan Borusan Limanı, 2017 yılında çevresel sürdürülebilirlik çalışmaları kapsamında Yeşil/Eko Liman Belgesi'ni almaya hak kazanarak; Yeşil/Eko Liman statüsüne ulaşan ilk limanlardan biri olmuştur. Borusan Limanı'nın 2022 yılına geldiğinde sahip olduğu kalite ve entegre yönetim sistemleri yetkinlikleri tablo 3'te gösterilmiştir

Tablo 3. Kalite ve Entegre Yönetim Sistemleri (Borusan Grubu, 2022)

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ISO 9001 Kalite Yönetim Sistemi
ISO 14001 Çevre Yönetim Sistem
ISO 10002 Müşteri Memnuniyeti Yönetim Sistemi
ISO 14064 Sera Gazı Doğrulaması
ISO 17024 Personel Akreditasyonu Standartı
ISO 27001 Bilgi Güvenliği Yönetim Sistemi
ISO 45001 İş Sağlığı ve Güvenliği Yönetim Sistem
ISO 50001 Enerji Yönetim Sistemi
Tehlikeli Madde Uygunluk Belgesi
Yeşil Liman Belgesi

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## 4. TARTIŞMA VE SONUÇ

Limanlar denizcilik endüstrisindeki konumları itibariyle endüstriye yön veren önemli iş sahalarıdır. Limanlar fonksiyonlarını sorunsuz bir şekilde gerçekleştirebilmeleri için büyük miktarda enerji kullanımına ihtiyaç duyarlar. Kullanılan bu enerjinin büyük bir kısmını yenilenemeyen enerji kaynakları oluşturmaktadır. Bu noktada limanlar sürdürülebilir enerji kullanımını oluşturarak ya da geliştirerek çevre üzerindeki negatif yönlü etkisini azaltma eğilimindedirler.

Denizcilik faaliyetlerinin temel üç yapı taşından biri olan liman sahaları; Yeşil Liman standartlarıyla dönüşmeye başlamasıyla birlikte sürdürülebilir denizcilik faaliyetlerinin oluşmasına zemin hazırlayacaktır. Dünya genelinde karbon salınımını mümkün olan en düşük seviyeye çekebilmek için, BM'nin küresel ölçekte büyük projeleri ve hedefleri mevcuttur. Dolayısıyla önümüzdeki yıllar içerisinde sürdürülebilirlik çerçevesinde kapsamlı dönüşümlere devletlerin ve işletmelerin hazırlanması gerekmektedir. Liman işletmeleri açısından konuya bakıldığında, müşterilerine sürdürülebilir ürün ya da hizmet sunabilen limanlar rekabet üstünlüğüne sahip olacaklardır. Bu noktada limanlar, Yeşil Liman standartlarına ulaşabilmek için gerekli yatırımları planlamalıdır ve planlamaları programlı bir şekilde hayata geçirmenin gayreti içerisinde olmalıdırlar. Bu duruma ülkemiz açısından bakacak olursak, Türkiye'de Borusan Limanı gibi Yeşil Liman etiketine sahip limanlarımız mevcuttur. Bu bakımdan bu tarz liman işletmelerinin deneyimlerinden ve ayrıca akademik yazında mevcut bu konu özelindeki çalışmalar doğrultusunda işletme politikaları oluşturulmalıdır.

Borusan Limanı'nın sürdürülebilir enerji kullanımını arttırmak için yatırımlar yapmıştır. Emisyon azaltıcı faaliyetler hususunda sahip olduğu ekipmanların değişimini ve dönüşümünü gerçekleştirmiştir. Gemilerden çeşitli atıkların kabulü ve bunların işlenmesine dair tesis yatırımları olmuştur. BM'nin 2030 sürdürülebilir kalkınma hedefleri doğrultusunda Borusan Lojistik bünyesinde yapılan yatırımlar mevcuttur. Bu yatırımların limancılık sektörüne somut olarak yansıyan kısmı, Borusan Limanı'nın Yeşil Liman sertifikasını alması olmuştur.

Bu araştırma neticesinde Borusan Limanı'nda kullanılan enerji türlerinin 2020 – 2022 yılları arasındaki dağılımları saptanmıştır. Buna göre limanda kullanılan enerjinin büyük bir kısmını motorin ve elektrik bazlı enerji kaynakları oluşturmuştur. Emisyon salınımı noktasında Borusan Limanı değerlendirildiğinde 2020 – 2022 yılları arasında, doğrudan ton cinsinden karşılık geldiği emisyon miktarı artmaktadır. Dolaylı emisyon miktarında ise 2020 – 2022 yılları arasında düşüş yaşanmıştır. Atık türüne göre elde edilen bulgular neticesinde 2020- 2022 yılları arasında tehlikeli atık miktarının ton bazında düşüş gösterdiği bu araştırma ile anlaşılmıştır. Tehlikesiz atık kategorisinde ise durum tam tersidir. Borusan Limanı'nda alınan toplam su miktarı 2020 – 2022 yılları arasında megalitre bazında sürekli artış kaydetmiştir. Atık su deşarjında ise sadece 2022 verilerine ulaşılmıştır. En fazla deşarj deniz suyunda gerçekleştirilmiştir. Yine araştırma bulguları doğrultusunda; Borusan Limanı, makine sahasında bulunan 35 makineden 11 iş makinesine Rentar yakıt tasarruf ve emisyon azaltma cihazı entegre ettiği araştırma bulguları ile görülmüştür. Borusan Limanı, BM'nin 2030 hedefleri doğrultusunda bazı projeler gerçekleştirmektedir. Bu girişimler: Yeşil Liman etiketine sahip olmak ve güncelliğini sürdürmek, üretimde doğal gaz ve elektrik kullanımı arttırmak, atık azaltma ve bertaraf projeleridir. Borusan Limanı'nın, 2022 yılına geldiğinde sahip olduğu kalite ve entegre yönetim sistemleri yetkinlik belgeleri şu şekildedir: ISO 9001 Kalite Yönetim Sistemi, "ISO 14001 Çevre Yönetim Sistem, ISO 10002 Müşteri Memnuniyeti Yönetim Sistemi, ISO 14064 Sera Gazı Doğrulaması, ISO 17024 Personel Akreditasyonu Standartı, ISO 27001 Bilgi Güvenliği Yönetim

Sistemi, ISO 45001 İş Sağlığı ve Güvenliği Yönetim Sistemi, ISO 50001 Enerji Yönetim Sistemi, Tehlikeli Madde Uygunluk Belgesi.”

Kaya, 2022 yılında Sürdürülebilir Kalkınma İçin Yeşil Limanlar Örnek Çalışma: Samsunport konulu yüksek lisans tezi ile bu makale kapsamında incelenen konu büyük oranda benzerlik göstermektedir. İki çalışmada da ilgililen limanların yıllar içerisindeki karbon salınımlarına dikkat çekilmiştir. Buna göre her iki çalışmada da yıllar bazında bir artış eğilimi bulunmaktadır doğrudan emisyon salınımı başlığında. 2021 yılında Samsunport'ta bir önceki yıla nazaran çok az bir düşüş gözlemlenmiştir. Dolaylı emisyon salınımlarında Borusan Limanı'nda yıllar bazında azalış eğrisi gözlemlenmektedir. Samsunport'un dolaylı emisyon salınımı noktasında yıllar bazında artış eğrisi gözlemlenmektedir. Bunun yanında ilgili limanların sahip oldukları kalite ve entegre yönetim sistemleri yetkinlik belgeleri vurgulanmıştır.

Sanrı, 2021 yılında yapmış olduğu; Yeşil Limanlar Üzerine İçerik Analizi 2009-2020 adlı eserinde Rotterdam Limanı'nın, Biyokütle ve Jeotermal enerji kaynaklarını etkin olarak kullandığı görülmektedir. Bu özelliği ile Rotterdam Limanı bünyesine kattığı bu enerji kaynakları ile Yeşil Liman kavramının içeriğini genişletmiştir. Borusan Limanı, Rotterdam Limanı gibi Biyokütle ve Jeotermal enerji kaynaklarını kullanmamaktadır. Bu doğrultuda Sanrı (2021) çalışmasına paralel şekilde bu çalışmada belirtilen Borusan Limanı, yenilenebilir enerji portföyünü niteliksel ve niceliksel olarak geliştirmenin yanında, kullandığı sürdürülebilir enerji kaynaklarını çeşitlendirmelidir.

Bu araştırma ile yeşil liman etiketine sahip olan Borusan Limanı'nın, çevresel etkilerinin araştırılması bakımından önem arz etmektedir. 2020 – 2022 yıllarına yönelik bulgular elde edilmiştir. Bu bulgular dâhilinde Borusan Limanı'nın güncel çevresel çıktıları incelenmiştir. Bu yapılan araştırma, ülkemizde örnek yeşil limanlarından olan Borusan Limanı'nın 2020-2022 yılları arası çevresel performansı, çevreci yatırımlarının neler olduğu ortaya koyması bakımından önem arz etmektedir. Bu kapsamda liman işletmeleri arasında Yeşil liman farkındalığının yaygınlaşmasına pozitif yönde katkı sağlaması beklenmektedir.

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## Assessment of Plastic Waste Situation in the Oceans (Seventh Continent)

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**Abstract:** When plastic is released into the environment, it becomes an insidiously developing enemy that threatens the future of all living things. A large number of plastic bags, plastic bottles, etc. are consumed by people every day as plastic waste, and very few of them are recycled. Most of them are thrown away after use. More than half a billion plastic bottles and nearly 5 billion straws are thrown away every year. So far, at least 500 pieces of plastic garbage used by each individual have mixed with water and reached the seas and then the oceans through rivers. Plastic pollution has reached the size of a continent, creating the world's largest waste dump released into the sea. Great Pacific Garbage Patch; It is a plastic accumulation point that is described as the seventh continent in the world, made by human hands and whose existence has reached the size of a continent. This continent, which is almost 5 times larger than Turkey's surface area, is known as the continent of plastic waste. The 7th continent is a pile of plastic in the Pacific Ocean, 3.4 million square meters wide and weighing approximately 7 million tons. The majority of this area is concentrated between Hawaii and California. While the densest debris accumulates on the seabed, floating debris comes together with bottom and circular currents of various sizes, allowing this pile to grow. The garbage dump located in the north of the Pacific (Pacific Ocean) has no borders with any country. Even though we live in an age where plastic use is excessive, it is possible to find nature-friendly, sustainable alternatives to all these products. Otherwise, there will be more plastic than fish in the oceans by 2050. If plastic production and consumption continues in its current state, the extent of damage to nature and living things will gradually increase. For the future of our world, it is hoped to make progress towards a more nature-friendly life by eliminating the use of plastic from our lives as soon as possible.

**Key Words:** Plastic Use, Harmful Effects of Plastic, Seventh Continent, Pacific Ocean

### Okyanuslarda Bulunan Plastik Atık Durumunun (Yedinci Kıta) Değerlendirilmesi

**Özet:** Plastik çevreye bırakıldığında, tüm canlıların geleceğini tehdit eden, sinsi gelişen bir düşman haline gelmektedir. İnsanlar tarafından plastik atık olarak her gün çok fazla sayıda poşet, pet şişe gibi maddeler tüketilmekte ve çok azı geri dönüşüme girmektedir. Çoğu kullanıldıktan sonra çöpe atılmaktadır. Her yıl yarım milyardan fazla plastik şişe ve 5 milyara yakın pipet çöpe atılmaktadır. Şimdiye kadar her bireyin kullanarak attığı en az 500 adet plastik çöp parçası suya karışarak nehirlerle denizlere ve daha sonra da okyanuslara ulaşmıştır. Plastik kirliliği, denizde salınan dünyanın en büyük atık çöp alanını oluşturarak kıta büyüklüğüne ulaşmıştır. Büyük Pasifik Çöp Alanı; dünya üzerinde insan eliyle yapılmış ve varlıkları bir kıta boyutuna ulaşmış yedinci kıta olarak nitelendirilen plastik birikim noktasıdır. Türkiye'nin yüzölçümünün neredeyse 5 katından büyük olan bu kıta, plastik atıklar kıtası olarak bilinmektedir. 7. kıta, Pasifik Okyanusu'nda 3,4 milyon metrekaare genişliğinde ve yaklaşık 7 milyon ton ağırlığında bir plastik yığındır. Bu alanın büyük çoğunluğu Hawaii ve California arasında toplanmış konumdadır. En yoğun döküntü deniz dibinde birikirken, yüzer döküntüler ise çeşitli büyüklükteki alt ve dairesel akıntılarla biraya gelerek bu yığınin büyümesini sağlamaktadır. Pasifik'in (Büyük Okyanus) kuzeyinde bulunan çöplük yığınının hiç bir ülkeye sınırı bulunmamaktadır. Plastik kullanımının çok fazla olduğu bir çağda yaşasak da tüm bu ürünlerin doğa dostu, sürdürülebilir alternatiflerini bulmak mümkündür. Aksi takdirde 2050 yılında okyanuslarda balıklardan daha çok plastik bulunacaktır. Plastik üretimi ve tüketimi şu an ki haliyle devam ederse doğaya ve canlılara verilen zararın boyutu da gittikçe artmaktadır. Dünyamızın geleceği için en kısa sürede plastik kullanımını hayatımızdan çıkararak daha doğa dostu bir yaşam adına ilerleme kaydedilmesi umulmaktadır.

**Anahtar Kelimeler:** Plastik Kullanımı, Plastiğin Zararları, Yedinci Kıta, Pasifik Okyanusu

#### 1. INTRODUCTION

Since commercial developments in the 1950s, plastics have been a real success story. While its usage area and world production continue to increase exponentially, it increased by 620% in 1975 and reached 288 million tons in 2012. In the success of plastic; Its features include ease of shaping, low cost, decay resistance, mechanical resistance, practicality, almost unlimited usage area, easy and cheap recycling by humans, and being an advantageous packaging material.

Plastics, whose raw material is generally petroleum, do not decompose and disappear spontaneously in nature. Approximately 300 million tons of plastic are produced every year in the world, and half of these are disposable plastic products, that is, they are used for a maximum of ten minutes and then thrown away. Studies show that only 9% of plastics produced and turned into waste in the world are recycled. The rest complete their journey in the seas and oceans under the influence of wind and rain.

This feature of plastic is a big disadvantage for the environment. Depending on its composition and resistance to natural factors, the lifespan of a plastic can range from a few years to several centuries. In the sea, under the

influence of sand, gravel, rocks, wave abrasion and solar radiation, plastic breaks down into particles only a few millimeters in size, which contribute negatively to pollution. The seventh continent is a soup of tiny pieces of plastic called microplastics, with surface concentrations of 200,000 to 600,000 pieces per square kilometer. Plastic residue sizes range from a few centimeters to a micron (thousandth of a millimeter) and even a nanometer (millionth of a millimeter) (URL, 1). It is an area of 1.6 million square kilometers consisting of garbage that reaches the ocean floor. This area corresponds to three times the size of France and five times the size of Turkey (URL, 2).

In the study, plastic pollution, which has entered every part of life today and is used extensively, is mentioned. For this reason, the Great Pacific Garbage Patch (7th Continent) and its formation, which is formed because plastic is long-lived in nature and takes time to break down, micro and nanoplastics, which are the degradation products of plastic, the effect of plastics on marine creatures and the process of cleaning from the oceans are discussed.

### **1.1. Why Can't Plastic Degrade in Nature?**

Organic waste, such as paper or plant peels, begins to decompose immediately in nature. But it is not easy for nature to deal with plastic. The reason for this is related to the structure of plastic.

Most plastics are produced from oil, which is the end product of several million years of natural decay by once living organisms. The main components of oil consist of lipids that came together in the cells of these organisms long ago. It is reasonable to expect it to biodegrade under normal conditions.

But the problem lies in the production method of plastic. While natural polymers use chemical bonds called peptide bonds, plastic polymers have carbon-carbon bonds. These bonds are much stronger. That's why plastics are very durable but also difficult to get rid of. Organisms that decompose organic matter have evolved over billions of years to attack certain types of bonds common in nature. However, there are very few organisms that can break down these new and strong bonds they encounter in plastic (URL, 3). Therefore, non-degradable plastic appears as a pollution situation.

### **1.2. The Great Pacific Garbage Patch (7th Continent) and Its Discovery**

The Great Pacific Garbage Patch is a plastic garbage dump in the North Pacific Ocean, located within the 135°-155° west meridians and 35°-45° north parallels. The area is also known by names such as the Great Pacific Garbage Island and the Great Pacific Garbage Patch. Plastic waste mixed into the ocean from rivers in countries on the Pacific coast, especially North America, South America and Asian countries, constitutes a significant part of the garbage heap on this huge island. According to a study conducted in 2018, 1.8 trillion pieces of plastic waste were detected on the island. Comprised of trillions of plastic particles, the Pacific Garbage Patch is an 88,000-ton moving garbage dump (URL, 4).

Its existence was first noticed in 1997 by ship captain Charles Moore, a California sailor, environmentalist and researcher. While returning from a sailing race in Hawaii with her boat, Moore decided to deviate from her normal route and cruise the Pacific Ocean for a bit. When he came to an area called Doldrums, where sailors did not pass much because there was little wind, he was shocked by what he saw. Moore later described that moment as follows:

*"It stretched out in front of me as far as the eye could see. I haven't seen anything else in the area for the past week. "It was incredible, this was always supposed to be untouched ocean."*

Expressed it as (URL, 5). It took seven days for him to get out of the garbage pile. It was full of shampoo boxes, soap bottles, shopping bags and fishing equipment. How could so much plastic come to this place, far from land and people?

Floating marine debris is the name given to all kinds of materials entering the marine environment, originating from the terrestrial environment, fishing activities, and ship transportation. It includes everything from trees to plastic bottles, from bags to fishing nets. After entering the sea from one point, it can be transported to very distant points due to the marine current system (Figure 1). While many of them wash up again on the shore, some continue to swim and some sink to the seabed. Those who continue to swim gather in some areas, in vortex zones created by current systems (Figure 2) (URL, 6).

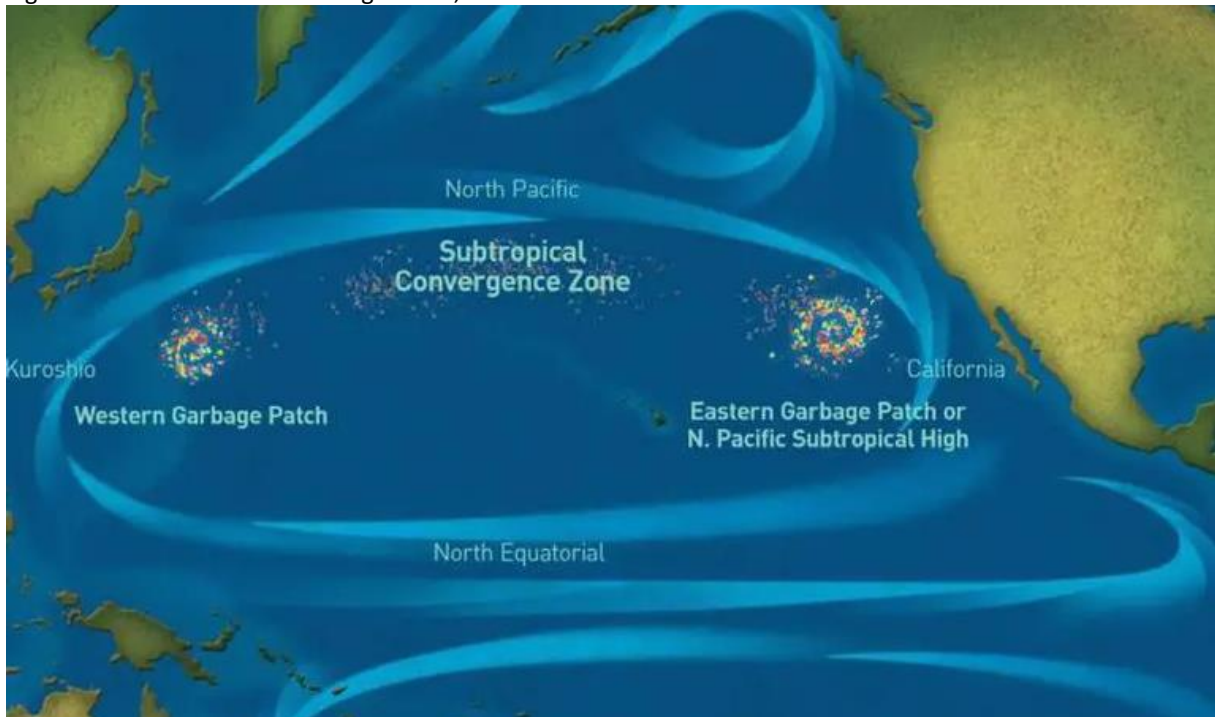
Figure 1: Plastic Accumulation Point Known as the Seventh Continent: The Great Pacific Garbage Patch.



Resource: URL, 7.

Large sections of the North Pacific Ocean feature the “North Pacific Subtropical Gyre,” a slowly moving, clockwise spiral current created by a high-pressure air current system. The Gyre gave birth to two large mass-accumulating garbage heaps. The Western and Eastern Pacific Garbage Patches are sometimes collectively referred to as the “Great Pacific Garbage Patch.” The Eastern Garbage Patch floats between Hawaii and California; scientists estimate their size at twice the size of Texas. The Western Garbage Patch consists of eastern Japan and western Hawaii. The patches are connected by a thin current 6,000 miles long (URL, 1; URL, 8).

Figure 2: The Great Pacific Garbage Patch, Called the 7th and Sometimes 8th Continent of the World.



Resource: URL, 3.



Scientists who track the source of garbage in the Pacific Ocean, the world's largest ocean, have listed 5 countries that pollute the seas. Most of the huge floating plastic garbage in the Pacific Ocean is due to overfishing in two countries - Japan and China, according to a new study. Scientists analyzed 573 kilograms of dry hard plastic garbage they collected with the help of "The Ocean Cleanup" organization in 2019. Researchers found that more than a quarter of the fragments came from discarded and lost fishing gear. About two-thirds of the 232 plastic objects examined by scientists for their origins were made in Japan or China. 10 percent of these come from South Korea, 6.5 percent from the USA, 5.6 percent from Taiwan and 4.7 percent from Canada (URL,9).

### 1.3. How Did the Great Pacific Garbage Patch Form?

It is estimated that 80% of the waste in the sea comes from land. This pollution is mainly caused by carelessly abandoned, poorly collected, poorly recycled domestic waste on land. These wastes end their journey in the oceans by being pushed by the wind and dragged by various natural factors and infrastructure channels such as sewage, rivers and streams, rain, flood, tsunami, etc., after being released into nature, either intentionally or unintentionally (URL, 1).

Air currents caused by high pressure systems cause vortex-shaped currents to appear in the oceans. There are five major ocean currents around the world. These; The North and South Pacific Subtropical Gyres, the North and South Atlantic Subtropical Gyres, and the Indian Ocean Subtropical Gyre.

40% of the surface water in the oceans, in other words 25% of the earth, remains in these eddies located in mid-latitudes. Once plastics mixed into ocean waters are caught in the eddies, they begin to drift towards the center of the vortex with the current. This causes a significant part of the plastic pollution in the oceans to accumulate in eddies.

The most well-known and most studied of the garbage dumps in the oceans is the North Pacific Garbage Patch (Figure 3). The garbage dump discovered by Captain Moore constitutes the eastern part of this huge garbage dump (URL, 3).

Figure 3: An Ever-Growing Garbage Continent Measuring Approximately 1.6 Million km<sup>2</sup> and Containing 80,000 Tonnes of Plastic.



Resource: URL, 3.

This garbage island or vortex is constantly growing because the garbage flow cannot be prevented and since most of the garbage is not made of materials that can self-destruct in nature, it mostly breaks down and turns into microplastics. This causes the water to condense and take on a soup-like texture. In fact, the garbage island is an island formed not by the large garbage we know, but by microplastics that cannot be seen with the naked eye or even captured in satellite images. There are also many fishing nets and other large rubbish (URL, 3; URL, 10).

#### **1.4. From Microplastics to Nanoplastics**

A large part of the garbage pile consists of microplastics. Marine scientists define microplastics as plastic pieces smaller than 5 millimeters and are found in facial cleansing gels, toothpastes and shower gels. Microplastics reach seas, lakes and rivers through sewage. The water that hits the face of someone surfing in the sea consists entirely of microplastics, and people inhale and swallow microplastics without realizing it. Microplastics are now turning into nanoplastics, and since they are not heavy enough to sink to the bottom of the ocean as a discarded bag breaks into millions of pieces, it becomes nanoplastic by being constantly exposed to sunlight (Çam, 2019).

#### **1.5. Effects of Plastics Found in the Sea on Living Things**

Microplastics are dangerous to marine creatures. Plastics have now joined the food chain of the marine ecosystem. mammals, fish, turtles and birds etc. It is responsible for being a major cause of death. After ingestion, plastic accumulates in the digestive system, its resistance decreases due to the damage it creates in its organism, it feeds less and eventually it dies.

Since microplastics are easily consumed by seabirds, they do not feel hungry as they create a feeling of fullness in their stomachs. As a result, seabirds cannot get the food they need and nanoplastics mix with their cells. The effects of this situation on humans and animals are not yet known. Seabirds, marine mammals and fish mistake this garbage for food and fill their stomachs with indigestible garbage. The parts in the water also release microscopic plastic pieces and toxic chemicals into the water through their endless impact and friction (URL, 3).

The multitude of harmful organisms, some of which can be invasive, cling to plastics, and are carried by currents over decades, thousands of kilometers, are a real danger to the balance of ecosystems. They have the chance to reach places that nature never planned for them. These plastic-associated organisms are as diverse as fish, algae, and shellfish (URL, 1).

As well as harming wildlife, boat and submarine equipment, beaches, plastic also harms swimming and local fishing. The problem of plastic and other accumulated garbage affects beaches and oceans around the world, including at both poles. Land masses in the path of rotating eddies receive particularly large amounts of garbage. The 19 islands of the Hawaiian archipelago, including Midway, receive massive amounts of garbage thrown from gyroscopes. Some beaches are filled with millions of plastic particles that are almost impossible to clean (URL, 11).

#### **1.6. Is It Possible to Clean the Ocean?**

80 percent of ocean trash originates from land. The rest comes from private and commercial ships, fishing equipment, oil platforms and spilled shipping containers (their contents frequently washing up on distant shores years later) (URL,8). Plastics with low density are constantly dragged and displaced. The majority of the plastics that make up the area consist of hard polyethylenes (PE), polypropylenes (PP) and abandoned fishing gear (especially nets and ropes) (URL, 7).

92% of the plastic pieces in the area consist of objects larger than 0.5 cm. However, every second that pieces larger than 0.5 cm spend on the ocean surface, they break down due to physical conditions such as the sun and waves and are on their way to becoming microplastic. Therefore, large pieces must be collected as quickly as possible.

The collection process started with a very simple system with the "ocean cleanup" project. A floating vehicle 600 meters long and 3 meters deep collects waste. While this system captures megaplastics floating on the water, it also collects smaller pieces remaining under the sea. However, this system alone is not sufficient because there is too much plastic. As it is collected, more is added than what is collected. This system is a problem too big to be solved by the actions of an organization or a community (URL, 7).

In addition, an attempt was made to collect the huge pile of plastic waste in the Pacific Ocean with barriers left in the area, but this process may not be as innocent as it seems. Experts warn that what is collected is not just plastic but also living creatures, which may negatively affect the ecological balance. In a news article originating from the British Guardian, it was stated that the 600-meter barrier left in the Pacific Ocean, where the plastic pile spread over an area nearly three times the size of Turkey, collected tons of waste. Thanks to the Ocean Cleanup project that developed the barrier, a lot of waste, from one-ton fishing nets to truck tires and micro plastics, was eliminated.



It will take a long time for garbage to reach such collection areas. During this period, the garbage will create an environment for many creatures to raft or cling to. If the number of these creatures increases, the garbage becomes heavier and sinks to the bottom. Some may not crash. Those that do not collapse continue to flow near the surface. With the Ocean Cleanup project, it was aimed to collect the garbage flowing close to the surface in this garbage patch, and the creatures swimming with the garbage were also collected at this time.

A wide variety of living creatures, called neustons, found in the surface layer of the seas, will also be destroyed during this cleaning. Moreover, they are the most productive living group in the oceans. As a result, this barrier system may cause eye popping when eyebrow plucking. If these systems are applied in areas where rivers have just flown into the sea, the damage to life will be minimal (URL, 6).

The discovery of the Great Pacific Garbage Patch has raised the awareness of thousands of people. This has led to numerous initiatives to reduce the amount of plastic in the ocean. The problem with cleaning up the open ocean is the common misconception that there are huge piles of garbage floating in the sea, waiting to be collected. Because the real problem is not on the surface, but at the bottom of the sea. Most waste is pea-sized or smaller and floats below the surface (Figure 4) (URL, 3).

Figure 4: Small Garbage Found at the Bottom of the Sea.



Resource: URL, 3.

## 2. DISCUSSION AND CONCLUSION

Although many organizations strive to clean the seas today, the main problem is that the resource does not decrease. Most of the garbage heaps at home consist of plastic. Therefore, we all have important duties. The first thing to do is to reduce plastic consumption as much as possible. The first thing that comes to mind in reducing plastic use is to reduce the number of products we use and throw away, such as disposable plastic forks, knives, plastic bottles and plates. This goes for freezer bags, foam boxes, and anything disposable you can think of (URL, 3).

It is estimated that 1.15 to 2.41 million tonnes of plastic enter the ocean from rivers every year. More than half of these plastics are less dense than water and float in water. Maybe there is hope for these floating plastics, but the scary thing is microplastics. There is almost no way to collect them and they are entangled in all systems. They do not only survive in the oceans, they are found in every imaginable place (URL, 5).

Scientists who study the plastic problem say it is simply impossible to trawl the ocean for all the trash, which would harm plankton and other marine life. In some areas, large pieces can be collected, but it is not possible

to thoroughly clean a section of ocean that covers the area of a continent and extends 100 meters below the surface.

International agreements prohibiting dumping at sea should be implemented. Untreated sewage should not be allowed to flow into the ocean. Many communities and even some small island nations have eliminated the use of plastic bags. These bags are generally recyclable, but billions of them are thrown away each year. In the Hawaiian Islands, cleanup programs bring volunteers to beaches to pick up trash, but some beaches, even those that undergo regular cleanups, are covered in layers of trash several feet thick (URL, 8).

According to experts, waste management should be in place in the lands where most of the garbage originates. It is suggested that lobbying companies find plastic alternatives to reusable packaging, especially those that do not harm the environment. Recycling programs should be expanded to accommodate more types of plastic and the public should be educated on the issue (URL, 8).

If plastic pollution is to be prevented, plastics, especially single-use plastics, should be removed from daily life, and those that are used compulsorily should be sent for recycling (URL, 2).

Megaplastic garbage from the 1900s is also found in the garbage pile. This also threatens the lives of thousands of living species. Not only those living in water, but all animals associated with it are affected; fish, whales, birds that see small pieces of plastic and mistake them for food. For this reason alone, it is estimated that 45 percent of seabirds or turtles have pieces of plastic in their stomachs. According to researchers, more than 1 million seabirds or marine creatures die every year due to this reason alone.

Today, not only the 7th Continent, but the bottom of all oceans is full of waste and garbage heaps. While this situation destroys the environment, it also destroys living things. When throwing plastic bottles or similar items on the ground, they are thrown away with the thought that someone will pick them up anyway, or the discarded garbage may have put an end to the life of a living being. Everything starts with ourselves. Therefore, by throwing a used plastic bag into the trash, you contribute to its recycling and contribute to both the environment and the fight against environmental pollution (Direkli, 2019).

Plastics are also vectors of persistent organic pollutants. Some plastics have the ability to concentrate pollutants in the environment when left in rivers, streams and oceans for long periods of time. Plastics can thus multiply the initial concentration of these molecules by a factor of up to 100,000. These molecules can also bioaccumulate in living organisms, meaning they can concentrate throughout the food chain (URL, 1).

The country with the strictest plastic bag ban, which was first implemented in Bangladesh in 2002, is Kenya, an African country. According to the practice that came into force in Kenya in 2017, those who use, produce or sell plastic bags may face imprisonment or fines. In fact, 25 countries, approximately half of which ban the use of plastic bags, are in Africa. When we look at the European Union member countries, the use of plastic bags is taxed in 10 countries, including Denmark, Bulgaria and Spain, while fees are applied in 14 countries such as the Netherlands and Sweden. While the countries with the lowest annual plastic bag usage per capita in Europe are Denmark and Finland with 4 bags, this number decreased from 300 in Ireland, where plastic bag use was taxed in 2002, and from 140 to 20 in the UK (URL, 12).

Although the dumping of all plastic materials used into the sea affects us indirectly, it actually has the first harmful effect on the creatures living in the sea. Thousands of aquatic creatures either live a poor quality life or cannot survive due to this plastic waste. If these wastes, which pollute the existing clean water as well as the thousands of creatures caught and trapped in plastic bags, nets and canned food containers, continue to increase at the same rate as today in the coming years, many marine creatures will become extinct.

Plastic waste in the oceans also directly affects humans. According to a study, microplastics were detected in the stomachs of nearly half of the species most preferred in fishing activities. In other words, when we consume these fish or seafood, we also consume plastic waste that enters the ocean (URL, 4).

One of the marine creatures most affected by plastic pollution is coral reefs. Coral reefs, which are very important creatures for the ecosystem, become sick and lose their lives due to the bacteria produced by plastic waste. The deaths of these creatures will directly affect the food chain and cause the extinction of many creatures and marine life. In summary, it is still up to us to save the link in a chain that will affect all living things before it breaks (URL, 12).

Let's hope that everyone will eliminate plastic from their lives as soon as possible for the sake of our planet and start taking steps towards a more environmentally friendly life. Because it should not be forgotten, THERE IS NO OTHER PLANET ON WHICH WE CAN LIVE.

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## X ve Y Kuşağındaki Tüketicilerin Bireysel Değerleri ile Satın Alma Tarzları Arasındaki İlişkinin İncelenmesi

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**Özet:** Bireysel değerler, tüketicilerin satın alma kararlarını etkileyen önemli faktörlerden birisidir. Günümüzün önemli tüketici gruplarından sayılan, farklı değerlere sahip X ve Y kuşağı üyelerinin satın alma tarzlarının şekillenmesinde etkili olan faktörlerden biri de bireysel değerlerdir. Bu noktadan hareketle bu çalışmada, X ve Y kuşağındaki tüketicilerin bireysel değerleri ile satın alma tarzları arasındaki ilişkinin incelenmesi amaçlanmıştır. Araştırmada veri toplama aracı olarak bireysel değerler envanteri ve satın alma tarzı ölçekleri kullanılmış ve Kütahya ilinde yaşayan X ve Y kuşağındaki katılımcılardan kolayda örnekleme yöntemi kullanılarak toplanan 476 adet anket istatistik paket programı kullanılarak analiz edilmiştir. Elde edilen sonuçlara göre X ve Y kuşaklarının bireysel değerleri ile satın alma tarzları arasında anlamlı farklılıklar olduğu görülmüştür.

**Anahtar Kelimeler:** X ve Y Kuşağı, Bireysel Değerler Envanteri, Satın Alma Tarzı

### 1. GİRİŞ

Kuşak teorisi insanlık tarihinin başlangıcından günümüze kadar olan süreç içerisinde belli dönemlerde ortak bireysel özelliklerin ön plana çıkarılmasıyla oluşturulmuştur. Kuşak, genellikle benzer deneyimleri paylaşan ve bu deneyimler etrafında benzersiz ortak özelliklere sahip olan bir grup birey olarak tanımlanır (Beldona, vd., 2009: 407). Bu nedenle, bir kuşak, yaşamları boyunca devam edebilecek belirli benzersiz değerler ve önceliklerle ilişkilendirilir ve bu da her kuşağın farklı tutum ve davranışlar sergilemesine neden olur. Schewe ve ark. (2000), bir kuşağın uzunluğunun onu tanımlayan dış olaylara bağlı olarak değişebileceğini ve genellikle 20-25 yıl olduğunu belirtmektedir (Eastman ve Liu, 2012: 94).

Her kuşak kişilik özellikleri, iş değerleri, tutumlar ve yöneticiler için önemli olduğu varsayılan çalışma motivasyonlarına sahiptir. Bununla birlikte, kuşaklar arası farklılıkları destekleyen bu özellikler eleştirisiz değildir. Örneğin, kuşakların sınıflandırılmasında zaman noktasının belirlenmesinde sorunlar vardır. Belirli bir kuşağın tüm üyelerinin, sosyal sınıf, cinsiyet, etnik köken veya ulusal kültürden bağımsız olarak aynı temel sosyokültürel veya sosyoekonomik olayları aynı şekilde deneyimleyeceği de varsayılmaz (Macky, vd., 2008: 859).

Bireysel değerler, bireylerin kendileri için neyin arzu edilir olduğuna dair inançlarıdır. İhtiyaçlarla yakından bağlantılı olan bireysel değerler kişisel, sosyal ve kültürel öğrenme yoluyla türetilir ve değiştirilir. Bilişsel bir bakış açısından, bireysel değerler, dünya gerçeklerini dikkate alan ve bireyin kişiliğini yansıtan, değişimden sonra altına yatan ihtiyaçların zihinsel temsilleridir (Lai, 1995: 383).

Satın alma tarzı, bireyin satın alma kararları üzerinde sürekli ve kalıcı bir etkisi olan rasyonel ve bilişsel yönelimler olarak tanımlanır. Tüketiciler satın alma tarzlarına göre gruplara ayrılır. Örneğin, bilgi arayanlar, mükemmeliyet arayanlar, yenilik ve moda arayanlar, fiyat duyarlı olanlar, yüksek kalite ve marka bilincine sahip olanlar, alışkanlıkları veya markalara sadık olanlar, kararsız olanlar vb. Bu tarzlardan biri veya daha fazlası, tüketicinin ürün ve hizmet seçiminde etkilidir ve bu etki uzun vadeli olabilir (Ünal ve Erciş, 2006: 25).

Pazarlama literatüründe değerler ve satın alma tarzları hakkında birçok çalışma yapılmıştır. (Homer ve Kahle, 1988; Madrigal ve Kahle, 1994; Shao, 2002; Schiffman, vd., 2003; Ünal ve Erciş, 2006; Hasdemir, 2009; Turan, 2010; Dursun, Alnıaçık ve Kabadayı, 2013). Ancak bu çalışmalar da değerle ve satın alma tarzlarının ele alındığı çalışma olmasına rağmen iki değişkenin birlikte ele alındığı az sayıda çalışma vardır. Ünal ve Erciş (2006)'da yaptıkları çalışmada tüketicilerin bireysel değerleri ile satın alma tarzlarını ilişkilendirmiştir. Bireysel değerler ile satın alma tarzlarının kuşaklar açısından ele alınmamış olası araştırmanın yapılmasına neden olmuştur.

X ve Y kuşağındaki tüketicilerin bireysel değerlerinin satın alma tarzları üzerindeki etkisini incelemeyi amaçlayan bu çalışma iki bölümden oluşmaktadır. İlk bölümde X ve Y kuşağı, bireysel değerle ve tüketici satın alma tarzı konusunda teorik bilgiler verilmektedir. İkinci bölümde ise, Kütahya merkez ilçede yaşayan X ve Y kuşağındaki

tüketicilerin satın alma tarzları ve bireysel değerleri arasındaki ilişki incelenerek, elde edilen bulgulara yönelik yorumlar yer almaktadır.

## 2. LİTERATÜR TARAMASI

### 2.1. X Kuşağı

X Kuşağı 1965 ile 1979 yılları arasında doğanları kapsamaktadır. Ancak, X Kuşağı'nın üst sınırı bazı durumlarda 1982'ye kadar çıkarken, alt sınır 1963 yılına kadar düşmüştür. X Kuşağı Bebek Patlaması kuşağının gölgesinde yetiştikleri için bu kuşağın da özelliklerini yansıtmaktadır. Finans, aile ve toplum açısından güvensiz bir ortamda yetişmişlerdir. Durgun iç pazar, kurumların küçülmesi ve sınırlı iş gücü hareketliliği ile büyümüşler ve anne babalarından daha az kazanan ilk kuşak olmuşlardır (Tolbize, 2008: 3; Demirkaya vd., 2015: 189).

X kuşağı üyeleri çalışkan, işine karşı sorumluluk hisseden ve bağlılık gösteren, yaptıkları işlerde denetlemenin olmadığı durumlarda bile işe karşı kendilerini sorumlu hisseden, modern varoluşu sık sık çerçeveye alan statü, para ve sosyal tırmanma atıklarından atlamak isteyen bireylerdir (Saileela ve Thiruchanuru, 2017: 99). X kuşağının yaşamını tanımlayan olayları arasında, kültürel farklılıklara vurgu yapan kadın hakları hareketinin evrimi ve kurumsallaşması, kadın hakları hareketi, enerji krizi ve kişisel bilgisayarların ilk kez piyasaya sürülmesi yer almaktadır (Dwyer, 2009: 103-104). Türkiye'de 68 kuşağı olarak tanınan, orta ve üst yaş grubunu oluşturan X kuşağı üyeleri bol paça pantolonları, uzun ve bakımsız saçları ve tüketim karşıtlığı ile dönemlerine damga vurmuşlardır. Para kazanmayı ve kariyer sahibi olmayı reddetmektedirler. Türkiye'de risk almaktan kaçınan kuşak üyeleri mesleği ne olursa olsun devlette çalışmayı kariyer açısından yeterli görmekteyiz. Çünkü kuşağa göre özel sektör her zaman risktedir ve gelecek açısından güvenli değildir (Ünusan Atak, 2016: 18).

### 2.2. Y Kuşağı

1980 ile 2000 yılları arasında doğan Y Kuşağı, çoğu kişi tarafından yankı patlamaları, patlama bebekleri, milenyum kuşağı, hak sahibi nesil veya dijital nesil olarak da adlandırılmaktadır (Spiro, 2006: 16; Queiri, vd., 2014: 201). Y kuşağı, PC'lerin, dizüstü bilgisayarların, internet erişiminin ve sosyal ağ sitelerinin her yerde bulunması nedeniyle son derece tekno-okuryazar olan, dijital çalışmayı tercih eden, öğrenme, takım halinde çalışma, akranları ve sosyal ağ tabanlı temaslarla gerçek zamanlı, sürekli teknolojinin kolaylaştırdığı bağlantıları deneyimleme fırsatları elde etmiş kuşaktır. Y kuşağındakilerin anlayışlı bir toplumda büyümeleri eşitlik konusunda çok bilgili, sesini duyuran ve otoriteye meydan okuyan bir kuşak olarak ortaya çıkmalarına neden olmuştur (Edge, 2014: 140).

Y kuşağı, bağımsız, teknoloji meraklısı, girişimci, çalışkan ve esneklik konusunda başarılı olması bakımından X kuşağına benzemelerine rağmen bağımsızlık konusunda X Kuşağına göre çok daha az şiddetlidir. Bu nesil için bir iş, bir görev değil, bir sözleşmedir. Hem X hem de Y Nesilleri, Sessiz Kuşak ve Baby Boomers emsallerine kıyasla çalışmaya daha az bağlıdırlar. X ve Y kuşakları hayatta çalışmaktan daha fazlası olduğuna inanıyor olmalarına rağmen bu özellikle Y kuşağı için geçerlidir. Uzun vadede, Y kuşağı çalışmak için yaşamak yerine yaşamak için çalışmayı tercih eden, ebeveynlerinin yaşamak için uzun saatler boyunca çalışmasını izleyen genç işçiler, daha dengeli bir yaşam için kendilerini koruyarak çalışırlar (Crampton ve Hodge, 2009: 4). Türkiye'deki Y kuşağının öne çıkan özellikleri, yardımsever, bireysel kimliğine önem veren, güvenilir, hevesli, çok yönlü, işbirlikçi, aktif hayal gücü olan ve enerjik olan, güvenilir ve güven veren çalışanlar olarak tanımlanan, iş bitene kadar özenle çalışan ancak rutin işleri tercih etmeyen bireylerdir (Özer ve Oflaz, 2021: 184).

### 2.3. Bireysel Değerler

Değerler, bireyin içinde bulunduğu veya bulunması gereken şartlara uygunluğu, devam ettirme sürecine bağlı olarak geliştirilen, tutarlı ve soyut hedefler olarak tanımlanmaktadır (Schwartz, 1992: 4). Gouveia'nın (1998) tipolojisine göre değerler, bireysel veya toplumsal değerler olarak tanımlanır. Kişinin iç yaşantısında oluşturduğu kavramsal anlamlara bireysel değer, kişinin içerisinde bulunduğu topluluğun sahip olduğu normlar ve inançlar ise toplumsal değer olarak tanımlanmaktadır (Gouveia vd. 2002: 336). Schwartz (1999), kültürlerin karşılaştırılabileceği değer türleri teorisinde 49 ülkeden elde ettiği verilerden yola çıkarak değerleri kültürel değerler ve bireysel değerler olmak üzere iki boyutta incelemiştir. Kültürel değerlerdeki amacın toplumun büyük bir bölümü tarafından paylaşılan soyut fikirlerle ilgili bilgi üretirken, bireysel değerler, bireyin yaşamına yön vermedeki önem derecelerine göre değerlendirilmiştir (Schwartz, 1999: 24). Schwartz (1992),

kapsamlı bir bireysel değerler seti belirlemiştir. Bireysel değerler, bir kişinin veya grubun yaşamında yol gösterici ilkeler olarak hizmet eden, önemi sırası değişen, durumsallık arz eden ve istenen hedefler olarak tanımlanmaktadır. Bireysel değerlerin, bireysel karar verme, tutum ve davranışların altında yatan ve tutumları açıklamaya yardımcı olabilecek tutarlı bir sistem halinde organize edildiğini tespit etmiştir. Bu tutarlı yapı, insanların günlük kararlar alırken deneyimledikleri değerler arasındaki sosyal ve psikolojik çatışma veya uyumdan kaynaklanır (Schwartz, vd, 2012: 664).

Roy, bireysel değerlerin farklı yönlerini değerlendirip sınıflandırmak amacıyla Bireysel Değerler Envanteri adlı bir ölçek geliştirmiştir. Ölçeği geliştirilmesi sürecinde ilgi duyulan temel değerleri belirlemek için ölçüleri araştırdı ve bu alanda çalışan uzmanların görüşlerini alarak temel bireysel değer yapılarının bir modelini tanımladı. Bu çalışmalar sonucunda, bireyin bütün olarak gelişimi, huzur ve sağlığı için yedi temel değer önemli olduğu belirlendi. Roy (2003), bu değerleri niyet, dürüstlük, güven, disiplin, saygı, adanmışlık, paylaşım ve affetme olarak sınıflandırmıştır. Roy'a göre, bu değerler bireyin huzuru ve sağlığı için aile, iş ortamı, zihinsel sağlık, fiziksel sağlık, duygusal ve sosyal alanlar gibi yaşam alanlarına dahil edilmelidir (Asan vd, 2008: 21).

1973 yılında psikolog Milton Rokeach tarafından Değerler Sistemi geliştirilmiştir. Rokeach'e göre bir değer, belirli bir nesne veya durumla ilgili inançlara atıfta bulunan bir tutumun aksine, herhangi bir belirli nesneyi aşan tek bir inancı ifade eder. Değerler, bir kişinin bilişsel sisteminde tutumlardan daha istikrarlıdır ve daha merkezi bir konuma sahiptir. Bu nedenle, tutum ve davranışların belirleyicisi olduklarından tüketicilerin daha istikrarlı ve içe dönük anlayışlarını sağlarlar (Kamakura ve Novak, 1992: 119).

1978 yılında Michigan Üniversitesi Ölçüm Araştırma Merkezi'ndeki araştırmacılar tarafından Değerler ve Yaşam Biçimi Sistemi (VALS) geliştirilmiştir. VALS programı, piyasadaki insanları ekonomik, politik, sosyolojik ve insani açılarından anlamak amacıyla oluşturulmuştur (Astor, 2006: 26). VALS'de kullanılan psikolojik teori, ağırlıklı olarak Abraham Maslow'un İhtiyaçlar Hiyerarşi'sinden yararlanılarak geliştirilmiştir (Kahle, vd., 1986: 405). VALS, değerler ve yaşam tarzları için dinamik bir çerçeve sağlamış bu da insanların neden sosyal gruplar ve tüketiciler olarak davrandıklarını açıklamaya yardımcı olmuştur (Sathish ve Rajamohan, 2012: 160).

Kahle tarafından 1983 yılında, Maslow'un (1954) ve Rokeach'ın (1973) değerler üzerine yaptığı çalışmaların teorik temelinden Değerler Listesi geliştirilmiştir. Teorik olarak, bireylerin, kısmen değerlerin gerçekleşmesine dayalı olarak çeşitli yaşam rollerine uyum sağlayacak şekilde kavramsallaştırıldığı sosyal uyum teorisine bağlıdır (Beatty vd., 1985: 186). Kahle (1996), LOV'nin yalnızca LOV'deki maddelerin derecelendirmeleri ve sıralamaları ile binlerce bağlantı yoluyla kendisini güvenilir bir değer ölçüm aracı olarak kanıtlamakla kalmayıp aynı zamanda bireylerin her bir değerle nasıl özdeşleştiğine ve çevrelerine nasıl uyum sağladığına dair kişilik benzeri bir tanım da sağlamıştır (Kahle ve Kennedy, 1988: 50; Shao, 2002: 25-26).

## 2.4. Tüketici Satın Alma Tarzı

Tüketiciler ihtiyaçlarını karşılamak için mal ve hizmet satın alırlar. Alınacak mal veya hizmet ne kadar lükse, tüketici o kadar çok bilgiye ihtiyaç duyar. Örneğin; tuz satın almak, pırlanta kolye almaktan tamamen farklıdır (Vijayalakshmi ve Mahalakshmi, 2013: 15268). Voramontri (2018),e göre tüketicinin ihtiyaçlarını karşılamak için karar vermesi ürün veya hizmet satın almaya yönelik farklı davranış kalıpları içerir (Xhema, 2019: 505; Vijayalakshmi ve Mahalakshmi, 2013: 15268). Tüketicinin bir ürünü satın alırken yüksek oranda ilgili olduğu ve genellikle yüksek fiyatlı ürünlerin alımı durumunda gerçekleşen yüksek ilgide tüketici satın alma işlemine oldukça dahil olur. Tüketicinin bir ürünü satın alırken çok ilgili olmadığı ve genellikle düşük fiyatlı ürünlerin alımı durumunda gerçekleşen düşük ilgide tüketici satın alma işlemine çok dahil olmaz.

Tüketicilerin satın alma kararı verirken pazara belirli bir "karar verme stili" kullanarak yaklaştıkları, yani tüketicilerin belirli bir satın alma stratejisinde karar vermeye rehberlik eden belirli kuralları kullanarak seçimler yaptıkları belirlenmiştir. Tüketiciler; bilgi arayanlar, bilgi işleyenler, maksimizasyoncular, tatmin ediciler, yenilik/moda arayanlar ve rasyonel karşılaştırmalı alışveriş yapanlar olarak nitelendirilebilir (Splores, 1983: 79).

Tüketici davranışı literatüründe, tüketici karar verme tarzını inceleyen üç yaklaşım geliştirilmiştir. Bunlar psikografik/yaşam tarzı yaklaşımı, tüketici tipolojisi yaklaşımı ve tüketici özellikleri yaklaşımıdır. Psikografik yaklaşım, tüketici karar verme tarzını psikolojik özellikler ve yaşam tarzı açısından inceleyerek, tüketici davranışını açıklarken birçok değişken kullanır. Tüketici tipolojisi yaklaşımı, tüketicileri alışveriş şekillerine göre gruplara ayırır. Tüketici özellikleri yaklaşımı ise, bireyin bilişsel ve duygusal sürecini dikkate alarak, bireyin kişiliğinin tüketici karar verme tarzını belirlemede etkili olduğu unsurları incelemiş ve bu unsurlara dayalı olarak sekiz özellik geliştirmiştir. Bunlar; mükemmeliyetçilik veya yüksek kaliteye odaklanma, marka bilinci, yeniliklere ve son moda trendlerine odaklanma, eğlenceye odaklanma, fiyata odaklanma, dikkatsizlik, çeşitlilik karışıklığı

yaşama ve alışkanlık/marka bağımlılığıdır (Ünal ve Erciş, 2006; 26). Yapılan araştırmalarda sekiz özelliğinden bazıları arasında benzerlikler olduğu anlaşılmıştır. Örneğin, ulusal marka bilincinin biraz farklı yönlerini ölçen iki özellik ve tatmin edici stratejileri ölçen iki özellik daha sade bir yapı olarak belirlenmiş böylece nihai çözüm olarak altı özellik tespit edilmiştir. Bunlar; mükemmeliyetçilik, fiyat bilinci, çeşit karışıklığı, yenilik/moda bilinci, alışverişten kaçınma ve marka bilinci (Splores, 1983: 81).

### 3. YÖNTEM

Bu çalışmanın amacı X ve Y kuşağındaki tüketicilerin bireysel değerleri ile satın alma tarzları arasındaki ilişkinin incelenmesidir. Araştırmanın evrenini Kütahya ilinde ikamet eden X ve Y kuşaklarında olan bireyler oluşturmaktadır. Kütahya ilinde ikamet eden X ve Y katılımcılar araştırmanın örnekleme dahil edilmiş, anketi cevaplayan ancak bu kriterleri taşımayan katılımcılar araştırma örnekleminde çıkarılmıştır. Araştırmada tesadüfi olmayan örnekleme yöntemlerinden kolayda örnekleme yöntemi ile Kasım-Aralık 2023 tarihlerinde Google Formlar üzerinden 476 katılımcıya çevrimiçi anket uygulaması gerçekleştirilmiştir. Ana kütleye ait büyüklüğün 100.000'den daha fazla olması halinde %95 güven aralığı ve %5 hata payı ile örneklem büyüklüğünün 384 olarak belirlenebileceği (Yazıcıoğlu ve Erdoğan, 2004) belirtilmiştir. Uygulanan anketlerden eksik, hatalı ve X ve y kuşağında yer almayanlar çıkarıldıktan sonra 476 anket üzerinden analizler gerçekleştirilmiştir.

Araştırmanın anket soruları; araştırmanın amacı ve literatür araştırması dikkate alınarak hazırlanmıştır. Anket formu üç bölümden oluşmaktadır. Birinci bölümde araştırmaya katılanların demografik bilgilerini tespit etmeye yönelik sorular bulunmaktadır. İkinci bölümde Roy (2003) tarafından geliştirilen 47 ifadeden oluşan bireysel değerler ölçeği ve üçüncü bölümde ise Sproles'in (1983) 40 ifadeden oluşan satın alma tarzı ölçeğinin Erciş ve Ünal (2009) tarafından geçerlilik ve güvenilirliği test edilerek 23 ifadeden oluşan ölçekten uyarlanmıştır. Ankette yer alan ifadeleri 5'li Likert ölçeğiyle ölçülmüştür. Katılımcıların ifadelere katılma derecelerini, "1: Kesinlikle Katılmıyorum", "5: Tamamen katılıyorum" aralığında belirtmeleri istenmiştir. Çalışmada kullanılan ölçek güvenilirliği Cronbach Alpha yöntemi ile test edilmiş, satın alma tarzı ölçeğinin alfa katsayısı 0,837; bireysel değerler ölçeğinin alfa katsayısı 0,952 olarak ölçülmüştür. Bu değerler ölçeklerin yüksek oranda güvenilir olduğunu göstermektedir.

X ve Y kuşağındaki tüketicilerin bireysel değerleri ile satın alma tarzları arasındaki ilişkiler olabileceği düşünülmüş ve aşağıdaki hipotezler geliştirilmiştir:

- H1: Katılımcıların cinsiyetlerine göre bireysel değerleri ile satın alma tarzı alt boyutları arasında anlamlı fark vardır.
- H2: Katılımcıların yaşına göre bireysel değerleri ile satın alma tarzı alt boyutları arasında anlamlı fark vardır.
- H3: Satın alma tarzı boyutları ile bireysel değerler boyutları arasında pozitif yönlü bir ilişki vardır.

### 4. ANALİZ VE BULGULAR

#### 4.1. Demografik Özelliklerine Ait Bulgular

Tablo 1'de araştırmaya katılanların demografik özelliklerine ilişkin sonuçlar yer almaktadır.

Tablo 1: Demografik Özellikler

Demografik Özellikler	N	%	
Cinsiyet	Kadın	348	73,1
	Erkek	128	26,9
Yaşınız	Y Kuşağı	238	50
	X Kuşağı	238	50
Eğitim Durumu	İlköğretim	6	1,3
	Lise	96	20,2
	Ön lisans	72	15,1
	Lisans	242	50,8
Medeni Durum	Lisans üstü	60	12,6
	Evli	308	64,7
	Bekar	168	35,3
	Toplam	476	100

Tablo 1'deki verilere göre araştırmaya katılan katılımcıların cinsiyet dağılımları incelendiğinde; %26,9'unun erkek, %73,1'inin kadın olduğu görülmektedir. Katılımcıların yaşlarına göre dağılımına göre X ve Y kuşağındaki bireyler eşit sayıdadır. Katılımcıların eğitim dağılımları incelendiğinde; %50,8'inin lisans, %20,2'sinin lise, %15,1'inin ön lisans, %12,6'sı lisans üstü ve %1,3'ünün de ilköğretim mezunu; %64,7'si evli ve %35,3'ü bekar olan bireylerdir.

## 4.2. Faktör Analizi

Bireysel değerler ve satın alma ölçekleri faktörlerinin gruplandırılması amacıyla açıklayıcı faktör analizi kullanılmıştır. Ölçeklerin güvenilirliğini belirlemek amacıyla iç tutarlılık güvenilirliği yöntemi kullanılarak Cronbach's Alpha değeri hesaplanmıştır. Analizlerde faktör yükü %40 ve üzeri olan değerler dikkate alınmıştır. Faktörlerin KMO ve Bartlett Testleri sonuçlarına bakılarak faktör analizinin yorumlanabilir olduğuna karar verilmiştir. Elde edilen analiz sonuçları sırasıyla tablo halinde aşağıda sunulmuştur. Tablolar büyük hacimli olduğundan faktör yapılarını belirleyen kısımları aşağıda sunulmuş, faktör yüklerini gösteren tablolar ekler kısmında sunulmuştur.

Tablo 2: Satın Alma Tarzı Faktör Alt Boyutları ve Güvenirlik Katsayıları

Faktörler	Cronb. Alpha	Özdeğ.	Açık. Var.
Mükemmeliyetçilik	0,876	6,493	15,38
Moda Odaklılık	0,801	2,754	11,82
Marka Bilinci	0,802	2,089	11,73
Çeşit Karmaşası	0,723	1,385	11,28
Fiyat Bilinci	0,723	1,385	8,27
Alışkın Olmak	0,651	1,102	6,53
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0,845	
Bartlett's Test of Sphericity		X <sup>2</sup> =4792,182; Sig:0,000	
Cronbach's Alfa		0,837	
Açıklanan Varyans		65,01	

Tablodan 2'deki sonuçlara göre satın alma tarzı ölçeğinin iç tutarlılık katsayıları analizi sonucunda; Cronbach's Alpha değerleri  $\alpha=0,876$  (Mükemmeliyetçilik) ile  $\alpha=0,651$  (Alışkın Olmak) arasında değişmektedir. Ölçeğin KMO test değeri 0,845, Cronbach's Alpha 0,837, Bartlett test değeri 4792,182,  $p=0,000$  olarak bulunmuştur. KMO test değerinin 0,60'tan büyük olması, Cronbach's Alpha değerinin 0,60'tan yüksek olması, Bartlett test değerinin 4792,182,  $p=0,000<0,05$  verilerin faktör analizine uygun olduğunu göstermektedir. Oluşan altı faktörün açıklanan toplam varyans miktarı %65,01, faktörlerin açıkladıkları varyans miktarları sırasıyla mükemmeliyetçilik faktörü için %15,38, moda odaklılık faktörü için %11,82, marka bilinci faktörü için %11,73, çeşit karmaşası faktörü için %11,28, fiyat bilinci faktörü için %8,27 ve alışkın olmak faktörü için %6,53 olarak belirlenmiştir. Analiz sonucunda oluşan faktörlerdeki ifadeler Erciş ve Ünal (2009)'ın çalışmasında elde edilen faktörlerle benzerlik göstermektedir.

Tablo 3: Bireysel Değerler Faktör Alt Boyutları ve Güvenirlik Katsayıları

Faktörler	Cronb. Alpha	Özdeğ.	Açık. Var.
Disiplin ve Sorumluluk	0,949	18,381	20,92
Güven ve Bağışlama	0,875	3,504	13,36
Dürüstlük ve Paylaşım	0,850	2,017	12,76
Paylaşım ve Saygı	0,616	1,437	9,94
Saygı ve Doğruluk	0,754	1,364	6,12
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0,941	
Bartlett's Test of Sphericity		X <sup>2</sup> =15454,372; Sig:0,000	
Cronbach's Alfa		0,952	
Açıklanan Varyans		63,11	

Tablodan 3'te anlaşılacağı gibi, Bireysel Değerler Envanter Ölçeği'nin iç tutarlılık katsayıları analizi sonucunda; Cronbach's Alpha değerleri  $\alpha=0,952$  (Disiplin ve Sorumluluk) ile  $\alpha=0,616$  (Paylaşım ve Saygı) arasında değişmektedir. Ölçeğin KMO test değeri 0,941, Cronbach's Alpha 0,952, Bartlett test değeri 15454,372  $p=0,000$  olarak bulunmuştur. KMO test değerinin 0,60'tan büyük olması, Cronbach's Alpha 0,60'tan yüksek olması,



Bartlett test değerinin 15454,372,  $p=0,000<0,05$  verilerin faktör analizine uygun olduğunu göstermektedir. Oluşan altı faktörün açıklanan toplam varyans miktarı %63,11, faktörlerin açıkladıkları varyans miktarları sırasıyla disiplin ve sorumluluk faktörü için %20,92, güven ve bağışlama faktörü için %13,36, dürüstlük ve paylaşım faktörü için %12,76, paylaşım ve saygı faktörü için %9,94 ve saygı ve doğruluk faktörü için %6,12 olarak belirlenmiştir. Analiz sonucunda oluşan faktörlerdeki ifadeler Asan vd, (2008)'in çalışmasında elde edilen faktörlerle benzerlik göstermektedir.

Tablo 4: Katılımcıların Cinsiyetlerine Göre Satın Alma Tarzı ile Bireysel Değerler Alt Faktörlerine İlişkin Testler

Faktörler	Cinsiyet	N	Ort.	t	p
Disiplin ve Sorumluluk	Kadın	348	5,42	3,339	<b>0,001</b>
	Erkek	128	5,15		
Güven ve Bağışlama	Kadın	348	5,27	2,064	<b>0,040</b>
	Erkek	128	5,09		
Dürüstlük ve Paylaşım	Kadın	348	4,86	2,877	<b>0,004</b>
	Erkek	128	4,60		
Paylaşım ve Saygı	Kadın	348	4,64	1,041	0,298
	Erkek	128	4,54		
Saygı ve Doğruluk	Kadın	348	3,51	-1,876	0,061
	Erkek	128	3,72		
Mükemmeliyet	Kadın	348	3,23	-2,547	<b>0,011</b>
	Erkek	128	3,52		
Moda Odaklılık	Kadın	348	1,87	-3,531	<b>0,000</b>
	Erkek	128	2,23		
Marka Bilinci	Kadın	348	2,59	-0,344	0,731
	Erkek	128	2,63		
Çeşit Karmaşası	Kadın	348	2,36	-2,4	<b>0,017</b>
	Erkek	128	2,59		
Fiyat Bilinci	Kadın	348	3,16	0,763	0,446
	Erkek	128	3,07		
Alışkın Olmak	Kadın	348	3,97	0,723	0,470
	Erkek	128	3,90		

t: Bağımsız Örneklem T Testi; SS: Standart Sapma; Ort: Ortalama;  $p<0,05$

Tablo 4 incelendiğinde araştırmaya katılan kişilerin cinsiyetlerine göre Bireysel Değerler Ölçeği Alt Boyutlarından “Disiplin ve Sorumluluk”, “Güven ve Bağışlama” ile “Dürüstlük ve Paylaşım” alt boyutundan aldıkları skorlar istatistiksel olarak anlamlı farklılık göstermektedir ( $p<0,05$ ). Tablodaki sonuçlara göre kadınların “Disiplin ve Sorumluluk”, “Güven ve Bağışlama” ile “Dürüstlük ve Paylaşım” skorları erkeklerden anlamlı derecede daha fazladır.

Satın alma tarzı ölçeği alt boyutlarından göre “Mükemmeliyet”, “Moda Odaklılık” ile “Çeşit Karmaşası” alt boyutundan aldıkları skorlar istatistiksel olarak anlamlı farklılık göstermektedir ( $p<0,05$ ). Elde edilen sonuçlara göre erkeklerin “Mükemmeliyet”, “Moda Odaklılık” ile “Çeşit Karmaşası” skorları kadınlardan anlamlı derecede daha fazladır. Bu sonuca göre “H1: Katılımcıların cinsiyetlerine göre bireysel değerleri ile satın alma tarzı alt boyutları arasında anlamlı fark vardır.” hipotezi kısmen kabul edilmiştir.

Tablo 5: Katılımcıların Yaşlarına Göre Satın Alma Tarzı ile Bireysel Değerler Alt Faktörlerine İlişkin Testler

	Yaş	N	Ort.	SS.	t	p
Disiplin ve Sorumluluk	Y Kuşağı	238	5,31	0,863	-1,104	0,270
	X Kuşağı	238	5,39	0,711		
Güven ve Bağışlama	Y Kuşağı	238	5,16	0,927	-1,518	0,130
	X Kuşağı	238	5,28	0,756		
Dürüstlük ve Paylaşım	Y Kuşağı	238	4,77	0,906	-0,511	0,609
	X Kuşağı	238	4,81	0,887		
Paylaşım ve Saygı	Y Kuşağı	238	4,65	0,901	1,012	0,312
	X Kuşağı	238	4,57	0,954		
Saygı ve Doğruluk	Y Kuşağı	238	3,55	1,081	-0,322	0,748
	X Kuşağı	238	3,58	1,085		

Mükemmeliyet	Y Kuşağı	238	3,31	1,045	-0,042	0,967
	X Kuşağı	238	3,31	1,157		
Moda Odaklılık	Y Kuşağı	238	2,07	0,987	2,381	<b>0,018</b>
	X Kuşağı	238	1,86	0,977		
Marka Bilinci	Y Kuşağı	238	2,69	0,961	2,035	<b>0,042</b>
	X Kuşağı	238	2,51	1,002		
Çeşit Karmaşası	Y Kuşağı	238	2,45	1,006	0,769	0,442
	X Kuşağı	238	2,38	0,899		
Fiyat Bilinci	Y Kuşağı	238	3,06	1,172	-1,377	0,169
	X Kuşağı	238	3,20	1,090		
Alışkın Olmak	Y Kuşağı	238	2,95	0,962	-0,047	0,963
	X Kuşağı	238	3,95	0,987		

t: Bağımsız Örneklem T Testi ; SS: Standart Sapma; Ort: Ortalama; p<0,05

Tablo 5 incelendiğinde araştırmaya katılan kişilerin yaşlarına göre Bireysel Değerler Ölçeği Alt Boyutlarından aldıkları skorlar istatistiksel olarak anlamlı farklılık göstermemektedir (p>0,05). Satın alma tarzı ölçeği alt boyutlarından göre “Moda Odaklılık” ve “Marka Bilinci” alt boyutundan aldıkları skorlar istatistiksel olarak anlamlı farklılık göstermektedir (p<0,05). Elde edilen sonuçlara göre Y kuşağındaki bireylerin “Moda Odaklılık” ve “Marka Bilinci” skorları X kuşağındakilerden anlamlı derecede daha fazladır. Bu sonuca göre “H2: Katılımcıların Yaşına göre bireysel değerleri ile satın alma tarzı alt boyutları arasında anlamlı fark vardır.” hipotezi kısmen kabul edilmiştir.

Tablo 6: Satın Alma Tarzı ve Bireysel Değerler Korelasyon Analizi Sonuçları

		Mükemmeliyetçilik	Moda Odaklılık	Marka Bilinci	Çeşit Karmaşası	Fiyat Bilinci	Alışkın Olmak
Disiplin ve Sorumluluk	ve	,151**	-0,035	,136**	0,038	,197**	,313**
Güven Bağışlama	ve	,128**	-0,057	,128**	0,055	,140**	,257**
Dürüstlük Paylaşım	ve	0,053	-0,04	,125**	,157**	,171**	,269**
Paylaşım ve Saygı		,175**	,130**	,211**	,090*	,224**	0,034
Saygı ve Doğruluk		,317**	,386**	,344**	0,085	,216**	0,032

\* p < 0,05, \*\*p < 0,01, N=476 (r: Pearson Korelasyon; r= 0,00 ilişki yok; r= 0,01 – 0,29 Düşük düzeyde ilişki; r=0,30 – 0,69 Orta düzeyde ilişki; r=0,70 – 0,99 Yüksek düzeyde ilişki ve r=1,00 Mükemmel düzeyde ilişki)

Tablo 6’da yer alan sonuçlar incelendiğinde;

“Disiplin ve Sorumluluk” ile “Mükemmeliyetçilik” arasında pozitif yönlü düşük düzeyde; “Marka Bilinci” arasında pozitif yönlü düşük düzeyde, “Fiyat Bilinci” arasında pozitif yönlü düşük düzeyde, “Alışkın Olmak” arasında ise pozitif yönlü orta düzeyde doğrusal ilişki bulunmaktadır.

“Güven ve Bağışlama” ile “Mükemmeliyetçilik” arasında pozitif yönlü düşük düzeyde; “Marka Bilinci” arasında pozitif yönlü düşük düzeyde, “Fiyat Bilinci” arasında pozitif yönlü düşük düzeyde, “Alışkın Olmak” arasında ise pozitif yönlü düşük düzeyde doğrusal ilişki bulunmaktadır.

“Dürüstlük ve Paylaşım” ile “Marka Bilinci” arasında pozitif yönlü düşük düzeyde, “Çeşit Karmaşası” arasında pozitif yönlü düşük düzeyde, “Fiyat Bilinci” arasında pozitif yönlü düşük düzeyde, “Alışkın Olmak” arasında ise pozitif yönlü düşük düzeyde doğrusal ilişki bulunmaktadır.

“Paylaşım ve Saygı” ile “Mükemmeliyetçilik” arasında pozitif yönlü düşük düzeyde; “Moda Odaklılık” arasında pozitif yönlü düşük düzeyde, “Marka Bilinci” arasında pozitif yönlü düşük düzeyde, “Çeşit Karmaşası” arasında pozitif yönlü düşük düzeyde “Fiyat Bilinci” arasında pozitif yönlü düşük düzeyde doğrusal ilişki bulunmaktadır.

“Saygı ve Doğruluk” ile “Mükemmeliyetçilik” arasında pozitif yönlü orta düzeyde; “Moda Odaklılık” arasında pozitif yönlü orta düzeyde, “Marka Bilinci” arasında pozitif yönlü orta düzeyde, “Fiyat Bilinci” arasında pozitif yönlü düşük düzeyde doğrusal ilişki bulunmaktadır. Bu sonuçlara göre “H3: Satın alma tarzı boyutları ile bireysel değerler boyutları arasında pozitif yönlü bir ilişki vardır.” hipotezi kısmen kabul edilmiştir.

## SONUÇ VE ÖNERİLER

Araştırmaya X ve Y kuşaklarından eşit sayıda birey katılmıştır. Katılımcıların büyük çoğunluğu kadın ve evli olan bireylerdir. Bu kişilerin yarısından fazlası üniversite mezunu olan kişilerdir.

Araştırmada kullanılan bireysel değerler ölçeği Roy (2003)'de geliştirdiği ve Asan vd, (2008)'in Türkçeye çevirerek kullandıkları ölçekten yararlanılmıştır. Faktör analizi sonucunda oluşan faktörlerdeki ifadeler Asan vd, (2008)'nin çalışmasında elde edilen faktörlerle benzerlik göstermektedir. Ölçek maddeleri beş faktör altında toplanmıştır. Araştırmada kullanılan satın alma tarzı ölçeğinin geliştirilmesinde ise Sproles'in (1983) 40 ifadeden oluşan satın alma tarzı ölçeğinin Erciş ve Ünal (2009) tarafından geçerlilik ve güvenilirliği test edilerek 23 ifadeden oluşan ölçekten uyarlanmıştır. Araştırmada elde edilen bulgular alan yazınla karşılaştırılmış fakat, kuşaklar yönünden iki değişkenin bir arada değerlendirildiği bir çalışmaya rastlanmamıştır. Ayrıca araştırmada ele alınan değişkenlere ilişkin alan yazındaki çeşitli çalışmaların sonuçları ile paralellik gösteren sonuçlar değerlendirilmiştir.

Yapılan analizler sonucunda, araştırmaya katılan kişilerin cinsiyetlerine göre bireysel değerler ölçeği alt boyutlarından “disiplin ve sorumluluk”, “güven ve bağışlama” ile “dürüstlük ve paylaşım” alt boyutundan aldıkları skorlar istatistiksel olarak anlamlı farklılıklar tespit edilmiştir. Ulaşılan sonuca göre kadınların “disiplin ve sorumluluk”, “güven ve bağışlama” ile “dürüstlük ve paylaşım” sonuçlarının erkeklere göre daha anlamlı olduğu anlaşılmaktadır. Bu sonuç Şaçkırk (2019), Muğla ilindeki ilköğretim öğrencileri üzerinde yaptığı çatışma yönetimi ile bireysel değerler arasındaki ilişkiyi tespit etme amaçlı çalışmasındaki sonuçlarla benzerlik göstermektedir. Şaçkırk çalışmasının sonucunda kadınların sonuçlarının erkeklere göre anlamlı olduğu tespit edilmiştir. Baş vd. (2022) spor eğitimi alan ve almayan öğretmen adaylarının bireysel değerlerini incelemiş ve analiz sonucunda, erkekler ile kadınların ortalamaları arasında, “güven ve bağışlama”, “dürüstlük ve paylaşım” ve “saygı ve doğruluk” alt boyutlarında erkek öğretmen adaylarının lehine anlamlı farklar olduğunu tespit etmişlerdir. Ulaşılan sonuçlara göre kadınlar erkeklere göre “disiplin ve sorumluluk”, “güven ve bağışlama” ile “dürüstlük ve paylaşım” şeklinde belirtilen değerlere daha fazla sahip oldukları söylenebilir.

Araştırmaya katılan kişilerin cinsiyetlerine göre satın alma tarzı ölçeği alt boyutlarından göre “Mükemmeliyetçilik”, “Moda Odaklılık” ile “Çeşit Karmaşası” alt boyutundan aldıkları skorlar istatistiksel olarak anlamlı farklılıklar tespit edilmiştir. Şen ve Ar (2021) cinsiyetler arası farklılıklara göre itkisel satın alma davranışının moda sektörü üzerindeki etkilerini inceledikleri çalışmada, kadın ve erkek katılımcıların moda anlayışında dürtüsel satın alma kararlarına istinaden bazı noktalarda benzerlik ve farklılıklar olduğu gözlenmiştir. Çalışma sonucunda erkek tüketicilerin itkisel satın alma davranışlarında giyim tarzı, moda ve uygun fiyatın belirleyici olduğunu tespit etmişlerdir. Mevcut çalışmada ulaşılan sonuçlara göre erkeklerin “Mükemmeliyetçilik”, “Moda Odaklılık” ile “Çeşit Karmaşası” skorları kadınlardan anlamlı derecede daha fazla olduğu sonucuna ulaşılmıştır.

Baş vd. (2022)' spor eğitimi alan ve almayan öğretmen adaylarının bireysel değerlerini inceledikleri çalışmada “Saygı ve Doğruluk” ile “Paylaşım ve Saygı” alt boyutlarında anlamlı farklılıklar olduğunu tespit etmişlerdir. Bu araştırmaya katılan kişilerin yaşlarına göre bireysel değerler ölçeği alt boyutlarına göre aldıkları skorlar istatistiksel olarak anlamlı farklılık göstermediği sonucuna ulaşılmıştır. Bu sonuca göre X ve Y kuşağı üyelerinin bireysel değerleri arasında farklılık olmadığı anlaşılmaktadır. Katılımcıların yaşlarına göre satın alma tarzı ölçeği alt boyutlarından “Moda Odaklılık” ve “Marka Bilinci” alt boyutları yönünden X ve Y kuşağındaki bireyler arasında anlamlı farklılık tespit edilmiştir. Elde edilen sonuçlara göre Y kuşağındaki bireylerin “Moda Odaklılık” ve “Marka Bilinci” skorları X kuşağındakilerden anlamlı derecede daha fazladır. Bu sonuç literatürde yer alan çalışmalarla benzerlik göstermektedir. Erciş ve Ünal (2009) çalışmalarında gençlerin marka bilincinin yüksek olduğunu, reklamı yapılan pahalı markalı ürünleri tercih ettikleri sonucunu elde etmiştir. Bu çalışmada da Y kuşağındaki bireylerin X kuşağındaki bireylere göre genç oldukları dikkate alınacak olursa sonuçların benzer olduğu söylenebilir. Araştırmada ulaşılan bu sonuç Danışman ve Gündüz (2018)'ün çalışmalarında elde ettiği X ve Y kuşağı üyeleri açısından mükemmeliyetçilik, marka odaklılık, moda odaklılık, fiyat odaklılık gibi alt boyutlar arasında farklılık bulunmadığı sonucu ile benzerlik göstermemektedir.

Araştırmada satın alma tarzı ve bireysel değerler alt boyutları arasındaki ilişkilerin tespitine yönelik analiz sonucunda aşağıdaki sonuçlar elde edilmiştir;

Disiplin ve Sorumluluk ile mükemmeliyetçilik, marka bilinci, fiyat bilinci ve alışkın olmak arasında ilişki vardır.

Güven ve Bağışlama ile mükemmeliyetçilik, marka bilinci, fiyat bilinci ve alışkın olmak arasında ilişki vardır.

Dürüstlük ve Paylaşım ile marka bilinci, çeşit karmaşası, fiyat bilinci ve alışkın olmak arasında ilişki vardır.

Paylaşım ve Saygı ile mükemmeliyetçilik, moda odaklılık, marka bilinci, çeşit karmaşası ve fiyat bilinci arasında ilişki vardır.

Saygı ve Doğruluk ile mükemmeliyetçilik, moda odaklılık, marka bilinci ve fiyat bilinci arasında ilişki vardır.

Sonuç olarak bireysel değerler ve satın alma tarzı arasında doğrudan bir ilişki olduğu anlaşılmaktadır. Bir kişinin bireysel değerleri, satın alma tercihlerini ve davranışlarını etkilerken, satın alma tarzı da kişinin bireysel değerlerini yansıtır. Bu noktada, pazarlama stratejileri, tüketicilerin bireysel değerlerini anlamak ve satın alma tarzlarına uygun ürün ve hizmetleri sunmak için önemli bir rol oynar.

Her çalışmada olduğu gibi, bu çalışmanın da bazı kısıtları vardır. Anket, yalnızca Kütahya ilinde yaşayan X ve Y kuşağındaki kişilere uygulandığından, araştırmanın tüm X kuşağı ve Y kuşağı için genellenmemelidir. Daha sonra yapılacak çalışmalarda ulusal ya da uluslararası karşılaştırmalar yapılarak daha geçerli sonuçlar elde edilebilir. Başka bir çalışmada bireysel değerlerin satın alma kararları üzerindeki etkisini anlamak için derinlemesine görüşmeler ve odak grupları oluşturulabilir. Tüketicilere bireysel değerlerini ve satın alma tercihlerini açıklamalarına imkân tanınarak bireysel değerlerini daha ayrıntılı bir şekilde inceleyip satın alma kararlarına olan etkisi tespit edilebilir.

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## Gümrük İdaresinden Alınan Bağlayıcı Bilginin Hukuki Niteliği ve Vergisel Etkileri

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**Özet:** Gümrük idareleriyle muhatap olan kişilerin maddi ve şekli yükümlülüklerini yerine getirirken teknik ve uzmanlık gerektiren bir mevzuat yığınının uygun şekilde hareket etmesi öngörülmektedir. Gümrük uyumu olarak adlandırılabilir bu durumun sağlanabilmesi açısından kişilerin doğru bilgiye sahip olması önem taşımaktadır. Bu noktada yükümlülüklerini tam ve zamanında yerine getirebilmesi için kişilere gümrük mevzuatının uygulanması kapsamında ve verildiği tarihten sonra tamamlanan gümrük işlemlerine konu eşyanın tarife pozisyonu ve menşeinin tespiti konusunda gümrük idarelerinden bilgi talep etme hakkı tanınmıştır. Yakın zamanda söz konusu bağlayıcı bilgi talebinin kapsamında gümrük kıymeti de dahil olacaktır. Bu bağlamda çalışmanın konusunu kişilerin gümrük idaresinden talep ettiği bağlayıcı bilginin hukuki niteliği ve vergisel etkilerini incelemek oluşturmaktadır. Çalışma kapsamında literatür taraması yapılmış ve doküman incelemesi yöntemi kullanılmıştır. Çalışma sonucunda gümrük mevzuatı uyarınca gümrük idaresinden alınan bağlayıcı bilginin kişilerin bu bilginin konusunu oluşturan yükümlülükleri bağlamında yanılma veya kusurlu davranma olasılığını ortadan kaldıracak hukuki etkiye sahip olduğu ancak fiili uygulama konusundaki belirsizliklerin giderilmesi ve bilgi talebinin hukuki niteliği tartışmalı olan idari tasarruflardan ziyade genel tebliğler yoluyla karşılanmasının yerinde olacağı sonucuna ulaşılmıştır.

**Anahtar Kelimeler:** Bağlayıcı Bilgi, Tarife, Menşe, Kıymet, Gümrük Vergileri, Gümrük İhlalleri

## Legal Nature and Tax Effects of Binding Information Received from the Customs Administration

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Individuals dealing with customs administrations are expected to comply with a mass of legislation that requires technical and expertise while fulfilling their fiscal and formal obligations. It is important for people to have accurate information in order to ensure this situation, which can be called customs compliance. At this point, in order to fulfill their obligations fully and on time individuals are given the right to request binding information from the customs administrations regarding the determination of the tariff position and origin of the goods subject to customs procedures to be completed within the scope of the implementation of the customs legislation and after the date of issue. It is anticipated that customs valuation will soon be included in the scope of this binding information request. In this context, the subject of the study is to examine the legal nature and tax effects of the binding information requested by individuals from the customs administration. Within the scope of the study, a literature review was conducted and the document review method was used. As a result of the study, it was concluded that the binding information received from the customs administration in accordance with the customs legislation eliminates the possibility of people making mistakes or acting faulty in the context of the obligations that constitute the subject of this information and it would be appropriate to eliminate the uncertainties regarding actual implementation and to meet the demand for information through general communiqués rather than administrative acts whose legal nature is controversial.

**Key Words:** Binding Information, Tariff, Origin, Value, Customs Duties, Customs Violations

### 1. GİRİŞ

Uluslararası ticaret çok aktörlü ve kamu düzenlemeleri bağlamında teknik bir mevzuat yığınının göre birçok işlem ve uygulamanın eş zamanlı olarak yerine getirilmesi gereken kapsamlı bir alanı tanımlamaktadır. Uluslararası ticaret operasyonlarının önemli bir bölümü gümrük mevzuatıyla düzenlenen işlem ve uygulamalarla ilişkilidir. Gümrük işlemleri olarak adlandırılabilir işlem ve uygulamaların muhataplarınca tam ve zamanında yerine getirilmesi, yani gümrük uyumunun sağlanması hususları uluslararası ticaretle öngörülen amaçlara ulaşılması açısından önemlidir. Uluslararası çalışmaların odağında gümrük işlemlerinin kolaylaştırılarak hızlandırılması, maliyetinin düşürülmesi, şeffaf ve öngörülebilir bir sürece dayanması ve risk esasına dayalı gümrük denetimi yoluyla gümrük ihlalleriyle etkin şekilde mücadele ederek ticaret erbabı arasında adil dengenin sağlanması

arayışı bulunmaktadır. Gümrük mevzuatına uyum sağlanması açısından gümrük idarelerinin muhataplarından ve muhataplarının da gümrük idarelerinden alacağı bilgi ve niteliği belirleyici etkenler arasındadır.

Bu çerçevede çalışmanın konusunu gümrük mevzuatında düzenlenen bağlayıcı bilginin niteliği ve vergilendirme rejimi bağlamında etkileri oluşturmaktadır. Çalışma kapsamında bağlayıcı bilgiye ilişkin düzenlemeler, bağlayıcı bilginin genel çerçevesi, türleri ve hukuki niteliği ile vergilendirme/cezalandırma rejimiyle ilişkili hukuki etkileri üzerinde durulacaktır. Çalışmada ayrıca Türk gümrük mevzuatında düzenlenen bağlayıcı bilgiyle ilgili konular yanında konunun anlaşılması ve karşılaştırılması bakımından uluslararası düzenlemeler ve dahilde alınan vergilere ilişkin ulusal düzenlemeler ile teorik açıklamalar üzerinde durulacaktır.

Çalışmanın amacı gümrük mevzuatında düzenlenen bağlayıcı bilgi konusunda akademik çalışmaların sayıca az olmasından hareketle bu nitelikteki bilginin sağlanmasına yönelik başvuru, kabul, yönetim süreçleri ile hukuksal etkileri bağlamında değerlendirmeler yapmak, sorunlu görülen konulara bilimsel perspektiften ışık tutmak ve akademik çalışmalara katkı sağlamaktır.

## 2. BAĞLAYICI BİLGİYE İLİŞKİN TEMEL DÜZENLEMELER

Bağlayıcı bilginin hukuki dayanağını oluşturan güncel düzenlemelerin uluslararası ve ulusal olmak üzere iki düzeyde incelenmesi mümkündür. Uluslararası düzenlemeler temelde Dünya Ticaret Örgütü'nün/DTÖ (World Trade Organization/WTO) ve Dünya Gümrük Örgütü'nün/DGÖ (World Customs Organization/WCO) çalışma alanlarıyla ilişkilidir. Ayrıca Avrupa Birliği gümrük mevzuatında bağlayıcı bilgiye ilişkin çeşitli düzenlemeler yer almaktadır. Türk hukukunda ise bağlayıcı bilgi konusu Gümrük Kanunu ile Gümrük Yönetmeliğinde düzenlenmiş ve ilgili tebliğlerde uygulamaya ilişkin çeşitli açıklamalara yer verilmiştir.

Bağlayıcı bilgi konusuyla ilişkili uluslararası düzenlemelerin ilki DTÖ Ticaretin Kolaylaştırılması Anlaşmasıdır (WTO, 2024; RG, 2024a). Anılan Anlaşmanın **Ön Kararlar (Advance Rulings)** başlıklı hükmü "1. Her Üye, bütün gerekli bilgileri içeren şekilde yazılı talepte bulunan başvuruya sahibine makul ve belirlenmiş bir sürede bir ön karar verir. Üye, ön karar vermekten imtina ederse başvuruya sahibini ilgili faktörler ve kararının gerekçelerini içerecek şekilde yazılı olarak derhal haberdar eder. 2. Üye, başvuruda yer alan: (a) sorunun, başvuru sahibinin halihazırda herhangi bir resmi dairede, mahkemede veya temyiz merciinde beklemekte olan bir davasında yer alması halinde; ya da (b) soruyla ilgili olarak herhangi bir temyiz mahkemesi veya merciinde bununla ilgili karar verilmişse; başvuruya sahibine ön karar vermekten imtina edebilir. 3. Ön karara dayanak teşkil eden kanun, vakia ve şartlar değişmedikçe, söz konusu karar verildiği tarihten itibaren makul bir süre boyunca geçerli olur. 4. İlgili Üye, ön kararı yürürlükten kaldırır, değiştirir veya geçersiz kılar, başvuruya sahibine, ilgili vakiaları ve karara mesnet teşkil eden gerekçeleri içerecek şekilde yazılı bildirimde bulunur. Bir Üye, geriye dönük etkisi olan bir ön kararı, ancak kararın eksik, yanlış, sahte veya yanıltıcı bilgiye dayalı olarak verildiği durumda yürürlükten kaldırabilir, değiştirebilir veya geçersiz kılabilir. 5. Bir Üye tarafından verilen ön karar talepte bulunan başvuruya sahibi açısından, söz konusu Üyeyi bağlayıcıdır. İlgili Üye ön kararın başvuruya sahibi için bağlayıcı olmasını temin edebilir. 6. Her Üye, asgari düzeyde, aşağıdakilerini yayımlar: (a) sağlanacak bilgiler ve format dahil olmak üzere ön karar başvurusu için gerekenler; (b) ön kararın hangi süre zarfında verileceği; ve (c) ön kararın geçerli olacağı süre. 7. Her Üye, başvuruya sahibinin yazılı talebi üzerine, ön kararın veya ön kararın yürürlükten kaldırılması, değiştirilmesi veya geçersiz kılınması kararının yeniden incelenmesini sağlar. 8. Her Üye, diğer ilgili taraflar için özel önem arz ettiğini düşündüğü ön kararlara ilişkin herhangi bir bilgiyi, ticari gizli bilgileri koruması ihtiyacını dikkate alarak kamuya açık hale getirmeye gayret eder..."(m.3) şeklindedir. Bağlayıcı bilginin evrensel hukuki dayanağını oluşturan bu hükme göre taraf ülkeler ilgili usul kuralları ve kısıtlamalar çerçevesinde tarife ve menşe konularında zorunlu olarak; kıymet, istisna-muafiyet, kota gibi konularda ise tercihleri doğrultusunda ön karar alınabilmektedir. Dikkat edileceği üzere tarife, menşe ve kıymet gümrük vergileri ve ticaret politikası önlemleri bağlamında gümrük mevzuatının üç temel konusudur (Gwardzińska & Chowanec, 2022: 37).

Bağlayıcı bilgi konusuna ilişkin uluslararası düzenlemelerden ikincisi Gümrük Rejimlerinin Basitleştirilmesi ve Uyumlaştırılmasına İlişkin Uluslararası Sözleşme Hakkında Değişiklik Protokolü/Revize Kyoto Protokolüdür (WCO, 2024; RG, 2024b). Anılan Protokolün 2 No'lu Eki'nin (Genel Ek) **Gümrük Makamları Tarafından Verilen Bilgi, Kararlar ve Kurallar** başlıklı 9 uncu bölümü "A. GENEL UYGULAMA BİLGİSİ; 9.1. Standart Gümrük, gümrük mevzuatına ilişkin bütün genel uygulama bilgisini her ilgili kişiye sağlar. 9.2. Standart Kullanıma sunulmuş bilginin, gümrük mevzuatı, idari düzenlemeler veya şartlardaki değişiklikler nedeniyle tadil edilmesi gerektiğinde gümrük, ön bildirimde bir engel olmaması kaydıyla, ilgili kişilerin değişiklikleri göz önüne almalarına imkan tanımak üzere yürürlüğe girmesinden yeterince önce revize edilen bilgiyi kullanıma hazır hale getirir. 9.3. Geçiş Standardı Gümrük, bilgi tedarikini geliştirmek için bilgi teknolojisini kullanır. B. ÖZEL NİTELİKLİ BİLGİ 9.4. Standart Gümrük, ilgili kişinin talebi üzerine, mümkün olduğu kadar çabuk ve doğru olarak, ilgili kişi tarafından istenilen özel

*durumlara ilişkin ve gümrük mevzuatına ait bilgiyi sağlar. 9.5.Standart Gümrük, sadece özel olarak istenilen bilgiyi değil aynı zamanda ilgili kişinin bilmesi gerektiğini düşündüğü diğer ilgili bilgileri de sağlar. 9.6.Standart Gümrük bilgi verdiğinde, gümrüğü ya da üçüncü tarafları etkileyen özel veya gizli nitelikli hususları, ulusal mevzuat bu tip açıklamayı gerektirmedikçe veya buna izin vermedikçe, ifşa etmeyeceğini temin eder. 9.7.Standart Gümrük bilgiyi ücretsiz sağlayamadığında, ücret, sağlanan hizmetin yaklaşık maliyetiyle sınırlıdır. KARARLAR VE HÜKÜMLER 9.8.Standart İlgili kişinin yazılı talebi üzerine, gümrük kararını ulusal mevzuatta belirtilen süre içerisinde yazılı olarak bildirir. Alınan kararın ilgili kişinin aleyhine olması halinde bunun sebepleri belirtilir ve itiraz hakkı sağlanır. 9.9.Standart Gümrük, gerekli olduğunu düşündüğü bütün bilgiye sahip olması kaydıyla ilgili kişinin talebi üzerine bağlayıcı hükümler verir” şeklindedir. Bu bağlamda gümrük idareleri gümrük mevzuatının uygulanmasında talepte bulunan kişilere genel ve özel nitelikte bilgi sağlayacaktır ki bu kapsamda bağlayıcı hüküm içeren bilgi verilmesi mümkündür.*

Avrupa Birliği Gümrük Mevzuatında bağlayıcı tarife bilgisi türündeki bağlayıcı bilgi Kombine Nomanklatürün yeknesak olarak uygulanması ve bu sayede tek pazarın düzgün işleyişine katkıda bulunmaya yönelik araçlardan biri olarak Avrupa Konseyi'nin 1715/90 sayılı Tüzüğü ve Avrupa Komisyonu'nun 3796/90 sayılı Tüzükle ilk kez kabul edilmiştir (Danacı & Çetinkol, 2018: 155). Zira bağlayıcı tarife bilgisine ilişkin düzenlemeler 1991'de ve bağlayıcı menşe bilgisine ilişkin düzenlemeler 1996'da yapılmıştır (EU, 2024). Günümüzde gümrük idarelerinden talep edilen bağlayıcı bilgi konusu Birlik Gümrük Kodu (Union Customs Code/UCC) olarak ifade edilen 952/2013 No'lu Avrupa Parlamentosu ve Konsey Tüzüğünde (m.23-37) düzenlenmiştir (Eur-Lex, 2024). Anılan Tüzüğün **Bağlayıcı Bilgilere İlişkin Kararlar** başlıklı hükmüne göre gümrük idareleri *“belirli şartların yerine getirilmesi sonrasında yapılacak başvuru üzerine, bağlayıcılığı konusunda sınırlı, karar sahibi aleyhine yalnızca kararın yürürlüğe girdiği tarihten sonra gümrük işlemleri tamamlanan eşya için ve karar sahibi hakkında gümrük idarelerine karşı, yalnızca kararın tebliğini aldığı veya almış sayıldığı tarihten itibaren -üç yıllık süre için- geçerli olacak”* bağlayıcı tarife bilgisi (Binding Tariff Information/BTI) ve bağlayıcı menşe bilgisi (Binding Origin Information/BOI) kararı alabilmektedir (m.34). Ayrıca Tüzüğün **Diğer Faktörlere İlişkin Bağlayıcı Bilgi Kararları** başlıklı hükmüne göre gümrük idareleri özel durumlarda *“başvuru üzerine, ithalat veya ihracat vergisinin ve eşya ticaretine ilişkin diğer önlemlerin uygulanmasına dayalı olarak Başlık II'de belirtilen diğer faktörlere ilişkin bağlayıcı bilgi kararı”* alabilmektedir (m.35). Tüzüğün Başlık II kısmının (m.56-76) ortak gümrük tarifesi ve eşyanın tarife cetvelinde sınıflandırılması, eşyanın menşei ve gümrük kıymeti konularını kapsadığı dikkate alındığında gümrük kıymeti için de gümrük idarelerinden bağlayıcı bilgi talep edilmesi mümkündür. Nitekim bağlayıcı kıymet bilgisi (Binding Valuation Information-BVI) konusunda gümrük idarelerini yetkilendirilmesi için de Birlik Gümrük Kodunda değişiklik yapılmasını öngören bir taslak yayınlanmıştır. Gümrük işlemleri sırasında şeffaflığı, hukuki belirliliği, uyumluluğu ve tekdüzeliliği artıracak ve ekonomik operatörlerin, gümrük yetkililerinin ve gümrük idarelerinin mali çıkarlarının yararına olacağı ve kararının alınması, geçerliliği ve geçerliliğinin sona ermesi veya iptali ve zaman sınırının diğer bağlayıcı kararlara uygulanan mevcut hükümlerle aynı olacak bağlayıcı kıymet bilgisi düzenlemesinin 1 Aralık 2027'de yürürlüğe girmesi öngörülmektedir (EU, 2024).

Türk hukukunda 1996'da Avrupa Birliği ile kurulan gümrük birliğine ilişkin müktesebatın üstlenilmesine bağlı olarak ilk olarak mülga 1615 sayılı Gümrük Kanununda daha sonra da yürürlükteki 4458 sayılı Gümrük Kanununda (MBS, 2023a) bağlayıcı bilgi verilebileceğine ilişkin düzenlemelere yer verilmiştir (Danacı & Çetinkol, 2018: 155). Bu bağlamda Gümrük Kanununa göre ilgili kişiler gerekli bütün bilgi ve belgeleri yazılı olarak ibraz etmek ve uygunluğunu kanıtlamak şartıyla gümrük idarelerinden gümrük mevzuatının uygulanmasına ilişkin ve verildiği tarihten sonra tamamlanan gümrük işlemlerine konu olan eşya için karar biçiminde bağlayıcı bilgi talep edebilmektedirler. Gümrük Kanununda bağlayıcı tarife bilgisi ve bağlayıcı menşe bilgisi bu bilgiler arasında sayılarak ilgili kararların alınmasına, geçerlilik kazanmasına ve geçerliliklerini yitirmesine ilişkin hususlar ayrıca düzenlenmiş ve bu nitelikteki bilginin gümrük vergilerinin belirlenmesi, tarım politikasına bağlı ihracat vergi idareleri ile diğer bütün ödemelerin hesaplanması için ve gümrük beyannamesinin tesciliyle ilişkili gümrük işlemleriyle ilgili verilen belge olarak kullanılacağı belirtilmiştir (m.6-9). Gümrük Yönetmeliğinde (MBS, 2023b) ise bağlayıcı tarife bilgisi *“yalnızca bir kalem (aynı tarife pozisyonu alt açılımında bulunan ve aynı yasal ya da tercihli vergi oranına tabi olan) eşyanın Türk Gümrük Tarife Cetvelinde sınıflandırılmasına ilişkin olarak, kişinin yazılı talebi ve eşya bütün bilgi ve belgeleri sunması üzerine gümrük idaresince verilen”* ve bağlayıcı menşe bilgisi *“kişinin yazılı talebi ve eşya bütün bilgi ve belgeleri sunması üzerine gümrük idaresince verilen ve yalnızca bir kalem (aynı tarife pozisyonu alt açılımında bulunan ve aynı yasal ya da tercihli vergi oranına tabi olan) eşyanın tercihli veya tercihli olmayan menşeinin tespitine ilişkin”* idari kararlar olarak tanımlanmıştır (m.28-29).

Gümrük idaresince yayımlanan 14 Seri No'lu Gümrük Genel Tebliğinde (MBS, 2024c) bağlayıcı tarife bilgisi verilmesine ilişkin işlemler ile uygulamanın amaçları, bağlayıcı tarife bilgisinin kullanılması ve hukuki etkisi açıklanmıştır. Yine 11 Seri No'lu Gümrük Genel Tebliğinde (MBS, 2024ç) ise bağlayıcı tarife bilgisi başvurusu



yapılamayacak hallerde yetkili Gümrük ve Dış Ticaret Bölge Müdürlüklerinden tarife bilgisi talebinde bulunulmasına ilişkin usul ve esaslara açıklık getirilmiştir. Ayrıca eşyanın tarife cetvelinde sınıflandırılması açısından uluslararası uygulamalarla yeknesaklığı sağlamak amacıyla gümrük idaresi tarafından yayımlanan çeşitli tebliğler de bulunmaktadır. Belirtilmelidir ki gümrük idaresince bağlayıcı menşe bilgisi hakkında ilave bir düzenleme veya açıklama yapılmadığı; bu durum ise çerçeve düzenlemesi olsa da uygulamada gümrük idaresince henüz bir bağlayıcı menşe bilgisi kararı alınmadığı sonucunu doğurmaktadır.

Son olarak henüz uygulaması olmayan bağlayıcı kıymet bilgisi içerisinde bazı sorunları barındırmakta ve Türkiye’de uygulamaya geçmesi zaman alacağı düşünülmektedir. Zira statik nitelik taşıyan tarife ve menşe aksine kıymet dinamik nitelik taşımakta ve dolayısıyla zamana/döneme, piyasa koşullarına yere ve ticaretin taraflarına göre değişebilmektedir. Uluslararası ticaret de sözleşme serbestliği içerisinde ve tarafların özgür iradelerine göre gelişmektedir. Gümrük Tarifeleri ve Ticaret Genel Anlaşmasının (GATT) VII nci Maddesinin Uygulanmasına İlişkin Anlaşmada keyfi ve uydurma belirlemeleri önlemek amacıyla ithal eşyasının gümrük kıymetini için satış bedeli/ticari işlem kıymeti esas alınmıştır. Ayrıca bağlayıcı kıymet bilgisi uygulamasının referans/emsal kıymet uygulamasının yaygınlaşmasına yol açma potansiyeli de bulunmaktadır (Şahin, 2022).

### 3. BAĞLAYICI BİLGİNİN GENEL ÇERÇEVESİ VE HUKUKİ NİTELİĞİ

Uluslararası ticaret alanında gösterilen temel gayret bir taraftan operasyonel faaliyetleri basitleştirerek ve hızlandırarak ticaret erbabı açısından maliyetleri olabildiğince düşürmek; diğer taraftan risk esaslı selektif fakat etkin denetim yöntemleriyle bu ticareti gözetim altında tutarak olası ihlallerin önüne geçmektir. Böylece tedarik zincirinin bütün aktörler için öngörülen hedeflere ulaşılması mümkün olacaktır. Uluslararası ticaretin kamusal yükümlülükleri ağır basan işlem ve uygulamalarından oluşan gümrük işlemleri kısmında ve özellikle gümrük vergileri ile ticaret politikası önlemleri bağlamında temel belirleyiciler olan tarife, kıymet ve menşe açısından öngörülebilirliğin, kesinliğin ve uygulama birliğinin sağlanması bu açıdan oldukça önemlidir. Ayrıca bu amaçlara ulaşılması bakımından bilgi ve iletişim teknolojilerinin ulaştığı nokta ve gümrük alanında kullanımı önemli bir avantaj oluşturmakta ve gümrük konulu uluslararası düzenlemelerin hareket noktasını oluşturmaktadır (Truel, Maganaris & Grigorescu, 2015: 86-87).

Bu noktada 14 Seri No’lu Gümrük Genel Tebliğinde “a) Sınıflandırma kurallarının doğru ve yeknesak bir şekilde uygulanması suretiyle sınıflandırmanın uyumlaştırılmasını ve böylece dış ticaret rejiminin dış ticaret erbabı arasında doğru ve eşit olarak uygulanmasını sağlamak, b) Beyan sürecini ve gümrük işlemlerini hızlandırmak ve böylece gümrük kontrolünü ve uluslararası ticareti mümkün olduğunca kolaylaştırmak ve dış ticaret işlemlerinin maliyetini azaltmak, c) Ticaret erbabı ile gümrük idaresi arasında eşyanın tarife pozisyonundan kaynaklanan ihtilafları azaltmak, ç) Gümrük işlemleri sırasında eşyanın sınıflandırılması probleminden kaynaklanan zaman kayıplarını azaltmak suretiyle yüksek riskli eşyanın muayenesine ve kontrolüne gümrük işlemleri sırasında yeterli zaman ayrılabilmesini, dolayısıyla, gümrük denetimlerinin seçimli ve daha etkin yapılabilmesini sağlamak, d) Dış ticaret erbabına eşyanın Gümrük Tarife Cetvelinde sınıflandırılmasına ilişkin hukuki geçerliliği olan resmi bir bilgi sağlamak, e) Uluslararası bir ticaret işleminin karlılığının ve uygulama imkanının önceden tahmin edilebilmesini sağlamak” (m.6) şeklinde ifade edilen bağlayıcı tarife bilgisi verilmesindeki amaçların esasında bağlayıcı bilginin gerekçesine yönelik ipucu niteliği taşıdığı söylenebilir. Zira gümrük mevzuatı kapsamında temin edilen bilginin genel olarak işlemleri kolaylaştırma; hukuki güvenliği sağlama; gümrük idaresi ile muhatap olan kişiler açısından belirlilik sağlama gibi etkileri vardır (Gök, 2016: 116). Ayrıca bağlayıcı bilgi gümrük işlemlerinin uyumlaştırılarak kişilere doğru ve eşit uygulanmasını sağlamak, uyuşmazlıkları ortadan kaldırmak ve şeffaflığı sağlamak şeklinde hukuki etkilere de sahiptir.

Bağlayıcı bilginin hukuki niteliği açısından üzerinde durulması gereken konulardan biri bilginin biçimsel durumudur. Yukarıda belirtildiği üzere DTÖ Ticaretin Kolaylaştırılması Anlaşmasında gümrük idaresinden alınan bağlayıcı bilgiler ön karar olarak nitelendirilmekte ve kavram “başvuru kapsamındaki eşyanın ithalatından önce Üye tarafından başvuru sahibine verilen; (i) eşyanın sınıflandırılması ve (ii) eşyanın menşei ile ilgili olarak ithalat esnasında üye tarafından eşyaya uygulanacak olan muameleyi belirten yazılı bir karar” olarak tanımlanmaktadır (m39). Avrupa Birliği gümrük mevzuatında ise bağlayıcı bilgi için “karar” nitelemesi yapılmıştır. Türk hukukuna göre Gümrük Kanunu uyarınca karar kavramı “bağlayıcı tarife ve menşe bilgileri de dahil olmak üzere, gümrük idaresinin, gümrük mevzuatı ile ilgili olarak belirli bir konuda bir veya daha fazla kişi üzerinde hukuki sonuç doğuracak idari tasarrufu” anlamını ifade etmektedir (m.3/9). Gümrük idaresinin idari işlem niteliği taşıyan bütün işlemleri esasında karar niteliği taşımaktadır. Dolayısıyla gümrük idaresinden alınan bağlayıcı olmayan bilginin idari işlem niteliği tartışmalı olmakla birlikte bağlayıcı bilginin idari işlem niteliği taşıdığı söylenebilir. Zira bu durum Gümrük Kanunundaki karar tanımı ile “gümrük idareleri tarafından gerek başvuruların reddine ve

*gerekse muhatapı kişinin aleyhine olarak verilen yazılı kararlar...itiraz yolu açık olmak üzere gerekçeli olarak alınır ...alınan kararlar gümrük idareleri tarafından derhal uygulanır” (m.6/3-4) ve “itirazın reddi kararlarına karşı işlemin yapıldığı yerdeki idari yargı mercilerine başvurulabilir” (m.242/4) hükümlerinin doğal sonucudur. İspat hukuku açısından bağlayıcı bilgi remi belge niteliğindedir. Bununla birlikte söz konusu resmi belgenin verilmesine esas alınacak bilgi ve belgelerin tam, doğru ve uygun olmasının sorumluluğu talepte bulun kişiye aittir. Zira Gümrük Kanununa göre bilgi alan kişi “bağlayıcı tarife bilgisi için, beyan edilecek eşya ile verilen bilgide tanımlanan eşya arasında her bakımdan uygunluk bulunduğunu” ve “bağlayıcı menşe bilgisi için, beyan edilecek eşya ve menşe kazanımı gerektiren durumu ile verilen bilgide tanımlanan eşya ve menşe kazanımı gerektiren durumunun her bakımdan uygun bulunduğunu” kanıtlamalıdır (m.93).*

Konusu bağlamında bağlayıcı bilginin uygulamada bağlayıcı tarife bilgisinden ibaret olduğu, bağlayıcı menşe bilginin sadece düzenlemesinin olduğu ve fakat uygulamasının olmadığı ve bağlayıcı kıymet bilgisinin ise yapılacak düzenlemelerle kaynak Avrupa birliği gümrük mevzuatından Türk gümrük mevzuatına zaman içerisinde aktarılacağını görülmektedir. Bunlardan bağlayıcı tarife bilgisi kavramı Gümrük Yönetmeliğinde sadece bir kalemde ibaret “eşyanın Türk Gümrük Tarife Cetvelinde sınıflandırılmasına ilişkin olarak, kişinin yazılı talebi üzerine [gümrük idaresi tarafından verilen] idari karardır” şeklinde tanımlanmıştır (m.28/1). Genel olarak bağlayıcı tarife bilgisi “belirli bir ürüne ilişkin gümrük tarifesinin ilgili kodunu belirleyen bir makamın yazılı kararıdır” ve eşyanın tarife cetvelindeki sınıflandırılmasına ilişkin hataların önüne geçmesi bağlamında hem ithalatçılara hem de gümrük yetkililerine fayda sağlayan bir uygulamadır. Zira eşyanın gümrük tarife istatistik pozisyonunun önceden bilinmesi gümrük vergilerinin, ihracat iadelerinin, lisans gerekliliklerinin, kotaların ve diğer kısıtlamaların önceden belirlenmesine yardımcı olmaktadır (Laszuk, 2018: 81-82).

Diğer bir konu ise gümrük mevzuatında düzenlenen bilgi talebinin hak oluşturduğu ve bağlayıcılığı yönünden iki türe ayrıldığı hususudur. Türk hukukunda bilgi talebi gümrük hukuku ilişkisinde hem gümrük idaresine hem de bu idareyle muhatap olan kişilere tanınmış bir hak niteliği taşımaktadır. Söz konusu bilgi talebi gümrük hukukunu ilgilendiren ve gümrük mevzuatında düzenlenmiş bulunan tüm konuları kapsarken, bağlayıcı tarife ve bağlayıcı menşe bilgisi bağlamında maddi ve şekli yönleriyle bazı özel şartlara tabidir (Gök, 2016: 116). Bu noktada gümrük mevzuatında gümrük idaresinden talep edilen bilginin bazı hallerde gümrük idaresini bağlayıcı nitelik taşıdığı ancak bazı hallerde bağlayıcı nitelik taşımadığına işaret edildiği; dolayısıyla bilginin gümrük idaresini bağlayan bilgi ve bağlayıcı olmayan bilgi şeklinde iki tür olduğu görülmektedir. Söz konusu ayrım gümrük idaresince yayımlanan tarife konulu tebliğlerde de açıkça ifade edilmektedir. Zira Gümrük Kanununa göre bağlayıcı bilgi, “gümrük idarelerini, hak sahibine karşı sadece eşyanın tarife pozisyonu konusunda veya eşyanın menşesinin tespiti konusunda ve yalnızca bilginin verildiği tarihten sonra tamamlanacak gümrük işlemlerine konu olan eşya” bakımından bağlamaktadır (m.9/2). Yine 14 Seri No’lu Gümrük Genel Tebliğinin **Bağlayıcı Tarife Bilgisinin Hukuki Etkisi** başlıklı bölümünde “gümrük idarelerince, geçerli bir bağlayıcı tarife bilgisine konu eşya ile aynı olduğu tartışmasız olan eşya için bağlayıcı tarife bilgisindeki tespit doğrultusunda sınıflandırma yapılması gerektiği” ifade edilerek tarife sınıflandırma kararının gümrük idaresi açısından bağlayıcı olduğu ifade edilmiştir (m.15/1). Buna karşın anılan tebliğ uyarınca “laboratuvar tahliline tabi tutulacak dökme gelen bazı eşyadan perakende satılacak hale getirilmiş ambalajlarda olmayanları için, üzerlerinde veya ambalajlarında ayniyetini tespiti yarayacak bilgileri haiz olmayan ve fiziki olarak da ayniyet tespiti yapılamayan ya da başvuruya ilişkili olmayan/kapsamına girmeyen eşya” hakkında bağlayıcı tarife bilgisi verilememektedir (m.8). Bu durumda başvuru sahibince talep edilmesi halinde konu 11 Seri No’lu Gümrük Genel Tebliği çerçevesinde değerlendirilmektedir. Ancak atıfta bulunulan Tebliğin **Tarife Bilgisinin Hukuki Etkisi** başlıklı bölümünde bu kapsamda alınan tarife bilgisinin gümrük mevzuatı bakımından bağlayıcı olmadığı hususu vurgulanmıştır (m.12). Bu açıdan bağlayıcı olmayan bilgi, gümrük idaresinin bilgi verici, açıklayıcı, yol gösterici nitelikteki görüş ve önerileri olup kesinlik ve icrai nitelik taşıması nedeniyle enformel idari işlem niteliği taşır ve bu nedenle de idari dava konusu da olamazlar (Gök, 2016: 116). Bağlayıcı bilgi ise karar biçiminde olması bağlamında idare hukukunun genel esaslarına tabi bir idari işlem niteliği taşımaktadır.

Bağlayıcı bilginin hukuki niteliğinin anlaşılması bağlamında vergi hukukunda düzenlenen özelge ve sirküler için yapılan değerlendirmeler yol göstericidir. 213 sayılı Vergi Usul Kanununun (MBS, 2024d) **Mükelleflerin İzahat Talebi** başlıklı hükmünde “Mükellefler, Gelir İdaresi Başkanlığından veya bu hususta yetkili kıldığı makamlardan, vergi durumları ve vergi uygulaması bakımından müphem ve tereddütü mucip gördükleri hususlar hakkında yazı ile izahat isteyebilir. Gelir İdaresi Başkanlığı, kendisinden istenecek izahatı özelge ile cevaplandırabileceği gibi, aynı durumda olan tüm mükellefler bakımından uygulamaya yön vermek ve açıklık getirmek üzere sirküler de yayımlayabilir” (m.413) ifadesi yer almaktadır. Hükmün uygulamasına ilişkin Mükelleflerin İzahat Taleplerinin Cevaplandırılmasına Dair Yönetmelikte (MBS, 2024e) özelge kavramı “mükelleflerin ve vergi sorumlularının vergi durumları ve vergi uygulaması bakımından, kendilerince açık olmayan ve tereddüt ettikleri konular hakkında

yazılı olarak açıklama talebinde bulunmaları üzerine yetkili makamlarca kendilerine verilen yazılı görüşü” ve sirküler kavramı “vergi durumları ve vergi uygulaması bakımından açık olmayan ve tereddüt edilen konular hakkında aynı durumda olan tüm mükellef ve vergi sorumluları için uygulamaya yön vermek ve açıklık getirmek üzere Gelir İdaresi Başkanlığınca yayımlanan görüşü” olarak tanımlanmıştır (m.3/1.f-g). Ayrıca Yönetmeliğe göre “a) Başkalarının vergi durumları hakkında bilgi ve izahat talepleri, b) Yargıya intikal etmiş olaylara ilişkin izahat talepleri, c) Hakkında vergi incelemesi yapılmakta olan mükelleflerce veya vergi sorumlularınca incelemeye konu olan işlemlerle ilgili izahat talepleri, ç) Somut bir olaya dayanmayan, teorik hususlara ilişkin bilgi ve izahat talepleri, d) Mücbir sebep hali ilanı, vergi borçlarının terkinin, belge düzenine ilişkin yetkilerin kullanılması gibi kanunlarla uygulamanın tespitine dair Maliye Bakanlığına yetki verilen konulara ilişkin talepler, e) Mükelleflerin ve vergi sorumlularının vergi uygulamaları ile ilgili işlemlerinin gerçekleşmesinden sonra yaptıkları başvuruları ile Kanunun 122 nci maddesine göre vergi hataları ile ilgili yapılan düzeltme talepleri ve 124 üncü maddesine göre Maliye Bakanlığınca incelenecek olan şikayet yoluyla müracaatlar, f) Sözlü veya yazılı olarak veya internet aracılığıyla, 3071 sayılı Dilekçe Hakkının Kullanılmasına Dair Kanun ve 4982 sayılı Bilgi Edinme Hakkı Kanunu uyarınca yapılan talepler” izahat kapsamı dışında tutulmuştur (m.8/1). Bu bağlamda vergi mevzuatının sık değişmesi ve karmaşık yapıya bürünmesi, teknolojik gelişmeler, finansal araçlardaki çeşitlenme ve türev işlemlerdeki artış, uluslararası ticari ve vergisel işlemlerin boyutu, çok uluslu şirketler gibi pek çok husus mükelleflerin mevzuatın doğru yorumuna ilişkin ihtiyacını artırmaktadır. Dolayısıyla mükelleflerin izahat talebi hem bir ihtiyaç/ihtiyacın karşılanması aracı hem de mükellefin bilgilendirilme hakkının (the right to be informed) bir uzantısıdır (Aykın, 2016: 148). Bu bağlamda yeni bir hukuki durum oluşturmayan ve bu yönüyle görüş niteliği taşıyan (icrai nitelik taşımayan) özalgeler kişilerin vergiye ilişkin işlemleriyle ilgili önceden bilgi sahibi olmasını ve doğru işlemlerin zamanında yapılmasını imkan veren, vergi mevzuatının karmaşıklığı karşısında hak kaybı engelleyerek vergi yükümlülükleri bağlamında hukuki güvenlik sağlayan önemli bir mükellef hakkı ve hukuki kurum niteliği taşımaktadır. Özalgeler vergi idaresini tek taraflı, kesin ancak icrai nitelikte olamayan tasarruflardır. Bununla birlikte özalgeler talebinin reddedilmesi ilişkin idari yargıda açılan dava ortada kesin ve yürütülmesi gereken bir işlem olmadığı gerekçesiyle reddedilmiştir (Bölükbaşı, 2021: 111-127).

İzahat talep etme hakkı 4982 sayılı Bilgi Edinme Hakkı Kanununda düzenlenen bilgi edinme hakkından ve 3071 sayılı Dilekçe Hakkının Kullanılmasına Dair Kanunda düzenlenen yazıyla başvuru hakkından “izahat talep edebileceklerin sınırlandırılması, izahat talep edilebilecek konuların niteliği, talebin yapılabileceği merciler ile hukuki sonuçları açısından” farklı nitelik taşımaktadır. Zira izahat, idarenin elindeki bir bilgi veya belgenin elde edilmesi talebini değil bir konudaki yorumu veya açıklamasına ilişkin talebi içermektedir (Aykın, 2016: 152). Aşağıda değerlendirileceği üzere gümrük mevzuatında da izahat ve bağlayıcı bilgi talebi ile genel hükümlere göre yazılı talep ve bilgi edinme başvuruları ayrı hukuki rejime tabi tutulmuştur.

Gümrük idaresi (Gümrükler Genel Müdürlüğü, yetkili Gümrük ve Dış Ticaret Bölge Müdürlüğü) tarafından verilen bağlayıcı bilgi (tarife bilgisi) ile vergi idaresi (ilgili vergi dairesi başkanlıkları, defterdarlıklar ve Ankara-İzmir-İstanbul Vergi Dairesi Başkanlıkları) tarafından verilen özalgeler karşılaştırıldığında; hukuki dayanak (Gümrük Kanunu; Vergi Usul Kanunu), başvurunun cevaplandırılması süresi (3 ay; 45 gün), geçerlilik süresi (6 yıl; özalgelerin istendiği vergilendirme döneminde yürürlükte olan kanunlara göre), vergilendirme ve cezalandırma rejimine etkileri (her ikisi için de dayanak kanunları uyarınca ceza kesilmez ve gecikme faizi uygulanmaz; bağlayıcı bilgide ek tahakkuk yapılmaz ancak kapsam sınırlaması olmayan özalgelerde re’sen/ikmalen tarhiyat mümkündür) ve bağlayıcılığın niteliği bakımından (bağlayıcı bilgi gümrük işlemlerinde tarafları bağlar ancak yargı organlarını bağlamaz; özalgeler ise mükellef ve yargı organlarını bağlamaz ancak vergi idaresini, rapor değerlendirme komisyonunu ile vergi inceleme elemanlarını bağlar) noktaları bağlamında benzer ve ayrı yönler bulunmaktadır (Danacı & Çetinkol, 2018: 165-166).

#### **4.BAĞLAYICI BİLGİNİN VERGİLENDİRME VE CEZALANDIRMA REJİMİNE ETKİLERİ**

Gümrük Kanununa göre “gümrük idaresi tarafından yükümlüye yazı ile yanlış izahat verilmiş olması halinde bu Kısım hükümlerine göre idari para cezası ve faiz uygulanmaz” (m.231/5). Gümrük Yönetmeliğinde ise kişilerin gümrük idarelerinden gümrük mevzuatının uygulanması hakkında talep ettikleri ve karar niteliği taşımayan ve bu nedenle de itiraza konu olamayan izahatın yazı ile yanlış verilmiş olması halinde söz konusu uygulamanın kapsamına Gümrük Kanunu uyarınca verilen bağlayıcı tarife bilgisi ve bağlayıcı menşe bilgisine ilişkin talepler ile sözlü, yazılı olarak veya internet aracılığıyla Dilekçe Hakkının Kullanılmasına Dair Kanun ve Bilgi Edinme Hakkı Kanunu uyarınca yapılan talepler girmemektedir. Yine Gümrük Yönetmeliğine göre laboratuvar raporlarına göre tarife beyanında bulunulmakla birlikte sonradan yapılan tahlil sonucunda eşyanın farklı bir tarifede sınıflandırılması gerektiğinin belirlendiği ve tarife bilgisi kapsamında bildirilen tarifenin gümrük idaresince

sonradan değiştirilmesi durumlarda idari para cezası ve faiz uygulanmayacaktır (m.580/A). Gümrük vergilerine ilişkin ek tahakkukun yapılması ise mümkündür.

Vergi Usul Kanununda **Yanılma ve Görüş Değişikliği** başlıklı hüküm “*yetkili makamların mükellefin kendisine yazı ile yanlış izahat vermiş olmaları veya bir hükmün uygulanma tarzına ilişkin bir içtihadın değişmiş olması halinde vergi cezası kesilmez ve gecikme faizi hesaplanmaz*” şeklindedir (m.369). Ayrıca Vergi Usul Kanunu uyarınca Rapor Değerlendirme Komisyonunda vergi incelemesine ilişkin raporların vergi mevzuatı kapsamında sirküler ve özelgelere uygunluk açısından değerlendirmesi gerekmektedir (m.140/6). Vergi incelemesi yapmaya yetkili olanların da inceleme neticesinde tanzim edecekleri raporlarda sirkülere aykırı hususlara da yer vermemesi ve buna aykırı olarak tarhiyat önermemelidir (Atak & Altuntaş, 2017: 95). Bununla birlikte vergilerin aslıyla ilgili olarak hükümde bir belirleme yapılmadığından özelve ve dolayısıyla sirkülere konu vergilendirme işlemi hakkında gerekli hallerde re’sen vergi tarhi yapılabilmektedir (Bölükbaşı, 2021: 118).

Bağlayıcı bilgiye göre gümrük işlemlerini yerine getiren kişinin kusurlu veya hatalı olmadığı açıktır. Ayrıca bu durumdaki kişinin gümrük idaresince hukuki açıdan yanıltıldığı da söylenebilir. Dolayısıyla geçerli bir bağlayıcı bilgiye istinaden, diğer bir ifadeyle idarenin yorumuna/mevzuat izahına istinaden hatalı hareket eden kişiler için içinde buldukları durum esasında şahsi bir cezasızlık sebebi/durumu oluşturmaktadır. Diğer bir ifadeyle bu durumdaki kişilerin kasten (bilerek ve isteyerek) veya taksirle (dikkat ve özen yükümlülüğüne uymadan) hareket ettiği söylenemeyeceğinden kabahat de işlememiş sayılırlar. Nitekim Kabahatler Kanunu (MBS, 2024f) uyarınca kabahatler kasten veya taksirle işlenebilmekte (m9/1); bu nedenle subjektif unsurun olmaması halinde kabahat de oluşmamaktadır. Bununla birlikte bağlayıcı bilginin sağlanması sonrasında gümrüğe sunulan eşya ile bağlayıcı bilgi arasında bir farklılık tespit edilmişse artık bağlayıcı etkiden söz edilemez (Gök, 2016: 123). Bağlayıcı bilginin alınması sırasında gümrük idaresine yönelik ibraz/kanıtama yükümlülüklerin yerine getirilmesine ilişkin eksiklikten ya da başvuranın verdiği yanlış/hatalı bilgiye istinaden bağlayıcı bilginin iptal edilmiş olmasından kaynaklanan durumlarda gümrük idaresi bağlayıcı bilgi yerine gümrük denetimi sonuçlarına göre hareket etmek durumundadır. Zira bağlayıcı tarife bilgisi özelinde beyanın denetimi neticesinde bir aykırılık tespit edilmişse Gümrük Kanunu uyarınca idari yaptırımın uygulanacaktır. İptal edildiği veya geçerliliğini yitirdiği hallerde de Gümrük Kanununda belirtildiği andan itibaren bilginin söz konusu bağlayıcılık niteliği ve koruma etkisi sona ermektedir. Nitekim Gümrük Kanununda “...4.Bağlayıcı tarife bilgisi verilmiş tarihinden itibaren altı yıl; bağlayıcı menşe bilgisi verilmiş tarihinden itibaren üç yıl geçerlidir. Talep edenin verdiği yanlış veya eksik bilgiye dayanan bağlayıcı bilgi iptal edilir. 5.Bağlayıcı tarife bilgisi aşağıdaki durumlarda geçerliliğini kaybeder: a) Türk Gümrük Tarife Cetvelinde değişiklik yapılması ve verilen bilginin söz konusu değişiklikle getirilen hükümlere uymaması, b) Dünya Gümrük Örgütü’nün uymakla yükümlü bulunduğumuz nomanklatür, izahname, tarife pozisyonlarına ilişkin kararlarındaki bir değişikliğe uymaması, c) Bağlayıcı tarife bilgisinin iptal edildiğinin veya değiştirildiğinin bilgi verilen kişiye tebliğ edilmesi. Bu fıkranın (a) ve (b) bentlerinde belirtilen hallerde bağlayıcı tarife bilgisinin geçerliliğini kaybetme tarihi, söz konusu değişikliklerin Resmi Gazetede yayımı tarihidir. 6.Bağlayıcı menşe bilgisi aşağıdaki durumlarda geçerliliğini kaybeder: a) Menşe kurallarında bir mevzuat düzenlemesi veya bir uluslararası anlaşma gereğince değişiklik yapılması ve verilen bilginin söz konusu değişiklikle getirilen hükümlere uymaması, b) Dünya ticaret Örgütü’nün uymakla yükümlü bulunduğumuz Menşe Kuralları Anlaşmasına ve bu anlaşmaya ilişkin izahname ve kararlardaki bir değişikliğe uymaması, c) Bağlayıcı menşe bilgisinin iptal edildiğinin veya değiştirildiğinin bilgi verilen kişiye tebliğ edilmesi....(a) ve (b) bentlerinde belirtilen hallerde bağlayıcı menşe bilgisinin geçerliliğini kaybetme tarihi, söz konusu değişikliklerin Resmi Gazetede yayımı tarihidir...7. 5 ve 6 ncı fıkra hükümleri uyarınca geçerliliğini kaybeden bağlayıcı tarife veya menşe bilgisinin hak sahibi, söz konusu bağlayıcı bilgiye dayanarak ve bu bilginin geçerliliğini kaybetmesinden önce, ilgili eşyanın alımı veya satımı üstüne bağlayıcı sözleşmeler yaptığı takdirde, geçerliliğini kaybeden tarife veya menşe bilgisini, söz konusu yayımın ya da tebligatın yapıldığı, tarihten itibaren altı aylık bir süre boyunca kullanabilir. Ancak, gümrük işlemleri sırasında söz konusu ürünler için bir ithalat, ihracat ya da ön izin belgesinin gümrüğe verilmesi halinde, bu belgenin geçerlilik süresi esas alınır...” ifadelerine yer verilerek bağlayıcı bilginin hangi hallerde geçerliliği kaybedeceği veya iptal edileceği hususları ile bunun hüküm ve sonuç doğuracağı zamana açıklık getirilmiştir.

Konu gümrük/kaçakçılık suçları açısından değerlendirilirken hata ve sahte belge ibrazı durumlarından hareket edilmesi yerinde olacaktır. Türk Ceza Kanununun (MBS, 2024g) Hata başlıklı hükmü “(1) Fiilin icrası sırasında suçun kanuni tanımındaki maddi unsurları bilmeyen bir kimse, kasten hareket etmiş olmaz. Bu hata dolayısıyla taksirli sorumluluk hali saklıdır. (2) Bir suçun daha ağır veya daha az cezayı gerektiren nitelikli hallerinin gerçekleştiği hususunda hataya düşen kişi, bu hatasından yararlanır. (3) Ceza sorumluluğunu kaldıran veya azaltan nedenlere ait koşulların gerçekleştiği hususunda kaçınılmaz bir hataya düşen kişi, bu hatasından yararlanır. (4) İşlediği fiilin haksızlık oluşturduğu hususunda kaçınılmaz bir hataya düşen kişi, cezalandırılmaz”

şekindedir (m.30). Kabahatler Kanunu uyarınca da kasten işlenen kabahatler bakımından da Türk Ceza Kanununun hataya ilişkin bu hükmü uygulama bulmaktadır (m.10/1). Bu noktadan hareketle son söz olarak adli yaptırımlar bağlamında hata-yanılma hali içinde olan kişinin kusurlu hareket etmesi söz konusu olmayacağından bağlayıcı bilgidен kaynaklanan suçlara ilişkin ceza sorumluluğunun da olmadığı ancak bağlayıcı bilginin verilmesi sırasında ibraz ve ispat yükümlülükleri kapsamında kasten sahte/yanıltıcı bilgi veya belge sunan ve idareyi aldatarak bu bilgiyi temin eden kişinin ise ceza sorumluluğunun olduğu kabul edilmelidir.

## 5. SONUÇ

Bağlayıcı bilgi, bu bilgiyi talep etme hakkı olan kişilerin bilginin konusunu oluşturan işlemleriyle ilgili gümrük idaresinin ön karar/karar niteliği taşıyan tasarrufudur. Bağlayıcı bilginin biçimsel özelliğinin karar olması nedeniyle idari itiraz ve idari dava konusu yapılabilen kendine has bir idari işlem niteliği taşıdığı görülmektedir. Bağlayıcı bilginin bağlayıcılığı ise gümrük idaresi açısından kabul edilmekte; başvuru sahibi ya da yargı organları açısından ise kesin bağlayıcılığı kabul edilmemektedir.

Bağlayıcı bilgi vergi uygulamaları bağlamında çok önemli işleve sahiptir. Bununla birlikte Türk gümrük mevzuatında düzenleniş şekli ve kapsamı sorunludur. Zira gümrük mevzuatında bilgi ve bağlayıcı bilgi ile izahat konularına ilişkin düzenlemeler iç içe geçmiş ve karmaşık bir yapı görünümündedir. İzahın hangi bilgiye işaret ettiği hususu da anlaşılammaktadır. Bu noktada Vergi Usul Kanunundaki izaha ilişkin düzenlemeye benzer içerikte bir düzenleme yapılarak açık ve anlaşılır belirlemelere yer verilmesi uygun olacaktır. Yine Gümrük Kanununda ve Gümrük Yönetmeliğinde bağlayıcı menşe bilgisine ilişkin ifadelere de yer verilmesine rağmen uygulamada bağlayıcı bilginin tarife sınıflandırmasıyla sınırlı kaldığı görülmektedir. Diğer taraftan dilekçe hakkı ve bilgi edinme hakkına ilişkin düzenlemeler ya da gümrük mevzuatında bağlayıcı olmayan bilgi talebine ilişkin düzenlemelerinin gümrük mevzuatı içerisinde ayrıca açık, anlaşılır ve sistematik şekilde yeniden düzenlenmesi önemli bir eksikliği giderecektir.

Menşe konusunda yetkili otoritenin ihracatçı ülke gümrük makamları olduğu ve menşe ispat belgelerinin yaygın bir kullanım alanına sahip olduğu hususları bilinmekle birlikte bağlayıcı menşe bilgisinin de hayata geçirilmesi kendisinden beklenen faydaya ulaşılması bakımından gereklidir. Bağlayıcı kıymet bilgisi uygulamasının yürürlüğe girmesi halinde özellikle piyasa koşullarına müdahale ve referans kıymet uygulamasına yol açması bağlamında uyumsuzluklara yol açma potansiyelinin yüksek ve buna bağlı olarak kendisinden beklenen amaca ulaşılması bakımından konunun sorunlu olduğu görülmektedir. Zira bağlayıcı bilgi uygulaması açısından en önemli sorun bu bilgiyi alan ile almayan arasında hakkaniyetin ne şekilde sağlanacağına ilişkindir. Bu noktada bilginin gerekli olduğu hallerde en azından genel tebliğler yoluyla bilgilendirmenin tercih edilmesi bu açıdan yerinde olacaktır.

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## 2023 küresel İstihdam Raporu Kapsamında Dünyada İşgücü Piyasası Durum Analizi

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**Özet:** 18. yy sonlarında ortaya çıkan sanayi devrimi, üretim sürecine makineleri entegre ederken diğer yandan da çalışma sisteminde devrim niteliğinde değişiklikler çıkarmıştır. Köyden kentlere göç eden insanların fazla olması, işçilerin fabrikalarda düşük ücretlere çalışmasına yol açmış, Kentlere yığılan insanlar hem kentlerin demografik yapılarını bozmuş hem de kentlerde işsizliğin artmasına neden olmuştur. İkinci Dünya savaşı sonrası refah devleti modelinin ortaya çıkması ile işgücü piyasaları (istihdam, işsizlik, işgücüne katılım vs.) altın dönemini yaşamış olsa da 1970 sonrası petrol krizleri ve çoğu ülkenin ekonomilerinde görülen daralmalar refah devletinin sorgulanmasına sebep olmuştur. 1980 sonrası neoliberal politikalar birçok ülkede etkisini göstermeye başlamış teknolojik gelişmeler küreselleşmenin dünyaya hızlı bir şekilde yılmasında öncülük etmiştir. Küreselleşme sonucu ulus devleti sınırlarının ortadan kalkmasıyla birlikte ülkeler arasındaki etkileşim hız kazanmış, gelişmiş ülkelerin ekonomik yöntemlerindeki değişiklikler, hızlı nüfus artışı, teknolojik gelişmeler birlikte işgücü piyasası farklı bir boyuta evrilmiştir. Bu gelişmelere bağlı olarak küresel bir köy haline gelen dünyaya kendini entegre edemeyen ülkeler, işgücü piyasasını yönetmekte ve geliştirmekte güçlük çektiği görülmektedir.

Bu çalışmada İLO'nun 2023 yılında yayınladığı küresel istihdam eğilimleri raporu, sınıflandırılmış tüm bölgeler kapsamında ekonomik büyüme, istihdam, işsizlik ve sosyal gelişmeleri ele alarak dünya işgücü piyasası analiz edilmiştir.

**Anahtar Kelimeler:** Küresel İstihdam Eğilimleri, İşgücü Piyasası, İLO.

### Ekonomide Yaşanan Küresel Gelişmeler

2022 yılında işgücü piyasalarının küresel görünümü bir önceki yıla göre daha kötü ve istikrarsız bir seyir izlemiştir. Ortaya çıkan jeopolitik gerilimler, Ukrayna çatışması, salgından sonra ülkeler arasında yaşanan dengesiz bir iyileşme ve tedarik zincirlerinde süregelen darboğazlar, 1970'lerden bu yana ilk kez yaşanan eş zamanlı yüksek enflasyon ve düşük büyüme, stagflasyon döneminin özelliklerini yansıttığı görülmüştür. Politika yapıcılar, istihdamın tam olarak iyileşmediği bir ortamda yüksek enflasyonla uğraşırken zorlu bir tavizle karşı karşıya kalmaktadırlar.

Çoğu ülke, 2019'un sonunda, yani COVID-19 sağlık krizinin patlak vermesinden önce görülen istihdam seviyelerine ve çalışma saatlerine henüz dönemediği görülmüştür. Ancak ağırlıklı olarak gıda ve emtia piyasalarında yaşanan bir dizi arz şoku üretici fiyatlarını yükselterek tüketici fiyat enflasyonunda ani yükselişlere neden oldu ve büyük merkez bankalarını daha kısıtlayıcı bir politika izlemesine yol açmıştır. İşgücü gelirlerinde buna karşılık gelen artışların yokluğunda, hayat pahalılığı krizi, hanelerin geçim kaynaklarını doğrudan tehdit etmekte ve toplam talebin azalması riskini taşımaktadır. Pek çok ülke, kısmen salgının ortaya çıkardığı olumsuz etkileri gidermek için önemli miktarda borçlanma yoluna gitti. Bu nedenle küresel bir borç krizi riski büyük görünmekte ve ekonomide yaşanan toparlanmalarda kırılmalıklar görülmektedir. Fiyatlar nominal geliri aştığında gerçek emek gelirleri düşer. Yüksek gelirli ülkelerde talep üzerinde ortaya çıkan aşağı yönlü baskı, küresel tedarik zinciri (GSC) bağlantıları aracılığıyla düşük ve orta gelirli ülkeleri etkilemektedir. Buna ek olarak, tedarik zincirlerindeki sürekli kesintiler, özellikle sınır pazarlarında istihdam olanaklarını ve iş kalitesini tehdit ederek, işgücü piyasasının hızlı bir şekilde toparlanma olasılığını daha da azalttığı görülmektedir.

### İşgücü Piyasasında Yaşanan Küresel Gelişmeler

İşgücü piyasasında yaşanan zorlu çalışma ilişkileri yüzünden, dünya çapında insana yakışır iş açıkları devam ederken ve sosyal adaleti olumsuz yönde etkilemektedir. 2022-2023 yıllarına baktığımızda yüz milyonlarca insan ücretli istihdama katılmada zorluk çektiği görülmüştür. İstihdam edilenler sıklıkla sosyal korumaya ve işyerinde temel haklara erişimden yoksun olduğu görülmektedir; işçilerin çoğunluğu kayıt dışıdır veya sosyal diyalog yoluyla çıkarlarını ifade edememektedir. Gelirler son derece eşitsiz bir şekilde dağıtılmakta ve bu yüzden pek çok işçi yoksulluktan kurtulamadığı görülmektedir. İşgücü piyasasının beklentileri yalnızca ülkeler arasında değil, ülkeler içinde de son derece eşitsizdir.

İnsana yakışır iş sosyal adaletin temeli olmasından dolayı önemli bir konudur. Haneler büyük ölçüde adil bir gelir, işyerinde güvenlik ve sosyal koruma sunan insana yakışır iş fırsatlarının sağladığı emek gelirine güvenmektedir. Küresel iş açığı 2022'de 473 milyon kişi olarak güncellenmiştir; bu da yüzde 12,3'lük iş açığı oranına karşılık gelmektedir. Küresel iş açığı, dünyadaki istihdam açığının yeni bir ölçüsüdür. Yüzde 5,8'lik

işsizlik oranına karşılık gelen 205 milyon işsizden oluşmaktadır ve 268 milyon istihdam açığı ortaya çıkmakta ancak işsiz sayılma kriterlerini karşılamadıkları için işgücünün dışındadırlar. Bu iş açığı özellikle kadınlar arasında ve gelişmekte olan ülkelerde büyük olduğu görülmektedir. Erkekler ve kadınlar şu anda benzer küresel işsizlik oranlarıyla karşı karşıya olsa da, kadınlarda iş açığı yüzde 15,0 iken erkeklerde bu oran yüzde 10,5'tir. Kişisel ve aile sorumlulukları (ücretsiz bakım işi dahil), insana yakışır istihdam fırsatlarının olmayışı nedeniyle cesaret kırılması ve (yeniden) eğitim olanaklarının azlığı, birçok kişinin iş aramasını engellemekte veya kısa sürede çalışmaya uygunluklarını sınırlamaktadır. Düşük gelirli ve düşük-orta gelirli ülkeler yüzde 13 ila 20 arasında yüksek iş açığı oranlarına sahipken, orta gelirin üstünde olan ülkeler yaklaşık yüzde 11'lik bir boşluk göstermekte, yüksek gelirli ülkeler yalnızca yüzde 8'lik bir boşluk olduğu tespit edilmiştir. COVID-19 krizinden sonra istihdamın toparlanması esas olarak kayıt dışı istihdamdan kaynaklanmış ve bu da kayıt dışı çalışan sayısında hafif bir artışa neden olmuştur. Çalışma dünyasının her alanında cinsiyet uçurumları mevcut ve gençler belirli zorluklarla karşı karşıya kalmaktadır. Kayıt dışılık ve çalışan yoksulluğu, COVID-19 kriziyle birlikte daha da arttığı görülmektedir. 2021'de başlayan toparlanmaya rağmen, daha iyi iş fırsatlarıdaki açıkların devam etmesi sonraki yıllarda işgücü piyasasında önemli olumsuz etkilere neden olması tahmin edilmektedir. Öngörülen yavaşlamanın işçileri kötü işlere itmesi ve başkalarını yeterli sosyal korumadan mahrum bırakmasına neden olacaktır.

Kayıt dışı istihdamın görülme sıklığı 2004 ile 2019 arasında yüzde 5 puan azaldı. Kayıt dışılık, kayıtlı istihdam ilişkisinin sosyal adaleti geliştirmede önemli olan birçok özelliğinden yoksun olduğu görülmektedir. Örneğin, işlerin sosyal koruma sistemlerine erişim sağlama olasılığı resmi emsallerine göre çok daha azdır. Genel olarak, dünya çapında insanların yalnızca yüzde 47'si en az bir sosyal koruma yardımıyla etkin bir şekilde yararlanıyor; bu da 4 milyardan fazla insanın hâlâ herhangi bir sosyal korumadan yoksun olduğu anlamına gelmektedir. 2022 yılında tahminen 214 milyon işçi aşırı yoksulluk içinde yaşadığı tespit edilmiştir (satın alma gücü paritesi açısından kişi başına günlük 1,90 ABD dolarından az kazanan), bu da istihdam edilenlerin yaklaşık yüzde 6,4'üne karşılık gelmektedir. Düşük gelirli ülkelerin 2019'dakiyle aynı oranda aşırı çalışan yoksulluğuna sahip olduğu ve çalışan yoksul sayısının giderek arttığı tahmin edilmektedir. Bu durgunluğu kırmaya yönelik kayda değer bir ilerleme olmadan, Sürdürülebilir Kalkınma Hedefi (yoksulluğun tüm biçimlerinin ortadan kaldırılması)'ne ulaşılması imkansız olacaktır. Nominal işgücü gelirleri, enflasyona ayak uyduramadığından, yaşam maliyeti krizi daha fazla insanı mutlak veya göreceli yoksulluğa sürüklemektedir. Burada "göreceli yoksulluk" ulusal yoksulluk sınırının altına düşme anlamına gelmektedir. Bu risk, özellikle son derece eşitsiz gelir dağılımının en altında olanlar için daha yüksektir; Küresel ölçekte işçilerin yarısı toplam emek gelirinin yalnızca yüzde 8'ini kazanıyor. Kadınların ve gençlerin işgücü piyasalarında durumu çok daha kötü gözükmemekte; bu da birçok ülkede çalışma dünyasındaki büyük eşitsizliklerin göstergesidir. Küresel ölçekte kadınların işgücüne katılım oranı 2022'de yüzde 47,4 olurken, erkeklerde bu oran yüzde 72,3'tür. Yüzde 24,9'luk fark şu anlama geliyor: Yüzde 24,9'luk fark, ekonomik olarak aktif olmayan her erkeğe karşılık iki kadının olduğu anlamına geliyor. Gençler (15-24 yaş arası) insana yakışır istihdam sağlama konusunda ciddi zorluklarla karşı karşıya kalmaktadır. İşsizlik oranı yetişkinlerin (25 yaş ve üzeri) üç katıdır. Gençlerin beşte birinden fazlası (yüzde 23,5) ne eğitimde, ne istihdamda ne de öğretimde (NEET) yer almaktadır.

## İstihdamda Yaşanan Küresel Gelişmeler

Küresel istihdamın 2023'te yüzde 1,0 oranında artması bekleniyor; bu, 2022'deki yüzde 2,3'lük büyüme oranına kıyasla önemli bir yavaşlama anlamına gelmektedir. 2023 yılına ilişkin bu projeksiyon, önceki projeksiyona göre 0,5 puanlık kayda değer bir aşağı yönlü revizyondur. İstihdam artışının yüzde 1,1'e ulaşmasının beklendiği 2024 yılı için önemli bir iyileşme öngörülmemektedir. İstihdam artışının sıfıra yakın olduğu yüksek gelirli ülkeler için görünüm kötümser gözükmemektedir. Buna karşılık, düşük gelirli ve alt-orta gelirli ülkelerin istihdam artışının pandemi öncesi büyüme trendini aşacağı öngörülmektedir. İstihdam artışındaki yavaşlama, küresel olarak COVID-19 krizinin açtığı boşlukların, önümüzdeki iki yıl içinde kapatılması mümkün gözükmemektedir. 2022'deki güçlü istihdam artışı, küresel istihdam/nüfus oranını 2020'deki yüzde 54,5'ten yüzde 56,4'e çıkardı ancak yine de 2019 seviyesinin neredeyse yarım puan altında kalmıştır. 2022'de toplam haftalık çalışılan saat, 2019'un dördüncü çeyreğindeki seviyelerinin altında kaldı. Nüfus artışına göre ayarlandığında yüzde 1,4; bu rakam 41 milyon tam zamanlı işe (haftada 48 saat) eşdeğerdir. Ekonomik yavaşlamanın bir sonucu olarak 2023 yılında işçi başına ortalama haftalık çalışma saatinin hafif bir düşüş göstererek haftada 41 saatin biraz üzerinde kalması beklenmektedir. Faaliyetlerdeki bu azalma, çalışanların kazanç potansiyelini sınırlamakta ve büyük olasılıkla daha kaliteli, iyi maaşlı işlere geçiş fırsatlarını azaltmaktadır. Ekonominin kilit sektörlerinin yeniden açılması ve işgücü piyasası koşullarının 2022'de iyileşmeye devam etmesi nedeniyle 2021'deki istihdam artışı yüksek olmuştur. Avrupa ve Orta Asya'da istihdam/nüfus oranı 2022'de kriz öncesi seviyenin üzerine çıkmış, diğer



bölgelerdeki kayıplarının büyük kısmını geri almıştır. 2020'deki istihdam kayıplarından orantısız bir şekilde etkilenen kadınlar, özellikle güçlü bir istihdam artışı kaydetmiştir. 2022 yılına gelindiğinde istihdam/nüfus oranı, kriz öncesi seviyeye göre yüzde 0,3 puan yakınına ulaştı; erkeklerde ise bu fark yüzde 0,6 puan oldu. Ancak bu güçlü toparlanma esas olarak kayıt dışı istihdamdan kaynaklanmıştır: 2022'de kadınlar için yaratılan beş işten dördü kayıt dışıyken, erkekler için yalnızca üçte ikisi kayıt dışıydı. 2023 yılı için işgücü piyasası görünümü bölgeye göre önemli ölçüde farklılık göstermektedir.

## İş Kalitesi ve Verimlilik

İstihdamdaki açığın ötesinde iş kalitesi temel bir endişe kaynağı olmaya devam etmektedir. Sosyal korumaya erişimi olmayan pek çok kişi işsiz kalmayı göze alamaz. Genellikle çok düşük ücretle ve uygunsuz ya da yetersiz çalışma saatleri ile her türlü işi kabul etmektedir. Bu nedenle öngörülen yavaşlamanın, işçileri daha iyi ekonomik koşullarda yararlanabileceklerinden daha kötü kalitede işleri kabul etmeye zorlaması muhtemeldir. Üstelik fiyatların nominal ücretlerden daha hızlı artması nedeniyle işçiler, mevcut işlerini sürdürdüklerinde bile harcanabilir gelirlerinde hızla düşüş yaşamaktadır. Yaygın yoksulluk, kayıt dışılık ve güvenli ve emniyetli işyerlerinin olmayışı da dahil olmak üzere insana yakışır iş ve refaha yönelik tehditlerle mücadele etmek, yatırımı, yenilikçiliği ve teknolojik ilerlemenin yayılmasını gerektirecektir. Örneğin, insanların becerilerine ve yeteneklerine yapılan yatırım, yaygın olarak işgücü verimliliği artışında merkezi bir faktör olarak kabul edilmektedir. Dahası, Paris Anlaşması'nın iklim hedefleri, enerji ve diğer doğal kaynakları çok daha verimli kullanarak ve önemli ölçüde daha düşük sera gazı emisyonları üretirken ekonomilerin büyümesine olanak sağlamak için teknik ilerlemenin hızlandırılmasını gerektirmektedir. Ancak son yirmi yılda, üretkenlik artışında kademeli bir yavaşlama görüldü; bu, en çok gelişmiş ekonomilerde belirgin olmakla birlikte, gelişmekte olan başlıca ekonomilerde de giderek daha belirgin hale gelmektedir. Verimlilik artışı sadece yavaşlamakla kalmadı, aynı zamanda bu büyümenin meyveleri de daha az eşit olarak paylaşılmaktadır. Küresel işgücü geliri payı, COVID-19 krizinden önceki on beş yılda bir düşüş eğilimindeydi. Onlarca yıldır (gerçek) asgari ücretlerin düşmesi, bir zamanlar güçlü olan işgücü piyasası kurumlarının erozyona uğraması ve sosyal diyalogun daha geniş ölçekte canlandırılmaması, emeğin ekonomik büyümenin yararlarından tam ve adil bir şekilde yararlanmasını engelledi. Belirli sektörlerde artan endüstriyel yoğunlaşma, özellikle küçük ve orta ölçekli işletmeler arasında eşitsizliği daha da artırmakta ve ekonomik dinamizmi engellemektedir. Eşitsizliğin kötüleşmesi ve üretkenlik artışının yavaşlaması birbirini güçlendirmektedir. Çünkü gelir kazançlarını yatırımı teşvik etmeyecek şekilde yapıldığı gözlenmektedir. Dijital ekonomide teknolojik inovasyonun hızı yüksek ancak faydaları geniş çapta paylaşılmamaktadır. Maddi olmayan varlıkların iş modelindeki önemli rolü nedeniyle dijital ekonomide sanayi yoğunlaşması özellikle yaygındır ve bu da üretkenlik artışının birkaç önde gelen şirket ile diğerleri arasında farklılık göstermesine neden olmaktadır. Dijital yenilikler henüz istihdamı ve büyümeyi artıracak verimlilikte ekonomi çapında yayılmalar yaratmadı. Aksine, yoğunlaşan üretkenlik kazanımları, yüksek vasıflı iş fırsatlarının dağılımını birkaç teknoloji tabanlı endüstriye doğru kaydırarak hem eşitsizliği hem de (toplam) üretkenlikteki yavaşlamayı artırdı. Sürdürülebilir enerjiye geçiş için mobilite yönetimi veya şebeke yönetimi gibi toplum çapında faydalar sağlayan teknolojik atılımlar hâlâ eksik olduğu görülmektedir. Uzaktan ve hibrit çalışmaya geçişi kolaylaştıracak ve giderek daha fazla çeşitlilik gösteren iş gücü piyasasında iş birliğini destekleyecek yenilikçi çözümlere duyulan ihtiyacı giderecek başka fırsatlar ortaya çıkabilir. Sosyal getirisi yüksek alanlarda standart belirleme ve kamu alımları yaklaşımlarının ve sosyal ortaklar arasında verimliliği artırıcı işbirliklerinin bir karışımını kullanarak teknolojik gelişmeyi güçlendirmek için düzenleme ve politika yeniliğine ihtiyaç vardır.

Verimlilik artışı ekonomik seviyedeki yüksek belirsizlikler nedeniyle yatırımların zayıf olmasından olumsuz etkilendiği görülmektedir. Küresel mali krizden bu yana, ekonomik belirsizlik yaygınlaştı ve düşük faiz oranlarına rağmen yatırımlara engel olmaktadır. Bu yatırımın yavaşlamasına sıklıkla iş dünyasından konut yatırıma geçiş eşlik etmektedir; bu da üretkenlik artış hızına daha az katkı sağlamaktadır. Bunun nedenlerinden biri, son krizlerden kaynaklanan genel ekonomik koşulların değişkenliğidir; bu durum, işletmeleri kapasite genişletme veya yeni girişimler başlatma konusunda isteksiz hale getirmektedir. Daha istikrarlı bir makroekonomik ortama doğru hareket etmek muhtemelen salgının büyüttüğü yatırım açığının bir kısmının kapatılmasına yardımcı olacaktır. Eşitsizliklere yönelik daha güçlü adımlar atılması, harcanabilir gelirlerde daha geniş tabanlı artışlara yol açarak yatırım faaliyetlerinin canlanmasına da yardımcı olacaktır. İşgücü piyasasının kötüleşen görünümü ve kayıt dışı istihdamdaki artışlar, üretken yatırımlara yönelik teşvikleri daha da baltaladığı görülmektedir. Küresel ekonominin gelecekteki gidişatına ilişkin belirsizliğin ciddi oranda arttığı göz önüne alındığında, istihdam artışının en hızlı kayıt dışı çalışanlar arasında gerçekleştiği görülmektedir. Bu durumun, faiz oranlarının kısa vadeli yönü ne olursa olsun, en azından gelişmiş ekonomilerde uzun vadeli düşüşünü sürdüren yatırım oranları

üzerinde zincirleme etkileri olacaktır. Üstelik bu tür işlerdeki artışlar, daha düşük ücret artışı ve işverenlerin işgücünün geliştirilmesi ve beceri geliştirilmesine yatırım yapma teşviklerinin azalmasıyla ilişkilidir. İşgücü piyasası kurumlarının zayıflamasıyla birlikte pek çok ülke, reel ücretlerin daha fazla aşınmasını sınırlandıracak, dolayısıyla toplam talebi ve dengeli ve kapsayıcı ekonomik büyümeyi destekleyecek mekanizmalardan yoksun kalmaktadır.

## İşgücü Piyasasında Sosyal Adalet Durumu

Kötüleşen küresel ekonomik görünüm, insana yakışır iş açığının daha da kötüleşmesi yol açmaktadır. Artan jeopolitik gerilimler, Covid-19 salgınının dengesiz bir şekilde toparlanması ve tedarik zincirlerinde yavaş yavaş gevşemeye başlayan darboğazlar, 1970'lerden bu yana düşük büyüme ile birlikte yüksek enflasyonun ilk dönemi olan "stagflasyon" için zemin oluşturdu. Salgına eşlik eden tüketimdeki büyük dalgalanmalar ve tedarik zincirlerindeki aksaklıklar, asimetrik talep ve arz şoklarına yol açarak birçok sektörde işgücü sıkıntısına ve fiyatların artmasına neden oldu. Enflasyon – özellikle yüksek gıda ve enerji fiyatları – harcanabilir geliri aşındırmakta, bu da toplam talebi ve dünyanın en yoksullarının yeterli yaşam standartlarını sürdürme kabiliyetini etkilemektedir. Bu enflasyonist baskılar büyük merkez bankalarını daha kısıtlayıcı bir para politikası duruşu almaya yöneltti. Ukrayna'daki çatışmayla birleşen faiz oranlarındaki artış, ekonomik aktiviteyi yavaşlatmakta ve yüksek borçlu ülkelerde finansal istikrarsızlığı artırmaktadır. Bu durum belirsizliği önemli ölçüde artırıyor ve işsizliğin ve çalışan yoksulluğunun sürekli olarak azaltılmasına bağlı olan işletme yatırımlarını baltalamaktadır. Kısacası, pek çok ülkenin son yıllarda insana yakışır iş ve sosyal adalet konularında elde ettiği ilerleme, önümüzdeki yıllarda erozyona uğrama riskiyle karşı karşıya kalmaktadır. Bu tür zorlu koşulların ortasında insana yakışır iş açıkları oldukça büyük olmaya devam etmektedir. Dünya çapında yaklaşık 473 milyon insan istihdam yoluyla gelir elde etmekten mahrum kalmaktadır. Bunların arasında 205 milyon işsiz var; bunlar yakın zamanda iş aramış olma ve kısa süre içinde iş bulma şartlarını karşılayanlardır. Yani bu gereksinimleri karşılamayan ancak karşılanmamış istihdam ihtiyacı olan 268 milyon insan var. İstihdam edilenlerin iki milyarı kayıt dışı bir işe sahip; bu da onların işyerinde haklara sahip olma, sosyal diyalog yoluyla söz sahibi olma veya sosyal koruma sistemlerinin faydalarından yararlanma olasılıklarının önemli ölçüde daha düşük olduğu anlamına gelmektedir. Bu özellikle kırsal alanlar için geçerlidir. Dahası, 214 milyon insan çalışıyor ancak aşırı yoksulluktan kurtulamıyor; onlar ve aileleri, satın alma gücü paritesi (SAGP) şartlarına göre kişi başına günlük 1,90 ABD dolarından daha az bir gelire yaşamaktadır. Küresel emek geliri son derece eşitsiz bir şekilde dağılıyor; en alt statüde çalışan işçilerin yüzde 50'si, küresel emek gelirinin yalnızca yüzde 8'ini kazanmaktadır. Bu eşitsizlik kısmen işgücü verimliliğindeki büyük uçurumdan kaynaklanmaktadır: Yüksek gelirli ülkelerde işçi başına gayri safi yurt içi hasıla (GSYH), düşük gelirli ülkelerdekini 18 katıdır. İstihdam dışı kalanların gelir desteğine erişimi de dünya genelinde oldukça eşitsizdir; nüfusun yalnızca yüzde 47'si sosyal koruma kapsamındadır. 2020 yılında dünyada yaklaşık 160 milyon çocuk çocuk işçi olarak çalıştırılmakta ve bunların çoğu tarımda çalışmaktadır. Bu, yaklaşık 28 milyon kişinin zorla çalıştırılmasıyla birlikte, toplam 188 milyon kişinin kaldırılması gereken işlerde çalıştığı anlamına geliyor.

Kadınlar ve gençler işgücü piyasalarında çok daha kötü durumdadır; bu da birçok ülkede çalışma dünyasındaki büyük eşitsizliklerin bir göstergesidir. Küresel ölçekte, kadınların işgücüne katılım oranı (İKO) 2022'de yüzde 47,4 olurken, erkeklerde bu oran yüzde 72,3 oldu. Yüzde 24,9'luk fark, ekonomik olarak aktif olmayan her erkeğe karşılık iki kadının karşılık geldiği anlamına geliyor. Gençler (15-24 yaş arası) insana yakışır bir iş bulma ve sürdürme konusunda ciddi zorluklarla karşı karşıyadır. İşsizlik oranı yetişkinlerin (25+ yaş) üç katıdır. Gençlerin beşte birinden fazlası (yüzde 23,5) eğitimde, istihdamda veya öğretimde yer almamaktadır(NEET).

Uzun vadeli eğilimler, insana yakışır iş açıklarının bazı açılardan azaltılması konusunda ilerleme kaydedildiğini ancak bunun yeterince hızlı olmadığını göstermektedir. Çalışan yoksulluğunun aşırı oranının 1991'de yüzde 35'ten 2022'de yüzde 6,4'e düşmesi kayda değer bir başarı olsa da, düşük gelirli ülkelerde daha fazla ilerleme kaydedilmemesi, bu ülkelerde çalışan yoksulların sayısının arttığı anlamına gelmektedir. Kayıt dışılık oranındaki son 18 yılda yüzde 5 puanlık düşüş, yıllara göre değerlendirildiğinde düşük bekleenden düşük olduğu görülmektedir. İşgücüne katılımdaki cinsiyet farkı son otuz yılda esasen değişmeden kaldı. Genç erkekler arasında NEET oranı son 17 yılda artarken genç kadınlar arasında düşüş görülmektedir. Küresel işgücü gelir payı 2004'ten bu yana düşüş gösterdi. Bu arada işsizlik genel olarak döngüsel bir olgudur ve uzun vadeli net bir eğilimi yoktur. Bunların arasında 205 milyon işsiz var; bunlar yakın zamanda iş aramış olma ve kısa süre içinde iş bulma şartlarını karşılayanlar.

Yani bu gereksinimleri karşılamayan ancak karşılanmamış istihdam ihtiyacı olan 268 milyon insan bulunmaktadır. İstihdam edilenlerin iki milyarı kayıt dışı bir işe sahip; bu da onların işyerinde haklara sahip

olma, sosyal diyalog yoluyla söz sahibi olma veya sosyal koruma sistemlerinin faydalarından yararlanma olasılıklarının önemli ölçüde daha düşük olduğu anlamına gelmektedir. Bu özellikle kırsal alanlar için geçerlidir (ILO 2022a). Dahası, 214 milyon insan çalışıyor ancak aşırı yoksulluktan kurtulamıyor; onlar ve aileleri, satın alma gücü paritesi (SAGP) şartlarına göre kişi başına günlük 1,90 ABD dolarından daha az bir gelirle yaşamaktadır. Küresel emek geliri son derece eşitsiz bir şekilde dağılmaktadır; işçilerin en alttaki(günlük 1 dolardan daha az gelir elde eden) yüzde 50'si, küresel emek gelirinin yalnızca yüzde 8'ini kazanıyor. Bu eşitsizlik kısmen işgücü verimliliğindeki büyük uçurumdan kaynaklanmaktadır: Yüksek gelirli ülkelerde işçi başına gayri safi yurt içi hasıla (GSYH), düşük gelirli ülkelerdekini 18 katıdır. İstihdam dışı kalanların gelir desteğine erişimi de dünya genelinde oldukça eşitsizdir; nüfusun yalnızca yüzde 47'si sosyal koruma kapsamındadır. 2020 yılında dünyada yaklaşık 160 milyon çocuk işçi olarak çalıştırılmış ve bunların çoğu tarımda sektöründedir. Bu, yaklaşık 28 milyon kişinin zorla çalıştırılmasıyla birlikte, toplam 188 milyon kişinin kaldırılması gereken işlerde çalıştığı anlamına geliyor. Kadınlar ve gençler işgücü piyasalarında çok daha kötü durumdadır; bu da birçok ülkede çalışma dünyasındaki büyük eşitsizliklerin bir göstergesidir. Küresel ölçekte, kadınların işgücüne katılım oranı (İKO) 2022'de yüzde 47,4 olurken, erkeklerde bu oran yüzde 72,3 oldu. Gençler (15-24 yaş arası) insana yakışır bir iş bulma ve sürdürme konusunda ciddi zorluklarla karşı karşıyadır. İşsizlik oranı yetişkinlerin (25+ yaş) üç katıdır. Gençlerin beşte birinden fazlası (yüzde 23,5) eğitimde, istihdamda veya öğretimde yer almaktadır (NEET). Uzun vadeli eğilimler, insana yakışır iş açıklarının bazı açılardan azaltılması konusunda ilerleme kaydedildiğini ancak bunun yeterince hızlı olmadığını gösteriyor. Çalışan yoksulluğunun aşırı oranının 1991'de yüzde 35'ten 2022'de yüzde 6,4'e düşmesi kayda değer bir başarı olsa da, düşük gelirli ülkelerde daha fazla ilerleme kaydedilmemesi, bu ülkelerde çalışan yoksulların sayısının arttığı anlamına gelmektedir. Genç erkekler arasında NEET oranı son 17 yılda artarken genç kadınlar arasında düşüş gösterdi. Küresel işgücü gelir payı 2004'ten bu yana düşüş gösterdi. Bu arada işsizlik genel olarak döngüsel bir olgudur ve uzun vadeli net bir eğilimi yoktur.

COVID-19 krizi, salgından önce var olan insana yakışır iş açıklarını daha da kötüleştirdi. 2020'de toplam çalışılan saat, 2019'un dördüncü çeyreğine göre tahminen yüzde 8,7 oranında azaldı; bu, 252 milyon tam zamanlı işe (haftada 48 saat) eşdeğerdir. Her ne kadar dünya çapında çalışma saatleri ve dolayısıyla gelir kayıpları meydana gelse de, gelir desteği tedbirlerinin eşit olmayan şekilde sağlanması, ülkeler arasındaki mevcut gelir eşitsizliklerini güçlendirdi; çünkü bu eşitsizlikler, mevcut ve acil sosyal koruma sistemlerinin ölçeğine bağlıydı. Ayrıca kadınlar ve düşük ve orta vasıflı mesleklerde çalışan işçiler daha fazla istihdam kaybına uğradığından, ülkeler içinde de eşitsizlikler arttı. Kayıt dışılık ve çalışan yoksulluğu vakalarındaki düşüş eğilimi, COVID-19 krizinin ardından durduruldu ve tersine çevrildi. Birkaç istisna dışında çoğu ülke, sağlık krizinin patlak vermesinden önce, 2019'un sonunda görülen istihdam ve çalışma saatleri seviyelerine (nüfus artışına göre ayarlandığında) henüz geri dönmedi. İyileşme, pek çok insana yakışır iş göstergesinin özellikle endişe verici olduğu düşük gelirli ve alt-orta gelirli ülkelerde geride kalmaktadır.

### **COVID Sonrası Gelişmelerin İstihdam Üzerindeki Etkileri**

COVID 19'un devam eden etkisi, yaşam maliyeti ve jeopolitik krizler, işgücü piyasası beklentileri üzerinde ağır bir baskı oluşturmaktadır. Arz ve talep şokları fiyat artışlarını tetikleyerek son yılların en yüksek enflasyon oranlarına yol açtığı görülmektedir. Ukrayna çatışması ve diğer jeopolitik çatışmalar arz sıkıntılarını kötüleştirmekte ve belirsizliği artırmaktadır. Ortaya çıkan yaşam maliyeti krizi, hanehalkı harcanabilir gelirinin satın alma gücünü aşındırmakta ve toplam talebi azaltmaktadır. Para politikasının sıkılaştırılması, yalnızca gelişmiş ekonomilerde değil, gelişmekte olan ekonomilere de yayılarak finansman koşullarını sıkılaştırmaktadır. Uygun politika koordinasyonunun yokluğunda, hakim ekonomilerin, potansiyel ikincil etkileri dikkate almadan öncelikle kendi iç sorunlarına hitap eden bir politika gündemi izleme riski vardır. Açık iş pozisyonları, bunları rapor eden ve çözüm arayan ülkelerde keskin bir şekilde düşmeye başladı; ancak rekor seviyelerden düşmekte ve tarihi açıdan bakıldığında Ekim 2022'de yüksek kalmayı sürdürdüğü görülmektedir. Mevcut zorlukların ötesinde, küresel işgücü piyasalarındaki uzun vadeli yapısal değişiklikler giderek daha fazla hissedilmektedir. Örneğin iklim değişikliği, sel, kuraklık, arazi bozulması, toprak erozyonu, sıcak hava dalgaları ve öngörülemeyen yağışlar dahil olmak üzere doğal afetlerin ve aşırı hava olaylarının daha fazla görülmesine yol açmaktadır. Yaşanan bu durumlara uyum sağlamak, yüksek düzeyde etkilenen bölgelerde önemli altyapı yatırımları da dahil olmak üzere büyük uyum girişimlerini gerektirecektir. Ancak bu uyum önlemleri, özellikle Afrika dahil dünyanın en yoksul bölgelerinde iş yaratma fırsatları da sunuyor. Bu arada, hemen hemen tüm gelişmiş ve gelişmekte olan ülkelerin çoğunda nüfusun yaşlanması hızlanmaktadır. Demografik olarak daha dinamik bölgelerden dışarıya doğru göçle telafi edilmesi muhtemel olmayan işgücü arzında bir depresyona neden olmaktadır. Aynı zamanda, özellikle yapay zeka gibi yeni dijital cihazlara ve araçlara ilişkin teknolojik değişim, üretkenlik artışını

artırma ve iş angaryalarının çoğunu hafifletme potansiyeline ilişkin daha önceki iyimser tahminleri henüz karşılamadığı gözlenmektedir; Demografik değişimlerden kaynaklanan bazı işgücü eksikliklerini gidermek için yeniliklere ihtiyaç olduğu açık bir şekilde görülmektedir. Makroekonomik faktörlerin etkileşimi, uzun vadeli eğilimler ve kurumsal ortamlar farklılık göstermekte ve istihdam artışını ülke gelir grupları arasında farklı şekilde etkilemektedir. Birincisi, yüksek gelirli ülkeler için makroekonomik görünüm kötümser, diğer birçok ülkede ise 2021 ve 2022'deki yüksek büyüme oranlarından sonra büyümenin normalleşmesi beklenmektedir. İkincisi, düşük gelirli ve alt-orta gelirli ülkelerdeki düşük sosyal koruma kapsamı, birçok işçinin çalışmayı bırakmayacağı, ancak ekonomik aktivite yavaşladıkça kayıt dışı ekonomiye geçişi hızlandırması anlamına gelmektedir. Buna karşılık, çoğu yüksek gelirli olan, denenmiş ve test edilmiş istihdamı koruma programlarına sahip ülkeler bunları tekrar kullanacak ve böylece istihdam kayıplarını sınırlayacaktır. Üçüncüsü, yüksek gelirli ülkelerdeki işletmeler, işgücünün yaşlanması ve daralması nedeniyle artan işgücü sıkıntısıyla karşı karşıya kalabileceği öngörülmekte ve bu da onları, mümkün mertebede işçilerini ellerinde tutmaya motive edecektir.

## 2023 Küresel İşgücü Piyasası ve Öngörülen Politikalar

İşgücü piyasasının görünümü birçok aşağı yönlü riskle karakterize edilmektedir. Günümüzün “çoklu krizi”, 2023'te küresel ekonomik büyümeyi yüzde 2'nin altına itebilir ve bu da istihdam yaratılması üzerinde ciddi olumsuz etki etmektedir. Büyümede bu kadar daha fazla yavaşlama olmasa bile, örneğin işletmelerin finansman kısıtlamaları nedeniyle işçileri elinde tutamaması veya hükümetlerin kendilerini bir borç krizinde bulması ve işgücü piyasalarını destekleyemeyecek durumda olması durumunda, işgücü piyasası beklentilerinin kötüleşme ihtimali yüksektir. Düşük ve orta gelirli ülkelerde, artan fiyatlar karşısında eşitsizlik ve azalan reel gelirler yurt içinde üretilen mal ve hizmetlere olan talebi bastırabilir ve dolayısıyla özellikle kayıtlı sektörde istihdam artışını daha da azaltabilir. İstihdam artışındaki genel yavaşlamaya rağmen, bazı ülke ve sektörlerde nitelikli işgücü eksikliği risk olmaya devam etmektedir. Küresel işgücünün tam potansiyelini ortaya çıkarmak için eğitim ve öğretime yapılan yatırımlarda büyük bir artış gereklidir. Şu anda küresel genç işgücünün üçte ikisi temel becerilerden yoksun durumda; bu durum onların işgücü piyasasındaki fırsatlarını kısıtlamakta ve onları kolaylıkla daha düşük kaliteli istihdam biçimlerine itmektedir. Aslında, gelişmiş ekonomilerde işgücüne katılımın artması, genellikle son on yılda ortalama eğitim kalitesinde kademeli bir düşüşe yol açtı ve bu da üretkenlik artışının yavaşlamasına neden oldu. Hem üretkenlik hem de istihdam açısından zorlukların olduğu mevcut ortamda, işgücü piyasasının herkes için işe yaraması için hem istihdama hem de becerilere odaklanan geniş tabanlı bir işgücü piyasası girişimi gereklidir.

Covid 19 salgını, dünyada büyük çaplı politika üreten kurumlar için önemli kapasite zorlukları yarattı. Dünyanın dört bir yanındaki merkez bankaları, salgından sonra toparlanmayı daha da desteklemek ile yüksek enflasyonla mücadele etmek arasında zor bir seçimle karşı karşıya kaldı. Her ne kadar pek çok ülke, çalışma saatleri bakımından henüz salgın öncesi seviyelere ulaşamamış olsa da, enerji ve gıda fiyatlarında yaşanan şoklar, politikaları normalleştirme ve salgın sırasında uygulamaya konulan acil durum önlemlerini azaltma ihtiyacını doğurdu. Yerel işletmeleri desteklemek için önemli miktarda borç biriktiren hükümetler ve haneler, bazı destek tedbirlerini aşamalı olarak kaldırma konusunda kendilerini baskı altında kalmaktadır. Pandemi sonraki ülkeler arasındaki iyileşmenin eşitsiz bir şekilde olması, ülkelerin jeopolitik gerilimlere ve arz kesintilerinden kaynaklanan fiyat artışlarına maruz kalmasına neden olmaktadır. Avrupa ülkeleri enerji maliyetlerinde stagflasyon dinamiğine katkıda bulunan önemli ve ani artışlarla karşı karşıya kalmaktadır. Afrika ülkeleri arasında önceki yıllarda yaşanan gıda fiyat artışları kötüleşmiş; Sahra altı ülkelerinin çoğu gıda üretiminde kendi kendine yeterli değildir ve gıda ithalatı da yeterince çeşitlendirilmemiştir. Dünyanın her yerinde, temel mal ve hizmetlere makul fiyatlarla erişimin sağlanması, bazen bu tür eylemlerin uluslararası yayılma etkileri dikkate alınmaksızın, ulusal bir meşguliyet haline gelmiştir. Çoklu ekonomik ve jeopolitik krizlere yanıt olarak uluslararası dayanışma her zamankinden daha kritik bir öneme sahiptir. Adil bir düzene geçiş için BM İş ve Sosyal Koruma Küresel Hızlandırıcısı gibi girişimlere güçlü bağlılık ve sosyal ortakların politika oluşturmanın tüm alanlarına yakın katılımı gerekmektedir. Ulusal ve uluslararası düzeyde, mevcut zorlukların üstesinden gelmek ve çalışmanın geleceğindeki uzun vadeli eğilimlere yanıt vermek için politika tutarlılığını ve ortaklıkları güçlendirecek temel önlemler almak ve bulmak gerekir. İnsana yakışır iş ve sosyal adaletteki büyük eksikliklerin yaşandığı bir dünyada, günümüzün çoklu krizleri karşısında ekonomilerin ve toplumların dayanıklılığını artırmak için yeni bir küresel sosyal sözleşmeye ihtiyaç vardır. ILO'nun 2019 Yüzüncü Yıl Bildirgesi ve 2021 küresel eylem çağrısı, COVID-19 krizinden kapsayıcı, sürdürülebilir ve dirençli, insan merkezli bir iyileşme için ulusal ve uluslararası düzeyde böyle bir stratejinin temel unsurlarını çerçevelemektedir. Bu amaçla ILO, 2023 yılında insana yakışır iş ve sosyal adalet konularında eylem ve yatırımların gerçekleştirilmesi amacıyla küresel dayanışmayı güçlendirmeyi ve politika tutarlılığını geliştirmeyi amaçlayan Küresel Sosyal Adalet Koalisyonunu

teşvik edecektir. Küresel iş açığının azaltılması, işlerin kalitesinin güçlendirilmesi ve gerçek gelirlerin korunması konusunda hızlandırılmış ilerleme, yenilenen politika koordinasyonu ve sosyal diyalogu gerektirmektedir. Güçlendirilmiş bir küresel sosyal sözleşmenin, kısmen daha hızlı üretkenlik artışıyla birlikte kalkınma ve yaşam standartlarındaki açıkları giderirken, aynı zamanda iklim değişikliğinden kaynaklanan tehditleri ele alan uzun vadeli hedefleri de entegre etmesi gerekecektir. Hükümetler ve sosyal ortaklar, bu amaçla işbirliklerini derinleştirmek için bu anı değerlendirmelidir.

## **Bölgeler Arasında İşgücü Piyasasında Yaşanan Gelişmeler**

Afrika ve Arap Devletlerinde istihdam artışının yüzde 3 veya daha fazla olması beklenmektedir. Bununla birlikte, artan çalışma çağındaki nüfusları nedeniyle her iki bölgede de işsizlik oranlarının yalnızca ılımlı bir düşüş görmesi bekleniyor (Afrika'da yüzde 7,4'ten yüzde 7,3'e ve Arap Devletlerinde yüzde 8,5'ten 8,2'ye). Asya ve Pasifik ile Latin Amerika ve Karayipler'de yıllık istihdam artışının yüzde 1 civarında olacağı öngörülmektedir. Kuzey Amerika'da 2023'te istihdam artışı olmayacak ve işsizliğin artacağı öngörülmektedir. Avrupa ve Orta Asya, Ukrayna ihtilafının ekonomik sonuçlarından özellikle ağır darbe aldığı görülmektedir; istihdamın 2023'te azalması bekleniyor, ancak çalışma çağındaki nüfustaki sınırlı büyüme, göz önüne alındığında işsizlik oranlarının yalnızca hafif bir artış göstermesi beklenmektedir. Gerçekten de Avrupa ve Orta Asya'da işgücünün 2023'te azalması bekleniyor. İşgücü piyasası göstergelerindeki bu eğilimlerden bağımsız olarak, her bölge, küresel ekonomik koşullar ve iklim değişikliği gibi uzun vadeli zorluklar karşısında daha da kötüleşecek sayısız insana yakışır iş açığıyla karşı karşıya kalmaya devam edeceği işgücü projeksiyonlarında görülmektedir. Küresel işgücü arzı büyümesinin yavaşlamaya devam etmesi muhtemel gözükmemekte olup, bu da özellikle gelişmiş ekonomilerde ciddi işgücü açığını artıracığı görülmektedir. Aslında bu yavaşlamanın bir kısmı beklenen bir şey çünkü son on yılda hem gelişmiş olan hem de gelişmekte olan ülkeler, birçok genç vatandaşın eğitim süresini uzatmasına olanak tanıyan artan gelir seviyeleri yaşadı. Bununla birlikte, gençlerin büyük bir kısmı istihdamın, eğitimin veya öğretimin (NEET oranı olarak da bilinir) dışında kalıyor ve bu da onların gelecekteki işgücü piyasası fırsatlarını olumsuz yönde etkileyeceği öngörülmüyor. Küresel ekonominin, gelişmekte olan birçok ülkenin demografik profilindeki genç nüfus artışından faydalanması isteniyorsa, bu NEET oranlarının düşürülmesi, çözülmesi gereken önemli bir konu olarak karşısına çıkmaktadır. Kazançlı iş sayısını artırarak küresel iş açığını kısmen kapatmak bile insana yakışır iş açıklarını azaltacak ve ekonomik aktiviteyi artıracaktır. Gelişmiş ekonomiler bu konuda önemli ilerlemeler kaydetmiş, özellikle yaşlı işçilere işgücü piyasasına bağlı kalma fırsatları sunmuş; bu, son on yılda işgücüne katılım oranlarının düşmek yerine arttığı tek ülke grubudur. Küresel işsizliğin 2023'te 3 milyon civarında hafif bir artışla 208 milyona ulaşması bekleniyor. Bu da yüzde 5,8 işsizlik oranına denk geliyor. Olumsuz küresel ekonomik görünüme rağmen, şokun büyük bir kısmının enflasyonun hızlandığı bir ortamda hızla düşen reel ücretler tarafından absorbe edilmesi nedeniyle küresel işsizliğin sadece ılımlı bir artış göstermesi bekleniyor. Ancak küresel işsizlik 2020'de 235 milyondan 2022'de önemli ölçüde azalarak 205 milyona gerilese de yine de 2019 seviyesinin 13 milyon üzerinde kaldığı görülmüştür. 2022 yılında işsizlik oranları yalnızca Amerika kıtasında, Avrupa ve Orta Asya'da kriz öncesi seviyesinin altına düştü; diğer bölgelerde bu seviyenin üzerinde kalmıştır.

İstihdamda yaşanan açığın ötesinde işin kalitesi ve verimlilik bölgeler arasında farklı görünüme sahip olmakla birlikte küresel ekonomide yaşanan daralma insanların daha düşük kalitedeki işlerde çalışmasına neden olmaktadır. Çünkü insanlar ekonominin bozuk olduğu zamanlarda işsiz kalmayı göze alamaz bu yüzden sosyal korumasız, düşük ücretli, uygunsuz işlerde çalışmak zorunda kalabilmektedir. Bölgelere baktığımızda Arap Devletleri, Kuzey Afrika ve Güney Asya'da, işgücüne katılım oranları da dahil olmak üzere işgücü piyasası göstergelerinde cinsiyete bağlı farklılıklar oldukça büyüktür. Latin Amerika, Karayipler ve Sahra Altı Afrika'da yüksek kayıt dışılık oranları, çalışma hayatında sosyal korumaya ve temel haklara erişimi engellemektedir. Tüm bölgeler şu ya da bu şekilde insana yakışır iş açığından etkilenmektedir. Küresel ekonomik koşullardaki mevcut bozulmanın geçmişteki ilerlemeyi tersine çevirmesi ve bu açıkları çeşitli yönlerde kötüleştirilmesi muhtemeldir. Enflasyonun reel gelir dağılımı üzerinde güçlü bir etkisi vardır. Pek çok işçi ve işletme, gelirlerini enflasyon oranında artıramamakta ve dolayısıyla gerçek gelir kayıplarına maruz kalmaktadır. Ancak bazı işçi ve işletmeler (örneğin enerji sektöründe faaliyet gösterenler) enflasyon oranının üzerinde gelir elde etmekte ve bu da reel gelirlerini artırmaktadır. Gerçek gelirler meydana gelen düşüş eğilimi özellikle yoksulluğa ve gıda güvensizliğine sürüklenme riski taşıyan yoksul haneler için daha fazladır. Sahra Altı Afrika ve Güney Asya'da, 2021'de istihdam edilen nüfusun sırasıyla yüzde 60,8'i ve yüzde 34,7'sinin, günlük 3,10 ABD doları (kişi başına SAGP) seviyesinde çalışan yoksul bulunmaktadır. Küresel tedarik zinciri bağlantıları, yüksek gelirli ülkelerdeki talebin yavaşlamasını düşük ve orta gelirli ülkelere de yaymaktadır. Mevcut verilere sahip 24 orta gelirli ülke örneğindeki işlerin tahmini ortalama yüzde 11,3'ü (tarım ve piyasa dışı hizmetler hariç) yüksek gelirli ülkelerle küresel tedarik zinciri

bağlantılarına bağlıdır. Bazı küçük ekonomilerde bu oran yüzde 20'yi aşmaktadır. Orta gelirli ülkelerde, daha yüksek küresel tedarik zinciri entegrasyonuna sahip sektörler, ücretli ve maaşlı istihdamın daha büyük bir payına, daha düşük bir kayıt dışılık oranına ve daha düşük ücretli çalışanların oranına ve dolayısıyla prensip olarak daha yüksek bir istihdam kalitesine sahip olma eğilimindedir. Yüksek gelirli ülkelerde talepteki bir düşüş, orta gelirli ülkelerdeki istihdam artışını küresel tedarik zincirleriyle bağlantılı olmayan faaliyetlere kaydıracağından, ortalama istihdam kalitesi düşebilir. Gelişmiş ekonomilerde verimlilik artışındaki uzun vadeli yavaşlama, gelişmekte olan başlıca ekonomilere de sıçradı. Bu oldukça endişe verici bir konu çünkü üretkenlikteki artış, günümüzün satın alma gücü, refah ve ekolojik sürdürülebilirlik konularındaki çoklu krizlere çözüm bulmanın anahtarıdır.

## SONUÇ

Covid 19 sonrası küresel piyasalar birçok yönden olumsuz etkilenmiştir. Salgına karşı küresel bazda alınan önlemler, piyasalara olumlu etki etse de salgın öncesi piyasa koşullarını henüz yakalayamamıştır. Dünya çapında yüksek ve kalıcı bir belirsizlik ortamı ortaya çıkmış, bu durum özellikle küçük ve orta ölçekli işletmelerin ticari yatırımlarını baskı altına almış, reel ücretleri aşındırmış ve işçilerin yeniden kayıt dışı istihdama yönelmesine neden olmuştur. Önceki on yılda yoksulluğun azaltılmasında kaydedilen ilerleme büyük ölçüde sekteye uğradığı görülürken, üretkenlik artışı dünya çapında yavaşlama eğilimini sürdürmekte, yaşam standartlarında ve iş kalitesi arasındaki uyum giderek bozulmakta, bu da insana yakışır iş açıklarının üstesinden gelinmesini daha da zorlaştırmaktadır. Küresel istihdam artışının 2022'deki hızlı büyümenin ardından 2023'te sert bir şekilde azalması bekleniyor. Bu, toparlanmadaki farklılığı derinleştirecek ve düşük gelirli ve düşük-orta gelirli ülkelerin, 2021 ve 2022'de açılan yüksek gelirli ülkelerle arasındaki farkları kapatması zor görünmektedir. Küresel işsizlikte 2021 ve 2022'de elde edilen azalma da duracak; 2023 ve 2024 için ılımlı bir artış öngörülmektedir. Çalışan kişi başına çalışma saatlerinin de yavaşlayan ekonomik aktivite nedeniyle azalması ve salgın öncesi seviyelerinin önemli ölçüde altında kalması bekleniyor. Bölge bazında bakıldığında Avrupa bu süreçte kendini toparlamış görünse de hala birçok Avrupa ülkesi salgın öncesindeki ekonomik, sosyal ve işgücü piyasası koşullarına ulaşamamıştır. Afrika kıtasında ekonomik sosyal ve işgücü piyasası koşulları kırılganlığını korumakta salgın sonrası ekonomide yaşanan aksaklıklar işgücü piyasasını olumsuz etkilemektedir. Amerika kıtasında salgın sonrası artan işsizlik sayısı ve istihdamdaki azalma 2021 sonrasında düşüşe geçmiş 2022 de ise salgın önceki seviyeleri yakalamıştır. Arap ülkelerinde covid 19 sonrası ekonomi durumlardaki aksaklıklar ve bölgedeki siyasi istikrarsızlık bölgeyi olumsuz etkilemiş, işsizlik oranlarının yüksek, istihdamın düşük, kayıtdışı istihdamın yüksek olduğu gözlenmiştir. Asya ve Pasifik bölgelerinde covid sonrası ekonomide ve işgücü piyasasında kısmen iyileşmeler görülmekte özellikle 2022 de işgücü piyasasında ciddi toparlanmalar meydana gelmiştir.

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## Endüstri 5.0 ve ESG'nin Sürdürülebilirlik Üzerindeki Etkileri Hakkında Bir Çalışma

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**Özet:** İnsanoğlu, su ve buhar gücünü kullanan mekanik üretim sistemleriyle tarım toplumundan sanayi toplumuna geçişi ifade eden birinci sanayi devrimini; elektrik gücünün seri üretimde kullanılmasıyla ikincisi ve bilgi teknolojilerinin gelişmesiyle üretimin daha da otomatik hale geldiği üçüncü sanayi devrimini yaşamıştı. Sonrasında birçok gelişmiş otomasyon sisteminin, veri alışverişlerini ve üretim teknolojilerini içeren Endüstri 4.0 insanlığın hayatına girdi. Bu geçiş çoğu ülkede yaşanmadan gündeme gelen, insan ve makine arasındaki iş birliğini ve uyumunu artırmayı amaçlayan bir üretim paradigması olan Endüstri 5.0 ise çevresel, sosyal ve yönetim kriterlerini ifade eden ESG (Environmental, Social, Governance) yaklaşımını çeşitli nedenlerle odağına almak zorunda kalmıştır. Çünkü doğrusal üretim modelini kullanan sanayi devrimleri gerçekleşirken, üretimde kullanılan emeğin ve çevrenin haklarının görmezden gelindiği iş isten geçtikten sonra fark edilmiştir. Bu yüzden Endüstri 5.0, döngüsel üretim modeli ve ESG yaklaşımı ile sürdürülebilirliği temel almıştır. Kısacası sanayi devrimleri gerçekleşirken emeğin, çevrenin haklarının görmezden gelindiği iş isten geçtikten sonra, gezegen elden gitmeye başlayınca algılanmıştır. Dolayısıyla endüstri 5.0 üretim modeli ile hem emek hem de çevre daha fazla önemsenmeye başlamış gözükmektedir. Bunun gerekçeleri ve olabirliği bu niteliksel çalışmanın konusudur.

**Anahtar Kelimeler:** Doğrusal Ekonomi, Döngüsel Ekonomi, Endüstri 5.0, ESG, Sürdürülebilirlik

**Abstract:** Mankind had experienced the first industrial revolution, which marked the transition from agricultural society to industrial society with mechanical production systems using water and steam power; the second with the use of electric power in mass production; and the third industrial revolution, in which production became more automated with the development of information technologies. Then Industry 4.0, which includes many advanced automation systems, data exchanges and production technologies, entered the life of humanity. Industry 5.0, a production paradigm that aims to increase the cooperation and harmony between man and machine, which came to the agenda before this transition was experienced in most countries, had to focus on the ESG (Environmental, Social, Governance) approach, which refers to environmental, social and governance criteria, for various reasons. Because while the industrial revolutions using the linear production model were taking place, it was realized after it was too late that the rights of labor and the environment used in production were ignored. Therefore, Industry 5.0 is based on sustainability with its circular production model and ESG approach. In short, the fact that the rights of labor and the environment were ignored while the industrial revolutions were taking place was realized after it was too late, when the planet started to be lost. Therefore, with the Industry 5.0 production model, both labor and the environment seem to have become more important. The reasons for and the possibility of this are the subject of this qualitative study.

**Key Words:** Linear Economy, Circular Economy, Industry 5.0, ESG, Sustainability

### 1. GİRİŞ

İnsanoğlu, su ve buhar gücünü kullanan mekanik üretim sistemleriyle tarım toplumundan sanayi toplumuna geçişi ifade eden birinci sanayi devrimini; elektrik gücünün seri üretimde kullanılmasıyla ikincisi ve bilgi teknolojilerinin gelişmesiyle üretimin daha da otomatik hale geldiği üçüncü sanayi devrimini yaşamıştı. Sonrasında birçok gelişmiş otomasyon sisteminin, veri alışverişlerini ve üretim teknolojilerini içeren Endüstri 4.0 insanlığın hayatına girdi. Bu geçiş çoğu ülkede yaşanmadan gündeme gelen, insan ve makine arasındaki iş birliğini ve uyumunu artırmayı amaçlayan bir üretim paradigması olan Endüstri 5.0 ise çevresel, sosyal ve yönetim kriterlerini ifade eden ESG (Environmental, Social, Governance) yaklaşımını çeşitli nedenlerle odağına almak zorunda kalmıştır. Çünkü doğrusal üretim modelini kullanan sanayi devrimleri gerçekleşirken, üretimde kullanılan emeğin ve çevrenin haklarının görmezden gelindiği kayıplar açık bir şekilde ortaya çıktıktan sonra; gezegen elden gitmeye başlayınca fark edilmiştir. Bu yüzden Endüstri 5.0, döngüsel üretim modeli ve ESG yaklaşımı ile sürdürülebilirliği temel almıştır. Bunun gerekçeleri ve olabirliğini veren bu niteliksel çalışmanın ilk başlığında doğrusal ve döngüsel ekonomi, amaç ve paydaş ekonomisi, Endüstri 5.0 ve ESG temel kavramlarına ve aralarındaki ilişkilere genel olarak bakılacaktır. Sonraki başlıkta Endüstri 5.0 ve ESG'nin sürdürülebilirlik üzerindeki etkileri ve sonuç kısmı yer almaktadır.

## 2. DOĞRUSAL VE DÖNGÜSEL EKONOMİ, AMAÇ VE PAYDAŞ EKONOMİSİ, ENDÜSTRİ 5.0 VE ESG TEMEL KAVRAMLARINA VE ARALARINDAKİ İLİŞKİLERE GENEL BAKIŞ

İktisadi düşüncede sermayedarlar kapitalizmi ve devlet kapitalizmi, ana akım iktisadın mülkiyet esasına göre temel sınıflandırmada kullandığı kavramlarıdır. Sermayedarlar kapitalizminin en yaygın ifadesi olan liberalizm, sermaye sahiplerinin kendi kârlarını maksimize ederken toplum refahına katkıda bulunacağını iddia ediyordu. Devlet kapitalizminde ise sermayenin devlete ait olması veya devletin müdahalesi yoluyla toplum refahını adil bir şekilde sağlayacak düzenin kurulacağı görüşü savunuluyordu. Ancak her iki yaklaşımın da amaçlarına ulaşmadığı görüldüğü için arayışlar başlamıştır. Bu arayışların neden ve sonuçları şöyle özetlenebilir:

Sanayi Devrimi başlangıcından yaklaşık yirmi birinci yüzyıla kadar doğrusal ekonomi modeli egemendi. Doğrusal ekonomide al-kullan-at modeli uygulanırken döngüsel ekonomide tüm kaynakların uzun süre kullanımı esastır (Balbay, Sarihan ve Avşar, 2021: 558). Doğrusal ekonomi basitçe, işletmelerin hammaddeyi alması; çevre dahil diğer paydaşların menfaatleri gözetilmeden ürünün üretilmesi; tüketimi sonrası atık olarak çevreye atılmasını içerir. Doğrusal ekonomi ve sermayedarlar kapitalizmi yaklaşımının aşırı kar elde etme çabaları, kaynakların verimsiz kullanımını ve atık miktarını artırarak başta iklim krizi olmak üzere çeşitli olumsuzluklara yol açmıştır. Bunlardan en önemlisi doğal felaketlerdir çünkü çevre tahrip edildi, ekolojik sistem bozuldu ve dünya ısındı. İkinci önemli olumsuzluk, aşırı gelir dağılımı adaletsizliğinin hem sebebi hem de sonucu olan çatışmalar ve iç savaşlar nedeniyle dünyada mutsuz, umutsuz insanların sayısının artmasıdır.

Bu olumsuzlukların temel nedeni olan hissedarlar kapitalizmi ve doğrusal ekonomi modeli yerine şirketlerin daha fazlasını yapmasını içeren yaklaşım paydaşlar kapitalizmi ve döngüsel ekonomidir. Abdullahoğlu (2014: 21) çalışmasına göre “paydaşlar kapitalizminde tek amaç şirketlerin kârlılığını artırmak olmamalıdır. Şirketler, gelirlerini, katkıları ölçüsünde çalışanlarla, tedarik zincirinde yer alanlarla, müşterileriyle ve üretim sürecindeki bütün aktörlerle paylaşırlar; sosyal ve çevresel boyutu da dikkate alarak faaliyetlerinin kâr/zarar hesabını yapmalıdırlar” ki sürdürülebilir kalkınma, büyüme mümkün olabilsin.

1995 yılında dönemin İngiltere Başbakanı ve İşçi Partisi lideri Tony Blair, Brighton’da yaptığı seçim öncesi parti konuşmasında ‘Paydaş Toplumu’ (Stakeholder Society) kavramına ve 1996 yılında ise yaptığı Singapur konuşmasında ‘Paydaş Ekonomisi’ (Stakeholder Economy) kavramına yer vermiştir. (...) Bireyin toplumun her alanında çıkarı olabileceği ya da finansal olsun ya da olmasın bir yatırımda bulunabileceği anlayışından hareket eden ‘Paydaş Toplumu’ düşüncesi, kapitalizmin yeni bir ekonomi politikasının temelidir. Öyle ki İngiliz İşçi Partisi’nin ‘dizginsiz kapitalizm’ ve ‘geleneksel sosyalizm’ arasında bir yol bularak, ödün vermeye dayalı bir ‘Üçüncü Yol’ (Third Way) politikasının yeni bir görünümü olarak ortaya atılan ‘Paydaş Ekonomisi’ bir doktrin olarak sunulmuştur. Tony Blair söz konusu konuşmasında “şayet insanlar toplumda bir çıkarları olmadığını düşünürlerse, bu topluma karşı çok az sorumluluk hissederek ve de toplumun başarısı için çalışmaya da çok az eğilimde bulunurlar” diyerek, tüm ülkenin ürün ve hizmet üretimine dâhil olduğu bir ekonominin ulusal bir amaç ve gurur olacağını ifade etmiştir (Mackey, 2006: 3, 4). Bu anlayış, çıkarın söz konusu olmadığı zaman sorumluluğun da anlamlı olmadığını ifade eden ve KSS (Kurumsal Sosyal Sorumluluk) kavramının da temelinde yer alan düşünce biçimidir (Çınarlı, 2014: 26).

Kuruluşların paydaşlarının yönetilmesi stratejik planlama (tehdit ve fırsatların belirlenmesi), kurumsal meşruluk ve KSS düşüncesi açısından gereklidir. ‘Paydaş Kuramı’ ve yine bu bağlamda ‘paydaş katılımı’, ‘KSS’, ‘sürdürülebilirlik’ ve ‘kurumsal vatandaşlık’ gibi diğer kavramlar; faydacı bir etik anlayış çerçevesinde bir ‘kurumsal ethos’un oluşturulması ve neo-liberal ekonomi-politikalarının uygulanmasına uygun ortam sağlamak amacıyla tasarlanmışlardır (Çınarlı, 2014: 23). Konuya sürdürülebilirlik açısından bakarsak Paydaşlar Ekonomisi ve döngüsel ekonomi yaklaşımı, atıkların yeniden kullanılarak ekonomik değere dönüştürülmesi sayesinde atık miktarını azaltır; enerji ve hammadde kullanımını optimize ederek sürdürülebilirlik hedeflerine katkı sağlarken üretimde kullanılan emeğin payları ölçüsünde haklarının verilmesi, motive edilmesi amaçlanır. Bu bağlamda günümüzde yeni bir kavram olarak karşımıza çıkan “Amaç Ekonomisi modeli, iyi fikirlerin akışını, olumlu ve etkili hizmetlerin sunulmasını ve ürünlerin yapılmasını hedeflerken dünyaya iyiliği yaymanın yollarını araştırmaktadır” (Hurst, 2014).

Amaç Ekonomisi ve Paydaşlar Ekonomisi yaklaşımı ile uyumlu olan Endüstri 5.0 ise üretimdeki “süreçleri daha insan merkezli hale getirerek, insan faktörünü teknoloji ile entegre etmeyi amaçlamaktadır. Endüstri 5.0 ile yüksek düzeyde otomatik süreçlerin yanı sıra kişiselleştirilmiş ve özelleştirilmiş ürün taleplerinin karşılanması önem arz etmektedir. Bu dönemin hâkim olduğu süreçte insanların yeteneklerini ve yaratıcılığını ön plana çıkararak insan destekli teknolojik eğilimlerin geliştirilmesi amaçlanmaktadır. Bu sayede, endüstriyel üretim daha dayanıklı, verimli ve sürdürülebilir hale gelebilecektir. Gelişiminin ilk aşamalarında olmasına rağmen



endüstriler, insan odaklı, sürdürülebilir ve dayanıklılık gibi ilkelerin söz konusu olduğu Endüstri 5.0 için çalışmalarına hız kazandırmıştır” (Güdek, 2023: 1131).

Endüstri 5.0’ın amacına ulaşabilmesi için çevresel, sosyal ve yönetim kriterlerini ifade eden ESG (Environmental, Social, Governance) temelli yenileştirici iş modeli yaklaşımı, firmaların içselleştirmesi gereken kriterleri içermektedir. Çünkü doğrusal üretim modelini kullanan sanayi devrimleri gerçekleşirken, üretimde kullanılan emeğin haklarının görmezden gelindiği ve çevrenin korunması gerektiği kaybedilenlerin yerine konulmadığı diğer bir ifadeyle gezegen elden gitmeye başlayınca fark edilmiştir. Bu yüzden Endüstri 5.0, dögüsel üretim modeli ve ESG yaklaşımı ile sürdürülebilirliği temel almak zorunda kalmıştır.

### 3. ENDÜSTRİ 5.0 VE ESG’NİN SÜRDÜRÜLEBİLİRLİK ÜZERİNDEKİ ETKİLERİ

Sürdürülebilirliğin ağızlarda sakız olduğu bir çağda yaşıyoruz. Bu kelimenin birçok yerde kullanımı çevresel açıdan daha iyiden havaliya kadar uzanıyor. Aslen “kesinti ya da azalma olmadan varlığını devam ettirebilme kapasitesi” anlamına gelen bu sıfatın tarihsel kökeni Antik Roma dönemine dayanıyor. 1987’de Dünya Çevre ve Kalkınma Komisyonu’nun Ortak Geleceğimiz raporu ile sürdürülebilirlik kelimesinin çevre anlamında kullanımında patlama yaşanıyor (Engelman, 2014: 3).

Öncelikle sürdürülebilirlik kavramına tarihsel olarak bakıldığında, ilk olarak çevresel endişeler sebebiyle ortaya çıkmış; ardından hem kalıcı ekonomik büyümeyi hem de sınırlı doğal kaynakların verimli kullanılmasını sağlayarak ve sosyal kaygıları da kapsayarak ülke politikalarında önemli bir rol oynamaya başlamıştır. Sürdürülebilir kalkınma nesiller arasında ve nesiller içinde eşitsizlikleri en aza indirmeyi ve gelecek nesillerin ihtiyaçlarını karşılama yeteneğinden ödün vermeden günümüz ihtiyaçlarını karşılamayı gerektirir. Dolayısıyla sürdürülebilir kalkınma, sosyal, ekonomik ve çevresel sürdürülebilirlik ile ilgili bir eşitlik ve denge meselesidir. Diğer taraftan Birleşmiş Milletler’in sürdürülebilir kalkınmayı ülke politikalarına dâhil etme ve küresel amaçlar oluşturma çabaları arasında 1972 Çevre ve Sürdürülebilir Kalkınma Konferansı, 1987 Brundtland Raporu, 1992 Rio Dünya Zirvesi, 1995 Kopenhag Sosyal Kalkınma Zirvesi, 1997 Kyoto Protokolü, 2000 Milenyum Zirvesi, 2002 Johannesburg Dünya Sürdürülebilir Kalkınma Zirvesi, 2012 Brezilya Sürdürülebilir Kalkınma Konferansı ve 2015 Transforming Our World Raporu bulunmaktadır (Gedik, 2020: 211). Tablo 1’in ikinci sütununda uluslararası organizasyonların çözüm önerileri başlığında da bu süreç görülmektedir.

Sanayi devrimleri gerçekleşirken emeğin, çevrenin haklarını görmezden gelindiği iş işten geçtikten sonra, gezegen elden gitmeye başlayınca fark edilmiştir. Dolayısıyla Endüstri 5.0 üretim modeli ile hem emek hem de çevre daha fazla önemsenmeye başlamış gözükmektedir. Bu geçiş süreci, “dijital üretimden dijital topluma geçiş” olarak da ifade bulunmaktadır ve 2020-2025 arasında gerçekleşmesi beklenen esas kazanımların ilk evresi olduğu belirtilmektedir. Bu aşamanın ardından endüstri 5.0’a tam geçiş bekleniyor. Bu yeni çağ, insan-robot iş birliği ve insan kaynaklarının kapasitesini artırmak için yapay zekânın insanlarla birlikte hayata nüfuz etmesini ve insanı evrenin merkezinde konumlandıracağını iddia ediyor (Yücebalkan, 2020: 241).

Çünkü Endüstri 5.0, insan-makine etkileşimini optimize ederek; üretim süreçlerinde yer alanların katma değerini, motivasyonunu artırmayı amaçlayan bir fikirdir. Bu fikir, üretimde israfı azaltmayı, enerji verimliliğini artırmayı, karbon ayak izini en aza indirmeyi, doğal kaynakları korumayı ve nihayetinde atık yönetimi sayesinde çevre kirliliğini önlemeyi amaçlamaktadır. Bu amaca ulaşabilmek için çevresel, sosyal ve kurumsal yönetim unsurlarını içeren ESG, bir şirketin sürdürülebilirlik performansını ve etik standartlarını değerlendirmek için kullanılan bir ölçüttür.

Çevresel, Sosyal ve Kurumsal Yönetişim olarak Türkçeleşen ve genelde ESG (Environmental, Social and Governance) kısaltması olarak kullanılan bu kavram, yatırımlar üzerinde etkili olan çevresel, sosyal ve kurumsal faktörleri ifade etmektedir. ESG, finans dışı faktörlerin de hesaba katılması sayesinde yatırımcıların risk ve fırsatları değerlendirirken daha geniş bir yelpazeye sahip olmasına ve şirketlerin sürdürülebilir, gelecek odaklı finansal performans elde etmesine imkânı sunan bir uygulamadır. Bir başka deyişle ESG, şirketlerin çevre dahil tüm paydaşlarını yani muhatap oldukları insanları ve kendilerini sorumlu bir şekilde yönetip yönetmediklerini değerlendirmek için sektörde geliştirilen çevresel, sosyal, yönetim alanlarını kapsayan uluslararası standartları ifade etmektedir.

Bu alanlara ayrı ayrı bakmak gerekirse, bir şirketin çevre üzerindeki etkisi, çevresel yönetim olarak tanımlanabilir. Bu alan, israfın azaltılmasına yönelik politikaları, seyahat politikalarını ve doğal kaynakların kullanımını inceler. ESG’nin ikinci değerini ifade eden sosyal yönetim, bir şirketin eşitlik ve adalet gibi temel standartlara sahip olup olmadığını ve çalışanlar, tedarikçiler ve müşteriler gibi diğer insanlarla nasıl iletişim

kurduğunu inceler. Son olarak, kurumsal yönetim, şirketin yönetimi ve karar alma mekanizmaları ile ilgili konuların değerlendirildiği alanı içerir.

Tüm bunlar göz önüne alındığında, ESG, hak temelli yönetişime ve çevrenin korunmasına katkıda bulunmak isteyen yatırımcılar için avantajlı bir strateji olmasının yanı sıra, yatırımcılar ve şirketler için daha fazlasıdır. ESG kriterlerine uyum sağlayan bir firma, çevre için tehlikeli uygulamalar ile bağlantılı yaptırım riskini azalttığı için şirket performansını önemli ölçüde iyileştiriyor. Aynı zamanda, sosyal ve kurumsal yönetim modellerine uyan bir ekonomik aktörün iç krizlerden kaynaklanan performans düşüşlerine daha az maruz kalması bekleniyor. Sonuç olarak, ESG, şirketlere uzun vadeli, sağlam, sürdürülebilir ve sorumlu bir finansal yönetim sağlamak için de avantajlı bir yaklaşımdır.

Endüstri 5.0 ve ESG yaklaşımı, iklim krizi, kaynak kıtlığı, sosyal eşitsizlik, insan hakları ihlalleri gibi küresel sorunlara çözüm bulmak, toplumsal fayda sağlamak ve evreni korumak için gerekli olan sürdürülebilirlik, dirençlilik, adalet ve insanîyet gibi değerleri yansıtmaktadır. Bu bağlamda Endüstri 5.0, sürdürülebilirliği sağlamak için kaynakları yeniden kullanan ve geri dönüştüren süreçleri geliştirirken; çalışanların refahını, güvenliğini, motivasyonunu ve yaratıcılığını artırmak için insan odaklı bir yaklaşım benimsemektedir. Bunun için de üretim süreçlerinin şeffaflığını, hesap verilebilirliği sağlamak ve dış denetimi artırmak için gittikçe yaygınlaşan dijital teknolojileri kullanmalıdır. Bu süreçte yer alan tedarikçilerin yönetimi, veri güvenliği, etik standartlar, yasal uyum ve paydaşların katılımı gibi konular da etkisini göstermektedir. Dolayısıyla endüstri 5.0 üretim modeli ile hem emek hem de çevre daha fazla önemsenmeye başlamış gözükmektedir.

Fakat küresel başarıları gerçekleştirmek ve iklim krizini önlemek için kalıcı ilerlemeler kaydedebilmek gerekmektedir. Bunun için de Birleşmiş Milletlerin Sürdürülebilir Kalkınma Hedefleri (Sustainable Development Goals - SDG) ve ESG kriterlerinin hem yerel hem de uluslararası düzeyde tanıtılması, benzer uluslararası hedeflerin, düzenlemelerin, devletlerin ve hükümetlerin faaliyetlerine referans olması sağlanmalıdır. Çünkü iklim krizi çevresel, ekonomik ve sosyal boyutta ortaya çıkan sorunların bir sonucudur. Bu yüzden sürdürülebilir kalkınma, mikro ve makro ölçekte içselleştirilmesi gereken ulusal ve uluslararası düzenlemeleri gerektirir. Makro ölçekte, ülkelerin icra makamları, işletmelerin sürdürülebilirliği sağlamak ve döngüsel ekonomiye geçmek için kurumsallaşmaya önem vermesi gerekirken, mikro ölçekte işletmelerin kurumsallaşma faaliyetlerine önem vermesi, içselleştirmesi gerektirir.

Bu bağlamda bir işletmenin iyi uygulama örneği gösterebilmesi için ekonomik, etkin ve verimli iş süreçlerinin; sağlam bir kurumsal risk yönetimi altyapısının, etik ilkelere özen gösteren ve çevreye duyarlı bir yönetim stratejisinin olması gereklidir. Bundan dolayı işletmeler açısından iyi yönetim yasal gerekliliklerin, politika ve prosedürlerin çok ötesindedir. Bu yeni anlayışın önem kazanmasının nedeni; işletme yöneticilerinin kısa vadeli kâr elde etmek yerine, orta ve uzun vadeli iş değeri yaratmaya yönelik bir eğilimin ortaya çıkmasıdır. Yeni iş değeri yaratmaya yönelik orta ve uzun vadeli stratejik bakış açısı, söz konusu işletmeler ile bu işletmelerin sorumlu ve ihtiyatlı üst düzey yöneticileri için beraberinde sürdürülebilirlik kavramını içselleştirmelerini gerekli kılmaktadır (Bozkuş Kahyaoğlu, 2019:127).

Mal ve hizmet üretimindeki bu yeni trendin sürdürülebilir kalkınma felsefesine katkıda bulunabilmesi için, çevrenin korunması, olumsuz çevresel etkilerin tespit edilmesi, bertaraf edilmesi, azaltılması ve iyileştirilmesi, çevresel maliyetlerin tanımlanması gibi süreçlerin standartlarının oluşturulması ve kamuoyunun katılımı gereklidir. İklim krizinin kontrol altına alınmasında, hem tüketicilerin çevre dostu ürünlere olan talebinin artmasını hem de üretim sürecinde çevre koruma düzenlemelerinin gerekli olmasını sağlayacak uluslararası Tablo1'deki düzenlemeler hayati önem taşımaktadır.

Tablo 1'in birinci sütunu, iklim krizinin çevresel, iktisadi ve sosyoekonomik boyutta etkileri olan temel sorunlar ve genel etkilerini özetlemektedir. Özet, krizin durdurulamaz ve giderek daha da kötüleştiğini göstermektedir. Ekonomik büyümenin yavaşlaması, işsizlik oranlarının artması, yoksulluk ve gelir dağılımı dengesizliği gibi sosyoekonomik sorunların artması da muhtemeldir. Şu anda, savaşlar ve kuraklık; kıtlık nedeniyle kitlesel göçlerin etkileri çok hissedilmektedir. Çünkü savaşlar ve iklim değişikliği nedeniyle ortaya çıkan çevresel adaletsizlikler, nüfus hareketlerine neden oluyor.

Tablo 1'in üçüncü sütunundaki kriterlerin yakalanabilmesi, sürdürülebilir iktisadi kalkınmanın sağlanabilmesi, bölgesel ve kıtalararası boyutta hissedilen sorunlara çareler bulunabilmesi için döngüsel ekonomiyi referans alan Endüstri 5.0 ve ESG'nin yaygınlaştırılması gerekmektedir. Aksi durumda, iklim krizinin gerek evrene gerekse de gelişmekte olan ve az gelişmiş ülkelere yönelik etkisinin daha şiddetli olacağı beklenmektedir. Döngüsel ekonomiye geçişin gerçekleşmesi ve küresel ölçekte iklim krizine ilişkin kararların ve politikaların uygulanması

için organizasyonların uluslararası boyutta olması gerekir. Tablo 1'in ikinci sütunu, bunlarla ilgili tüm ayrıntıları içerir.

Tablo 1. İklim Krizinin Temel Sorunlarına Karşı Geliştirilen Uluslararası Düzenlemeler

Temel Sorunlar ve Genel Etkileri	Uluslararası Organizasyonların Çözüm Önerileri	Düzenlemelerin Temel Hedef ve Kriterleri
<p>Çevresel, Ekolojik Sorunlar</p> <p>Buzulların erimesi, büyük ölçekli kasırgalar, kuraklık, yangın artışları, sel, erozyon vb. afetler, hava kirliliği sonucu:</p> <p>- Ekolojik dengenin tahrip edilmesiyle biyoçeşitlilikte azalma</p> <p>- Küresel balıkçılık gelirlerinde düşme</p> <p>- Akarsu rejimlerinin bozulmasıyla hidroelektrik santrallerindeki enerji potansiyellerinin düşmesi</p> <p>- Belirli bölgelerin sular altında kalabilmesi</p> <p>- Tarımsal verimde azalış</p> <p>İktisadi ve Sosyoekonomik Sorunlar</p> <p>İktisadi büyümede düşüş, işsizlikte artış sonucu oluşan yoksulluk ve gelir dağılımında dengesizlik ile yaşanan kıtlıkların sebep olduğu kitlesel göçler.</p> <p>İklim sorunları ile ilişkili olabilen sosyoekonomik sorunlar, WMO ve UNEP tarafından ortaklaşa olarak kurulan IPCC tarafından yayımlanan raporlarda, farklı senaryolar dâhilinde kapsamlı olarak ele alınmaktadır.</p>	<p>İklim krizine yönelik alınan karar ve uygulamalarda etkili olan kurumsal yapıların kısa tarihçesi:</p> <p>- Çevresel sorunlarla mücadele edebilmek; gelişmekte olan ülkelere destek sağlamak amacıyla Birleşmiş Milletler bünyesinde 5 Haziran 1972 tarihinde Birleşmiş Milletler Çevre Programı (UNEP) kuruldu.</p> <p>- Hükümetlerarası İklim Değişikliği Paneli (IPCC), Birleşmiş Milletler çatısı altındaki Dünya meteoroloji Örgütü (WMO) ve Birleşmiş Milletler Çevre Programı (UNEP) tarafından Aralık 1988'de kuruldu.</p> <p>- Birleşmiş Milletler İklim Değişikliği Çerçeve Sözleşmesi, (UNFCCC) 1992 yılında Brezilya'daki konferansta kabul edilmiş, 1994'de yürürlüğe girdi.</p> <p>- Sera gazı emisyonlarının azaltımını hedefleyen Kyoto Protokolü, Japonya'da, Birleşmiş Milletler İklim Değişikliği Çerçeve Sözleşmesi 3. Taraflar konferansında 1997 yılında imzalanmış.</p> <p>- Paris İklim Anlaşması Aralık 2015 tarihinde COP21 olarak da adlandırılan Birleşmiş Milletler İklim Değişikliği Çerçeve Sözleşmesi konferansı kapsamında kabul edilen; Kasım 2016 tarihinde yürürlüğe giren anlaşma, taraf ülkelere hukuki yaptırımlar getirebilmektedir. Türkiye bu anlaşmayı 22 Nisan 2016 tarihinde imzalamış, 11 Ekim 2021 tarihinde katılım işlemi tamamlanmıştır.</p>	<p>Kyoto Protokolü</p> <p>Protokol ile sanayileşmiş ülkelere belirli sorumluluklar yüklenerek, sera gazı emisyonlarını azaltılması hedefleniyor.</p> <p>Paris İklim Anlaşması</p> <p>- Anlaşmada, küresel ısınmanın azaltılmasına odaklanılmış, tüm ülkelerin sera gazı emisyonlarının azaltılmasında sorumlu olduğu vurgulanmıştır.</p> <p>- Fosil yakıtların kullanımını sınırlamada ulusal olarak belirlenmiş katkılar (INDC Intended Nationally Determined Contribution) ve sürdürülebilir enerjinin teşvik edilmesi gibi somut düzenlemeler vardır.</p> <p>Kriterler</p> <p>- İklim değişikliğinin risk ve etkilerinin önemli ölçüde azaltılabilmesi için: Küresel ortalama sıcaklık artışını sanayi devrimi öncesinden günümüze kıyasla 2°C'nin altında tutmak ve sıcaklık artışını sanayi devrimi öncesi seviyelerinin 1,5 °C üzerinde sınırlamaya yönelik çabalar belirtilmiştir.</p> <p>- Birçok ülkede, strateji ve eylem planlarıyla, karbon nötr hedeflerine uygun sera gazı emisyonlarını azaltıcı tedbirler (2030-2050) yıllık olarak açıklanmakta.</p>

Kaynak: Yazıcı (2023: 34).

#### 4. SONUÇ VE ÖNERİLER

İnsanoğlu, su ve buhar gücünü kullanan mekanik üretim sistemleriyle tarım toplumundan sanayi toplumuna geçişi ifade eden birinci sanayi devrimini; elektrik gücünün seri üretimde kullanılmasıyla ikincisi ve bilgi teknolojilerinin gelişmesiyle üretimin daha da otomatik hale geldiği üçüncü sanayi devrimini yaşamıştı. Sonrasında birçok gelişmiş otomasyon sistemini, veri alışverişlerini ve üretim teknolojilerini içeren Endüstri 4.0 insanlığın hayatına girdi. Bu geçiş çoğu ülkede yaşanmadan gündeme gelen, insan ve makine arasındaki iş birliğini ve uyumunu artırmayı amaçlayan Endüstri 5.0 ise çevresel, sosyal ve yönetim kriterlerini ifade eden ESG (Environmental, Social, Governance) yaklaşımını çeşitli nedenlerle odağına almak zorunda kalmıştır. Çünkü doğrusal üretim modelini kullanan sanayi devrimleri gerçekleşirken, üretimde kullanılan emeğin ve çevrenin haklarının görmezden geldiği kayıplar açık bir şekilde ortaya çıktıktan; gezegen elden gitmeye başlayınca fark edilmiştir. Bu yüzden Endüstri 5.0'ın, döngüsel üretim modelinin ve ESG yaklaşımının gerekliliği görülmüştür.

Endüstri 5.0, insan-makine etkileşimini en üst düzeye çıkarmak ve üretim süreçlerinde yer alanların katma değerini artırmayı amaçlayan bir konsepttir. Bu konsept, üretimde israfı azaltmayı, enerji verimliliğini artırmayı,

karbon ayak izini azaltmayı, doğal kaynakları korumayı ve nihayetinde atık yönetimi yoluyla çevre kirliliğini önlemeyi amaçlamaktadır. Bu amaca ulaşabilmek için ESG, bir şirketin sürdürülebilirlik performansını ve etik standartlarını değerlendirmek için kullanılan bir ölçüttür. Bu ölçüt, çevresel, sosyal ve kurumsal yönetim unsurlarını içerir.

Bu unsurlar, Endüstri 5.0 ve ESG yaklaşımı sayesinde, sürdürülebilirlik, dirençlilik, adalet ve insaniyet gibi değerleri merkeze alarak; iklim krizi, kaynak kıtlığı, sosyal eşitsizlik ve insan hakları ihlalleri gibi küresel sorunlara çözüm bulmada, toplumsal fayda sağlamada ve gezegeni korumada gereklidir. Zira Endüstri 5.0, çalışanların refahını, güvenliğini, motivasyonunu ve yaratıcılığını artırmak için kaynakları yeniden kullanan ve geri dönüştüren süreçleri geliştirirken insan odaklı bir yaklaşım benimsemektedir. Bunun için de şirketler, gittikçe yaygınlaşan dijital teknolojileri etkin bir şekilde kullanarak üretim süreçlerinin şeffaflığını, hesap verilebilirliğini ve dış denetimi artırmalıdır.

Bu süreçte şirketler, tedarikçilerin yönetimi, veri güvenliği, etik standartlar, yasal uyum ve paydaşların katılımı gibi çeşitli başlıkları da dikkate almalıdırlar. Bunun için şirketler, Endüstri 5.0'ın İnsan, Çevre ve Kurumsal (ESG) yönetim üzerinde nasıl bir dönüşüm yaratacağını anlamak ve bu dönüşüme uyum sağlamak için gerekli stratejileri belirlemelidirler. Özetle Endüstri 5.0'ın felsefesine göre şirketler, kâr elde etmenin ötesine geçmeli, topluma ve çevreye katkıda bulunmalıdırlar. Bunun için veri depolama, yazılım geliştirme, sürdürülebilir enerji ve kaynak paylaşımı gibi alanları merkezlerine almalıdırlar. Bir de şirketlerin bu dönemde artan riskler nedeniyle; iş yaptıkları, etkileşimde bulunduğu tüm paydaşlarına ait üstlendikleri risklerini hem ölçmede hem de yönetmede daha fazla özen göstermeleri ve sigorta sektörü ile iş birliklerini artırmaları gerekmektedir.

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## Mali Disiplini Sağlamada Maastricht Mali Kriterlerinin Güncel Durumunun Analizi

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**Özet:** 1970'lerden itibaren artan kamu açıkları, ülkeleri mali disiplini sağlamaya yönelik önlem almaya itmiştir. Devlet harcamalarının ve kamu borçlarının kontrol edilemez boyutlara ulaşması, Keynesyen politikaların başarı şansını düşürmüş, Neo-liberal politikaların dünya genelinde yaygınlık kazanmasına neden olmuştur. Avrupa Birliği'nin (AB) kuruluş gerekçelerinden birisi de birlik düzeyinde parasal ve mali disiplini sağlamaya yöneliktir. 1993 yılından itibaren yürürlüğe giren Maastricht Antlaşması ile, Avrupa Birliğinde hem mali disiplini hem de parasal disiplini sağlamaya yönelik bir dizi önlem hayata geçirilmeye başlanmıştır. Bu çalışmada, Maastricht mali kriterlerinin başarısı çeşitli veriler ışığında ölçülmeye çalışılmıştır. Bütçe açığı ve kamu borçlarının GSYH'ye oranlarının AB üyesi ülkelerin birçoğunda istenilen düzeyde olmadığı sonucuna varılmıştır. Özellikle 2008 Küresel Mali Krizi ve dünya genelinde etkili olan pandemi dönemlerinde bütçe açığı ve kamu borçlarının GSYH'ye oranları aşırı boyutlara ulaşmıştır. Mali kriterlere uymayan ülkelere yönelik yaptırımların özellikle Almanya ve Fransa gibi AB'yi domine eden ülkelere etkili düzeyde uygulanmadığı, parasal birliğin kısmen sağlandığı ancak maliye politikalarında eşgüdümün sağlanmadığı, Yunanistan başta olmak üzere birçok AB ülkesinin kamu borçlarını kontrol altına alamadığı anlaşılmaktadır.

**Anahtar Kelimeler:** Mali Disiplin, Bütçe Açığı, Kamu Borçları, Maastricht Mali Kriterleri

### 1. GİRİŞ

1929 Büyük Ekonomi Bunalımından sonra, Müdahaleci Devlet Anlayışı dünya genelinde yaygınlık kazanmaya başlamıştır. Devlet faaliyetlerinin artması ve özellikle Refah Devleti Yaklaşımları, kamu harcamalarının ve buna paralel olarak kamu gelirlerinin artmasına neden olmuştur ((Dileyici ve Özkıvrak, 2000: 3)

Yirminci yüzyılın son çeyreğinde artan devlet faaliyetleri ve Keynesyen Ekonomi Anlayışının geniş uygulama alanı, 1970'lerde yaşanan petrol krizleri, kamunun ekonomideki rolünü sorgulamaya itmiştir. Neoliberal politikaların etkisi ile başta ABD ve İngiltere'de dile getirilen bu görüşler, özelleştirme, deregülasyon, liberalizasyon ve mali disiplin olarak kendini ifade etmiştir (Durmuş, 2008: 91 – 96).

Washington Uzlaşması doğrultusunda Piyasa Yönlü Kalkınma Modeli uygulama alanı bulmuştur. Bu dönemde birçok ülkede ithal ikameci kalkınma modelleri terk edilmiş, ihracata dönük politikalar uygulanmıştır. Piyasalar üzerindeki fiyat - faiz – döviz kuru kontrolleri ve sübvansiyonlar kaldırılmıştır (Williamson, 1997: 48-61). Avrupa Birliği de bu sürece uygun olarak, birlik düzeyinde mali disiplini ve parasal disiplini sağlamaya yönelik bir dizi önlemleri hayata geçirmeye başlamıştır.

### 2. KAVRAMSAL ÇERÇEVE VE LİTERATÜR TARAMASI

Mali disiplin, kamu mali yönetiminde devletin gelir ve giderleri arasında sürekli ve istikrarlı bir dengeyi sağlanmasıdır. Mali disiplin olgusu, özellikle 1970'lerden itibaren artan kamu harcamaları ve beraberinde getirdiği bütçe açıkları ile birlikte tartışılmaya başlanmıştır (Alesina & Perotti, 1996: 401-407).

2008 Küresel Mali Krizinden sonra gerek ABD gerekse Avrupa Birliği ülkeleri mali disipline daha fazla önem vermeye başlamışlardır. Özellikle Yunanistan'ın yaşadığı borç krizi, sıkı maliye politikalarının uygulanması ve mali disiplinin sağlanmasının ne kadar önemli olduğunu göstermiştir. Neo-liberal politikaları savunanlar, artan kamu borcu ve bütçe açıklarının ancak mali disiplinin sağlanması ile aşılabileceğine inanmaktadırlar (Arıkboğa, 2011: 13-25).

Kantarci ve Karacan (2008) tarihli çalışmalarında, mali disiplinin sağlanması açısından Türkiye IMF ilişkilerinin değerlendirmişler; çalışma sonucunda IMF ile özellikle 2000 yılından sonra yapılan antlaşmalarda faiz dışı fazla hedefinin ön plana çıktığını ve bu hedefe ulaşmada bir bütçe dengesinin ve mali disiplinin sağlandığı sonucuna varmışlardır.

Keskingöz (2013) tarihli çalışmasında, Maastricht Kriterleri doğrultusunda Türkiye'de mali disiplinin sürdürülebilirliğini ele almış; çalışmasında son yıllarda borç stokunun ülkelerin milli hasılasında önemli bir seviyeye yükseldiğini, borç ödeme kapasitesinin aşılmaması gerektiğine vurgu yapmış, mali disiplinin sağlanabilmesinin koşulunun uzun vadeli bütçe disiplininin sağlanması gerektiğini ifade etmiş.

Sezgin (2013) tarihli çalışmasında, ülkelerin borç stoklarının taşınamaz hale gelmesi nedeniyle mali disiplinin hayata geçirilmesi zorunluluk arz ettiğini ifade etmiştir. IMF tarafından, borç krizi içerisinde olan ülkelere mali istikrar programı çerçevesinde faiz dışı fazla hedefinin temel maliye politikası haline geldiğini ifade etmiştir.

Mali disiplinin AB içerisinde yaygınlaşmasında, birlik sürecinde aday ülkelere getirilen bazı kriterler etkili olmuştur. AB içerisinde Maasricht Kriterlerinin uygulanmasında parasal bütünleşme ve eşgüdüm sağlanırken maliye politikalarında aynı başarı sağlanamamış, ülkeler kendi politikalarını uygulamaya devam etmiştir (Buhur, 2014: 62-63).

Soukiazis ve Castro (2005) tarihli çalışmalarında Maastricht Kriterlerinin ve İstikrar ve Büyüme Paktının son yirmi yılda AB üyesi ülkelerinde gerçek yakınsamanın ne düzeyde gerçekleştiğini ele almışlardır. Çalışmalarında bu kriterlerin ekonomik performans üzerinde ciddi kısıtlamalar getirdiğini, üye ülkelerin para otoritesini önemli ölçüde Avrupa Merkez Bankasına bıraktığını ancak, maliye politikalarını kısmen kendi inisiyatifinde olduğunu, istihdam ve ekonomik istikrar konusunda önemli sayılabilecek başarılar elde edemedikleri sonucuna varmışlardır.

Barrell ve Sefton (1997) tarihli çalışmalarında, maliye politikasının ve artan borç stoklarının ekonomi üzerindeki etkilerini incelemişlerdir. Maastricht yakınsama kriterleri gibi mali kısıtlamaların etkilerini analiz etmek amacıyla, Mundell-Fleming modeli üzerinde bazı politika analizleri gerçekleştirmişler, uzun vadede faaliyet düzeyi etkilenmese de mali kısıtlamaların kısa ve orta vadede üretimi azaltacağını ve işsizliği artıracığı sonucuna ulaşmışlardır.

### 3. MAASTRİCHT ANTLAŞMASINA GİDEN SÜRECİ

Avrupa'nın tarihine bakıldığında, ülkeler kendi aralarında defalarca savaşmışlardır. Bu savaşlarda büyük felaketler yaşanmış, milyonlarca insan hayatını kaybetmiş, yerleşim alanları önemli ölçüde zarar görmüştür. Avrupa'nın önde gelen düşünür ve devlet adamları artık savaşın bir şey kazandırmadığını, barış içerisinde ve uzlaşarak önemli kazanımlar elde edileceğini öne sürmüşlerdir (Avrupa Birliği Başkanlığı, 2024).

Fransa Dışişleri Bakanı Robert Schuman 1950 yılında, Jean Monnet'in tasarısına dayanarak, kömür ve çelik üretiminde uluslararası bir uzlaşmayı bütün Avrupa devletlerine önerdi. Bu öneri doğrultusunda, Avrupa Kömür ve Çelik Topluluğu (AKÇT) 1951 yılında, Belçika, Federal Almanya, Lüksemburg, Fransa, İtalya ve Hollanda'dan oluşan 6 üye ile kuruldu. Böylece, savaşın temel sebepleri arasında sayılan kömür ve çeliğin üretiminde ulus üstü bir kurumun oluşturulmasının yolu açılmış oldu (European Union, 2024).

Avrupa Kömür ve Çelik Topluluğunun devamında 1957'de Roma Antlaşması imzalanarak Avrupa Ekonomik Topluluğu (AET) kuruldu. AET'nin kurulmasındaki temel hedefler arasında, malların, işgücünün, hizmetlerin ve sermayenin serbest dolaştığı bir ortak pazarın kurulmasıdır. Bu aşamalar geçildikten sonra nihai hedef siyasi bütünlüğe gidilmesidir (Avrupa Birliği Başkanlığı, 2024).

1965 yılında AKÇT, AET ve Avrupa Atom Enerjisi Topluluğu (EURATOM) birleştirilerek Avrupa Topluluğu adı altında tek çatı altında toplandı. Devam eden süreçte birliğe yeni üyeler dahil oldu. Birleşik Krallık, Danimarka ve İrlanda 1973 yılında, 1981'de Yunanistan, 1986'da İspanya ve Portekiz birliğe üye oldular (European Union, 2024).

1991 yılında Doğu Bloğunun yıkılması ve SSCB'nin çözülmesi ile birlikte Avrupa siyasi açıdan bambaşka bir yöne evrildi. Bu tarihten itibaren Avrupa devletleri yeni bir anlaşmanın yapılmasına karar verdiler. Maastricht Antlaşması 9-10 Aralık 1991'de imzalanıp, 1 Kasım 1993 tarihinde yürürlüğe girmiştir. Bu antlaşmanın diğer adı Avrupa Birliği Antlaşmasıdır ve bu tarihten itibaren topluluk Avrupa Birliği (AB) adını almıştır (Avrupa Birliği Başkanlığı, 2024).

### 4. MAASTRİCHT MALİ VE PARASAL KRİTERLERİ

Avrupa Birliği gerek mali disiplinin sağlanması gerekse parasal disiplinin sağlanmasında belli kriterler geliştirmiştir. Maastricht Antlaşması ile belirlenen kurallar (Maastricht Kriterleri) iki kısımda değerlendirilebilir. Birincisi, mali disiplinin sağlanmasına ilişkin şartlar olan bütçe açığı ve toplam kamu borcunun GSYH'ye oranları; ikincisi ise parasal disiplinin sağlanmasına ilişkin olan enflasyon, faiz ve döviz kurları kriterleridir (European Commission , Convergence Criteria For Joining, 2023).

- Mali disiplinin sağlanmasına ilişkin kriterlerin birincisi: üye ülke bütçe açıkları GSYH'nin % 3'ünü aşmamalıdır.

- Mali disiplinin sağlanmasına ilişkin kriterlerin ikincisi: üye ülkenin genel yönetim borçları, GSYH'nin % 60'ını geçmemelidir.
- Parasal disiplinin sağlanmasına ilişkin kriterlerden birincisi: herhangi bir üye ülkenin yıllık ortalama enflasyon oranı, AB'nde en düşük enflasyon oranına sahip üç üye ülkenin enflasyon oranı ortalamasını 1,5 puandan fazla geçmemelidir.
- Parasal disiplinin sağlanmasına ilişkin kriterlerden ikincisi: herhangi bir üye ülkenin uzun vadeli devlet tahvili faiz oranı, en düşük enflasyon oranına sahip üç üye ülkenin faiz oranı ortalamasını 2 puandan fazla geçmemelidir.
- Parasal disiplinin sağlanmasına ilişkin kriterlerden üçüncüsü: üye ülke paraları Avrupa Para Sistemi Döviz Kuru Mekanizmasına dahil olmalı ve ulusal paranın döviz değişim oranı son iki yılda normal dalgalanmaya bırakılmalı ve devalüe edilmeksizin kur mekanizması içindeki değer değişimi (+/-) % 15'i geçmemelidir.

Maastricht Kriterleri belirlenirken, kamu yatırımlarının tarihsel ortalaması esas alınarak (bu ortalama % 3 civarındadır) geleneksel kamu maliyesinin altın kuralı uygulanmıştır. Altın kural, kamu gelir ve giderlerinde dengeyi öngörür ve borçlanmaya sadece yatırım harcamaları için izin veren bir kuraldır (Polat, 2023: 294 – 303).

AB'nin finansal istikrarı açısından Maastricht Kriterleri önemli bir süreçtir. Bu kriterlere parasal ve mali birlik sürecinin her aşamasında uyulması zorunludur. 1997 yılında hayata geçirilen İstikrar ve Büyüme Paketi (İBP), AB'de mali istikrar ve mali disiplinin sağlanmasında önemli bir kilometre taşıdır (Buhur, 2014: 63).

İstikrar ve Büyüme Paketi imzalanırken, Maastricht Antlaşması ile belirlenen kuralların hayata geçirilmesi ve mali disiplinin güçlendirilmesi hedeflenmiştir. Birlik düzeyinde belirlenen bu kriterlere uyumun tam anlamıyla sağlanamaması, son yıllarda İstikrar ve Büyüme Paketi'ni tartışılır hale getirmiştir (Wyplosz, 2002: 2-17).

## 5. AVRUPA BİRLİĞİNDE MALİ DİSİPLİN İLE İLGİLİ VERİLER

Maastricht Kriterleri içerisinde mali disiplini sağlamaya yönelik iki kriterin esas alındığını ifade etmiştik. Bunlardan birincisi, bütçe açıklarının üye ülkelerin GSYH'ye oranının % 3'ü aşmaması gerekmektedir. Aşağıdaki tabloda, seçilmiş bazı ülkelerin yıllar itibarıyla bütçe açıklarının GSYH'ye oranları yer almaktadır.

Tablo 1: Seçilmiş Bazı Ülkelerde Bütçe Açığı / GSYH

Ülke	2007	2008	2009	2010	2015	2020	2021	2022
Avusturya	-1.4	-1.5	-5.3	-4.4	-1.0	-7.9	-5.7	-3,5
Belçika	0.1	-1.1	-5.4	-4.1	-2.4	-8.9	-5.4	-3.5
Danimarka	5.0	3.2	-2.8	-2.7	-1.3	0.4	4.1	3.3
Avro Bölgesi	-0.6	-2.2	-6.2	-6.3	-2.0	-7.1	-5.2	-3.6
Avrupa Birliği	-0.5	-2.0	-6.0	-6.0	-1.9	-6.7	-4.7	-3.3
Fransa	-2.6	-3.3	-7.2	-6.9	-3.6	-9.0	-6.5	-4.8
Almanya	0.3	-0.1	-3.2	-4.4	1.0	-4.3	-3.6	-2.5
Yunanistan	-6.7	-10.2	-15.2	-11.4	-5.9	0.9	-9.7	-7.0
İrlanda	0.3	-7.0	-13.9	-32.1	-2.0	-5.0	-1.5	1.7
Letonya	0.6	-4.3	-9.5	-8.6	-1.5	-4.5	-7.2	-4.6
Norveç	17.0	18.5	10.2	10.9	6.0	-2.6	10.6	26.0
İspanya	1.9	-4.6	-11.3	-9.5	-5.3	-10.1	-6.7	-4.7
Türkiye	-	-	-6.1	-2.8	-	-4.7	-	-
İngiltere	-2.7	-5.2	-10.1	-9.3	-4.6	-13.1	-7.9	-4.7

<b>ABD</b>	-4.0	-7.3	-13.1	-12.4	-4.6	-14.9	-12.1	-
<b>Japonya</b>	-2.9	-4.1	-9.7	-9.1	-3.7	-9.1	-6.2	-
<b>Şili</b>	6.9	4.8	-4.7	-0.5	-2.3	-7.3	-7.3	-
<b>Meksika</b>	-0.6	-0.9	-2.9	-2.8	-5.2	-22.3	-5.2	-5.1

Kaynak: OECD verilerinden derlenerek tarafımızca oluşturulmuştur.

Tablodan da anlaşılacağı üzere, AB üyesi birçok ülkede bütçe açıklarının GSYH'ye oranı belirlenen % 3 seviyesinin üzerinde seyretmektedir. 2008 Küresel Mali Kriz ve dünya genelinde etkili olan pandemi dönemlerinde bütçe açıkları belirgin bir şekilde artmıştır.

Küresel krizin etkili olduğu 2009 yılında Avro Bölgesinde bütçe açıklarının GSYH'ye oranı % 6,2, Avrupa Birliği genelinde ise % 6,0 düzeyinde seyretmiştir. Pandeminin etkili olduğu 2020 yılında bu oran Avro Bölgesinde % 7,1, Avrupa Birliğinde ise % 6,7 seviyesinde gerçekleşmiştir.

Avrupa Birliği dışında kalan ülkeler açısından değerlendirildiğinde, ABD'de 2008 Küresel Mali Krizin etkili olduğu 2009 yılında, bütçe açıklarının GSYH'ye oranı % 13,1, Japonya'da % 9,7 düzeyinde seyretmiştir. Pandeminin etkili olduğu 2020 yılında bu oranlar ABD'de % 14,9, Japonya'da ise % 9,1 seviyesinde gerçekleşmiştir.

Benzer durum kamu borçlarının GSYH'ye oranında da görülmüştür. Aşağıdaki tabloda seçilmiş bazı ülkelerde kamu borçlarının GSYH'ye oranları yer almaktadır. Tablodan da anlaşılacağı üzere, AB ortalaması gerek 2008 Küresel Mali Krizinde gerekse pandeminin etkili olduğu dönemlerde % 60 olan kriterin üzerindedir.

Tablo 2: Seçilmiş Bazı Ülkelerde Kamu Borcu / GSYH

Ülke	2007	2008	2009	2010	2015	2020	2021	2022
<b>Avusturya</b>	69.0	74.2	86.3	90.5	101.3	107.1	101.5	80,5
<b>Belçika</b>	94.6	102.4	110.7	108.7	126.2	140.3	128.4	103.8
<b>Danimarka</b>	34.6	41.9	49.3	53.4	53.4	58.4	48.9	34.7
<b>Fransa</b>	75.9	82.5	97.6	101.0	120.8	145.5	138.0	117.3
<b>Almanya</b>	66.9	71.4	78.3	87.6	80.1	81.6	79.1	65.4
<b>Yunanistan</b>	113.0	117.6	135.5	130.4	184.2	237.4	224.6	193.0
<b>İrlanda</b>	27.5	47.3	67.5	83.4	88.3	71.3	64.3	46.3
<b>Letonya</b>	13.5	23.8	42.2	54.0	46.6	54.1	57.6	49.7
<b>Norveç</b>	55.8	54.5	48.6	49.0	40.0	52.9	48.9	42.5
<b>İspanya</b>	42.4	47.7	62.7	67.4	121.1	147.9	140.8	116.3
<b>Türkiye</b>	-	-	-	48.9	31.0	42.9	43.6	-
<b>İngiltere</b>	54.7	67.2	80.9	91.3	114.0	152.7	142.6	104.5
<b>ABD</b>	86.2	102.0	115.4	125.3	136.9	159.9	148.1	144.2
<b>Japonya</b>	174.2	178.2	199.4	204.4	233.3	257.0	256.0	254.5
<b>Şili</b>	11.3	12.5	13.4	15.4	24.3	44.2	42.1	41.3
<b>Meksika</b>	43.6	46.9	39.2	39.2	51.7	57.0	52.8	-
<b>Avrupa Birliği</b>	57.5	60.7	73.3	79.0	84.6	83.1	84.7	85.9

Kaynak: OECD ve Eurostat verilerinden derlenerek tarafımızca oluşturulmuştur.



Avrupa Birliğinde Maastricht Kriterlerini hayata geçirmeye ve bu kriterlerin daha güçlü bir şekilde uygulanmasına yönelik olarak İstikrar ve Büyüme Paketi (İBP) yürürlüğe girmiştir. İBP, mali disiplini sağlamaya yönelik AB içerisinde bütçe açığı ve kamu borçlarının istikrarlı bir seyir izlemesine yönelik bir dizi düzeltici ve önleyici tedbir içermektedir (European Commission, Stability and Growth Pact, 2024).

İstikrar ve Büyüme Paketi çerçevesinde açık verebilecek ülkelere gerekli düzeltici önlemleri almaları konusunda geliştirilen Erken Uyarı Sistemi ile ilgili ülkelere istikrarı sağlamaya yönelik bir dizi önlemler ve reform paketi geliştirilmiştir. AB üyesi herhangi bir ülkenin belirlenen % 3 açığı geçmesi durumunda Aşırı Açık Prosedürü ile açığın geçici olup olmadığı, kamu yatırımlarını aşır aştığı ve ne tür yaptırımlar uygulanacağı ile ilgili bir dizi prosedür ortaya konulmuştur (European Commission, Stability and Growth Pact, 2024).

Bahsi geçen bu her iki önlem paketi de bugüne kadar etkili olamamış, mali disiplini sağlamada beklenen başarı sağlanamamıştır. Bunun temel sebepleri arasında; AB'nin Euroya geçilmesi ile ortak para politikaları hayata geçirilirken, maliye politikaları ile ilgili her ülke bağımsız davranmıştır. Maliye politikalarında eşgüdümün sağlanamaması gerekli önlemlerin alınmasını da zora sokmuştur (Buhur, 2014: 80-83).

Maastricht Antlaşması ile belirlenen kriterlere uyulmaması durumunda, uygulanacak cezai yaptırımları uygulayacak olan Avrupa Konseyinin ilgili ülkelerin politikacılarından oluşması, yaptırımların tam anlamıyla hayata geçirilmesini zorlaştırmaktadır. Nitekim Almanya ve Fransa gibi AB'yi domine eden ülkelere bu yaptırımlar istenilen düzeyde uygulanamamıştır. Bu durum Maastricht Kriterlerine olan güveni ve inancı önemli ölçüde sarsmıştır (Buhur, 2014: 80-83).

Avrupa Birliğinde yukarıda sayılan sorunların çözümüne yönelik olarak 2011 yılında Altılı Paket (Six-Pack) yürürlüğe konulmuştur. Altılı Paket ile birlik üyesi ülkelerin ekonomi ve maliye politikalarında eşgüdümün sağlanması, daha güçlü bir İstikrar ve Büyüme Paketi oluşturulması, üye ülkelerin bütçe disiplinin sağlanmasına yönelik denetim mekanizmasının güçlendirilmesi amaçlanmıştır (European Commission, Six-Pack, 2024).

Altılı Paket ile belirlenen kriterleri ihlal eden ülkelere yönelik yaptırımların güçlendirilmesi, daha fazla şeffaflık, daha katı ve zorlayıcı kurallar öngörülmesine rağmen uygulamada gerekli sonuçlar elde edilememiştir. Örneğin Altılı Pakette öngörülen, "Borçlarının GSYH'ye oranı % 60'ı aşan ülke, borç miktarını 3 yıl boyunca ve her yıl GSYH'sinin % 60'ını aşan kısmının 1/20'si oranında azaltmalıdır" kuralı etkili bir şekilde uygulanamamıştır (Buhur, 2014: 82-86).

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## 6. DEĞERLENDİRME ve SONUÇ

Çalışmada ortaya konulan veriler ışığında, bütçe açığı ve kamu borçlarının GSYH içerisindeki payı değerlendirildiğinde, birçok AB ülkesi açısından bu kriterlere uyulmadığı, Maastricht Antlaşmasının en önemli hedeflerinden birisi olan mali disiplinin Avrupa genelinde sağlanmadığı anlaşılmaktadır.

AB'de mali disiplini sağlamaya yönelik uygulanmaya başlanan Maastricht Kriterlerinin ve bu kriterleri etkili bir şekilde hayata geçirmeye araç olan İstikrar ve Büyüme Paketi'nin (İBP) beklenen başarıyı sağlayamadığı ortadadır.

AB üyesi ülkelerin aşırı bütçe açıklarının ortaya çıkmasından önce müdahale edilmesini öneren Erken Uyarı Sistemi ve bütçe açıklarının % 3'ü geçmesi durumunda işletilen Aşırı Açık Prosedürü beklenen sonucu yaratmamış, üye ülkelerin birçoğunda mali disiplin sağlanamamıştır. Diğer taraftan bu kriter süreç içerisinde esnetilmesine rağmen beklenen başarı sağlanamamıştır.

Mali disiplinin sağlanamamasında, belirlenen kriterlere uymayan ülkelere uygulanacak yaptırımlar arasında; üye devletlerin yeni borçlanma senetleri veya tahvil çıkarırken iktisadi yapılarındaki olumsuzluklar hakkında ek bilgi yayınlaması, kriterlere uymayan üye ülkenin kamuoyuna duyurulması, kriterlere uymayan ülkelere Avrupa Yatırım Bankası kredilerinin kullanılmaması gibi önlemler yer almaktadır. Ancak bu sayılan yaptırımlar ya hiç uygulanmamış ya da yeteri düzeyde caydırıcı olamamıştır.

AB Merkez Bankası öncülüğünde ortak para politikaları hayata geçirilmeye çalışılırken, mali disiplini sağlamaya yönelik maliye politikası araçlarının etkili düzeyde uygulanmadığı sonucuna varılmıştır. Bunun yanında, 2008

Küresel Mali Krizi ve 2020 yılında ortaya çıkan pandemi gibi dış faktörler de eklendiğinde ciddi boyutlara varan bütçe açıkları ve kamu borçlarının olduğu görülmektedir.

AB’de makro ekonomik dengeyi ve mali disiplini sağlama, üye ülkeler arasında eşgüdümü oluşturmaya yönelik uygulamaya konulan Altılı Paket (Six - Pack) bir dizi önlem ve yaptırımı barındırır da gerekli sonuca ulaşılamamış, birlik içerisinde bütçe açıkları ve kamu borçları istenilen düzeye çekilememiştir.

Diğer taraftan AB içerisinde parasal birliği sağlamak amacıyla oluşturulan ortak para birimi politikası çerçevesi genişletilememiş, bazı AB üyesi ülkeler bu politikanın dışında bırakılmıştır. İngiltere’nin 2018 yılında halk oylaması ile AB üyeliğinden ayrılması, AB’nin geleceği konusunda önemli endişeler doğururken, en başta hedeflenen mali disiplin ve istikrarın sağlanması ile ilgili pek umut verici bir tablo ortaya çıkarmamaktadır.

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## The Role of Literature in Foreign Language Teaching

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**Abstract:** When it comes to teaching foreign languages, literature plays a dynamic and essential role that greatly aids in language teaching/learning and cultural understanding. This study examines how literature affects foreign language teaching in a range of linguistic and cultural contexts.

Additionally, this study conducts an in-depth investigation into the effects of literary studies on foreign language teaching by thoroughly reviewing the literature. Literature provides learners with a sophisticated awareness of the social, historical, and contextual facets of a target language, making it an effective tool for cultural immersion. Culture plays a significant role in the process of foreign language teaching, and literature holds great importance in reflecting the culture of the target language to students. Students' sensitivity and understanding are increased as they delve deeper into the nuances of cultural expressions through the study of literary genres. Building upon this, studies in the literature have been reviewed.

Learners are exposed to a wide range of grammatical structures, rich vocabulary, and real-world language use when they are exposed to a variety of literary genres. Literature also acts as a key point for the improvement of communication abilities. Students practice expressing themselves in the target language through debates, discussions, and language exercises based on literary texts, which helps them improve their communicative skills in relevant circumstances. By reviewing current research, the main purpose of this study is to shed light on the multifaceted benefits of integrating literature into foreign language education, ultimately contributing to a more comprehensive and effective language learning experience.

**Key words:** Literature, foreign language teaching, foreign language learning, culture.

### 1. INTRODUCTION

Literature integration has long been acknowledged as a potent and dynamic way to improve language learning opportunities in foreign language instruction. Teaching foreign languages is a broad field that encompasses more than just language proficiency; it also involves cultural sensitivity, critical thinking, and emotional intelligence. Studying literature in a foreign language environment offers a sophisticated method of teaching language, giving students a greater awareness of the cultural quirks that are woven throughout the language in addition to improving their language proficiency. At its core, literature serves as a gateway to linguistic proficiency, allowing learners to explore the intricacies of a language in context. Through exposure to authentic literary texts, learners are exposed to diverse vocabulary, idiomatic expressions, and complex grammatical structures, thereby expanding their linguistic repertoire. Immersing students in the literary landscape of a foreign language goes beyond rote memorization and mechanical language drills, fostering a more organic and holistic approach to language acquisition.

From understanding the role of literature in language acquisition to examining the benefits and challenges associated with its integration, this comprehensive exploration aims to shed light on the transformative potential of literature in the foreign language classroom. As it is navigated through the multifaceted dimensions of this topic, innovative approaches, best practices, and the enduring impact of literature on shaping proficient and culturally aware language learners will be uncovered.

### 2. BRIEF DEFINITION OF LITERATURE

Just as every country has its own unique language and culture, each country also has its distinctive literature. Creative expression is unrestricted in literary works, which depict genuine feelings that can elicit happiness or, sometimes, sadness. With no boundaries to their enormous imagination, these are creations that mirror reality. According to Alam (2007) literary texts “stimulate the imagination, offer learners specimens of real language use, allow for group discussions and individual exploration, and are intrinsically more dialogic” (p. 381). Culture reflects the experiences and future aspirations of a country, and literature, through the medium of language, articulates everything unique to that nation. Poetry, novels, and stories that are translated into other languages provide a bridge for readers from other countries to get to know that nation.

There are numerous definitions of literature, and it is not possible to encapsulate literature in a single sentence. “Literature is the expression of life in word of truth and beauty. It is the source of inspiration and delight. It is the written record of man’s spirit, of his thoughts, emotions, aspirations; it is the history of human soul” (Prakash, 2014, p. 62). A collection of written or spoken works that spans a variety of genres, including non-fiction, drama, poetry, and fiction is frequently distinguished by creative expression and intellectual depth. It adds to our understanding of culture, history, and society by reflecting human experiences, feelings, and thoughts. American poet Robert Frost defines literature as “... is a performance in words” (Barnet et al., 1961, p. 1). According to him literature is an expressive and dynamic art form that emerges through spoken or written language. Within this particular context, "performance" denotes a proactive interaction with language, where writers employ language as a tool to communicate ideas, narratives, and feelings. Literature engages readers and creates an immersive experience by using words to weave narratives, conjure imagery, and convey the nuances of human existence. This is similar to a performance on stage and Mitravinda expresses it as:

Literature is a group of words of art. Most are written, but some are passed by word of mouth. Literature usually means works of poetry and prose that is very well-written. The word Literature comes from the Latin word which literally means learning, Literature and grammar. Even imaginative or creative Literature is considered to be a good Literature (2020, p.1).

While much of literature is written, there are also oral traditions where stories and creations are passed down verbally. The emphasis on well-written works in poetry and prose indicates a focus on the quality and craftsmanship of the language used in literature. Furthermore, well-written, inventive, and original works of any kind—fiction, poetry, or other genres—add to the diversity and importance of literature. In this sense, the term "good literature" encompasses not only accuracy and educational value but also the artistic and creative qualities that make a work memorable and impactful.

### **3. IMPORTANCE OF LITERATURE IN LANGUAGE TEACHING**

Reading literature encourages introspection and helps readers consider their identities and the decisions that have shaped them (Ojaide, 1992). Upon witnessing the transformative journeys of characters within literature, readers find inspiration to embark on their personal voyages of self-discovery and adventure. The narratives of growth and development within the fictional realms become catalysts, motivating individuals to explore the uncharted territories of their own lives. Through the characters' experiences, readers not only gain insights into the diverse facets of the human condition but also feel compelled to navigate their unique paths, seeking understanding, growth, and a deeper connection with their own narratives of existence. In this way, literature serves as a guiding force, encouraging readers to venture into the realms of self-discovery and forge their own stories of transformation (Altun, 2023).

There are several benefits of using literary texts in the classroom environment. Universal topics like love, conflict, identity, and human experiences are frequently explored in literature. When students interact with literature, they come across subjects that relate to their own experiences or passions (Tevdovska, 2016), which enhances the relevance and enjoyment of language study. Emotional resonance can boost motivation on readers. According to Altun “Readers are motivated to set out on their own travels of self-discovery and adventure after watching the characters' own growth journeys” (2023, p. 382).

The integration of literature into foreign language curriculum also cultivates critical thinking (CT) skills among learners. Analyzing and interpreting complex literary texts necessitate higher-order cognitive processes, encouraging students to engage in critical reflection, interpretation, and synthesis. Through discussions and analyses of literature, learners develop the ability to think critically about language use, societal norms, and the perspectives of different cultures. This intellectual engagement not only enhances their language skills but also contributes to their overall cognitive development. Shikhani and Fahim (2011) listed three reasons that shows importance of critical thinking:

1. CT allows students to take charge of their thinking. Through this ability, they can monitor and evaluate their learning methods more successfully.
2. CT increases students’ learning experience and makes the language more meaningful.
3. CT significantly and positively correlates with students’ achievements.

There is a significant difference between learning a foreign language and learning one's native language. Learning one's native language does not require following written rules in a book or learning grammar. However, this is not the same when learning a new foreign language. The grammatical structure of the language plays an important role when learning a foreign language. Cairns and Cairns in Hill (1987) defines it as:

When people learn their native language, they are not taught the rules of grammar and the meaning of words, they work out how the language works from what they hear, imperfect though this sometimes is, and so internalize or construct mentally their knowledge of the language (Cairns and Cairns, 1976, in Hill 1987, p 7).

While literature undoubtedly offers numerous benefits in foreign language teaching, its integration is not without challenges. Teachers must navigate the balance between linguistic complexity and the comprehension level of their students. Selecting appropriate literary works that resonate with learners, challenge their language skills, and provide cultural insights requires a thoughtful approach. Moreover, addressing the diverse needs and interests of students within a classroom setting adds another layer of complexity to the integration of literature into language teaching.

Despite these challenges, the dynamic and immersive nature of literary exploration in foreign language teaching opens doors to a more engaging and enjoyable learning experience. Beyond linguistic proficiency and cultural understanding, literature has the power to evoke emotional responses and empathy in learners, fostering a deeper connection to the language and its cultural context. Besides it helps learners to focus on the language usage (Hellysta, 2020).

#### **4. ROLE OF LITERATURE IN SHAPING CULTURAL EXCHANGE**

One of the fundamental roles of literature in foreign language teaching is its ability to provide cultural insights. Literary works are cultural artifacts that encapsulate the values, traditions, and historical contexts of the societies that produce them (Altun, 2023). By engaging with these works, students gain a deeper appreciation for the cultural components inherent in the language they are learning. This cultural literacy is crucial in fostering effective communication, as language is inseparable from the cultural contexts in which it is embedded.

Literature enhances ELT through elements such as authentic material, language in use and aesthetic representation of the spoken language, as well as language and cultural enrichment. It is with this last element that literature opens the door that leads to a wider and closer look on the culture (or cultures) where the target language is spoken (Cruz, 2010, p.1).

Students who read literature benefit from increased linguistic proficiency as well as increased cultural awareness and sensitivity to various cultural challenges. As such, literature is useful when teaching foreign language learners about cultural issues. Students learn about the traditions, customs, and history of various societies through cultural exploration (Ildrimzade, 2018). Literature captures the spirit of a culture through its stories, characters, and themes and serves as a conduit for the passing down of cultural information from one generation to the next. Literature also provides a forum for social criticism, encouraging discussion of cultural concerns and reshaping ideas about morality, diversity, and identity. Literature influences and reflects culture, allowing societal conventions and viewpoints to continually develop and become more nuanced. Moreover, literature broadens readers' horizons by illustrating a range of cultural identities, encouraging empathy, and advancing understanding among people.

#### **5. THE SIGNIFICANCE OF LITERATURE IN ENHANCING THE LANGUAGE SKILLS**

In order to create referential and interactive meaning, teachers should strive to effortlessly integrate fundamental language abilities into both oral and written language use. Teachers should stress crucial significance of these abilities in developing successful communication, rather than seeing them as merely components of word, phrase, and sentence formation (Ildrimzade, 2018). Literary works can be integrated to the class in order to foster all the four skills reading, writing, listening and speaking. At the same time, vocabulary and grammar knowledge of the students can be improved with the help of literature.

Reading comprehension and writing skills are enhanced when students are exposed to a variety of grammatical structures, diversified vocabulary, and authentic language use through literary works. Using literature to explore characters, themes, and plotlines while expressing ideas and opinions in the target language helps students develop their oral communication skills. Additionally, hearing literary works read aloud or discussed in

class improves students' auditory comprehension abilities and helps them grasp rhythm, intonation, and pronunciation. All things considered, literature is a valuable and diverse tool for language learners, providing chances to improve their language abilities in an engaging and joyful setting.

While reading and writing skills can be developed through various literary genres, speaking proficiency can be achieved through role plays. Theater plays can serve as examples of this method. Listening skills can also be enhanced through this approach, either by incorporating activities like listening to audio books or having students engage in listening exercises. According to Povey (1972) "literature will increase all language skills because literature will extend linguistic knowledge by giving evidence of extensive and subtle vocabulary usage, and complex and exact syntax" (cited in McKay 1982, p. 529).

## 6. CONCLUSION

The present study concludes that literature plays a crucial role in the teaching of foreign languages by highlighting its dynamic influence on language instruction and cultural comprehension. A thorough analysis of the literature reveals that adding literary studies to language training improves students' comprehension of social, historical, and contextual factors and allows for a deeper level of cultural immersion. Literature also provides a medium through which children can be exposed to a variety of grammatical structures, a wide vocabulary, and real-world language use. By exploring the nuances of cultural expressions, the incorporation of literature develops sensitivity and understanding in addition to honing communication skills. Overall, this study promotes a more thorough and successful language learning process by highlighting the many advantages of integrating literature into foreign language instruction.

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## Oyun Teorisi ve Doğrusal Programlama ile Optimal Portföy Seçimi

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**Özet:** Rasyonel bir yatırımcının temel amacı aynı risk düzeyinde maksimum getiriye sağlayacak ya da aynı getiri düzeyinde minimum riske sahip yatırım araçlarını tercih ederek üstlenmiş olduğu risk karşısında optimum portföyü oluşturabilmektir. Dolayısıyla finans literatüründe optimum portföyün belirlenmesine yönelik çalışmalar hiçbir zaman güncelliğini yitirmemiştir. Geleneksel Portföy Teorisi'yle başlayan süreç, finansal varlıkların birbirleriyle olan ilişkilerini de dikkate alan Modern Portföy Teorisi'yle devam etmiştir. Bu dönemdeki yöntemlerin temel eksikliği yatırımcıların davranışlarının diğer yatırımcıların kazancı üzerindeki etkisini ele almaması olarak görülmektedir. Oyun Teorisi ise bir yatırımcının yatırım davranışının diğer yatırımcıları nasıl etkilediğini de dikkate alan bir yöntem olarak finans literatüründe kullanılabilir. Bu bakımdan çalışmanın temel amacı Oyun Teorisi ile belirlenen stratejilerin doğrusal programlama ile çözülerek optimum portföyün oluşturulması olarak belirlenmiştir. Bu amaç doğrultusunda 2019/5-2023/8 dönem aralığında seçilen 9 farklı yatırım aracının aylık getirileri dikkate alınarak optimum portföyler oluşturabilmek adına hangi dönemde hangi ağırlıkla hangi yatırım aracının portföyde yer alması gerektiği belirlenmiştir. Brent petrol her dönemde optimal portföylerde yer almasıyla dikkat çekerken, Ethereum ise en yüksek ağırlığa sahip yatırım aracı olarak ön plana çıkmaktadır.

**Anahtar Kelimeler:** Oyun Teorisi, Doğrusal Programlama, Optimum Portföy

### Optimal Portfolio Selection with Game Theory and Linear Programming

**Abstract:** The main objective of a rational investor is to form the optimum portfolio against the risk assumed by choosing investment instruments that will provide maximum return at the same risk level or minimum risk at the same return level. Therefore, studies on determining the optimal portfolio have never lost their relevance in the finance literature. The process that started with the Traditional Portfolio Theory continued with the Modern Portfolio Theory, which also takes into account the interrelationship of financial assets. The main shortcoming of the methods of this period is that they do not address the impact of investors' behavior on the earnings of other investors. Oyun Teorisi finans literatüründe bir yatırımcının yatırım davranışının diğer yatırımcıları nasıl etkilediğini dikkate alan bir yöntem olarak kullanılabilir. In this respect, the main objective of the study is to form the optimum portfolio by solving the strategies determined by Game Theory with linear programming. For this purpose, monthly returns of 9 different investment instruments selected in the 2019/5-2023/8 period range were taken into consideration and it was determined which investment instrument should be included in the portfolio with which weight in which period in order to create optimum portfolios. While Brent oil stands out as an optimal portfolio in every period, Ethereum stands out as the investment instrument with the highest weighting

**Key Words:** Game Theory, Linear Programming, Optimal Portfolio

#### 1. GİRİŞ

Bireylerin harcamalarından arta kalan kısımları gelir yaratacak unsurlara aktarmaları yatırım olarak adlandırılmaktadır. Bireysel anlamda refah düzeyini arttırmak veya olası krizlere karşı önlem alabilmek adına yatırım yapılırsa da doğru yatırımın gerçekleştirilmesi ülke ekonomilerinin sürdürülebilir büyümesi açısından da son derece önemlidir (Şahin ve Barış, 2017: 77). Toplam tasarrufun milli gelir içerisindeki payının yüksek olması ekonominin büyüme potansiyelinin yüksek olduğunu göstermekle birlikte dış finansal bağıllığı azaltmaktadır. Bu bakımdan tasarrufların doğru yatırımlara aktarılması ekonomik istikrarın sağlanmasına katkı sunmaktadır. Günümüzde finansal küreselleşme ve teknolojik gelişmelerin etkisiyle yatırımcıların tasarruflarını değerlendirebilecekleri çok sayıda finansal enstrüman bulunmaktadır (Acar, 2022: 2287). Bir diğer ifadeyle yatırım yapmayı amaçlayan bir yatırımcı çok sayıda enstrüman arasından seçim yapmak zorunda kalmaktadır (Ding, 2006: 457; Demirci vd., 2017: 22). Söz konusu seçim ise genellikle yatırım yapılacak menkul kıymetin riski ve getirisi üzerine şekillenmektedir. Finans teorisinde rasyonel bir yatırımcının minimum riskle maksimum getiriye elde etmeyi hedefleyeceği varsayılmaktadır. Yatırımcının aynı risk seviyesinde maksimum getiriye verecek menkul kıymeti, aynı getiri düzeyinde ise minimum riske sahip menkul kıymeti tercih etmesi beklenmektedir.

Geleneksel portföy teorisinde oluşturulacak bir portföyde yer alan menkul kıymet sayısı arttıkça riskin azalacağı varsayılarak çok sayıda menkul kıymetten oluşan portföylerle riskten korunma tercih edilmiştir (Acar ve Ünal,

2022: 75). Ancak Modern Portföy Teorisi'ni ortaya koyan Markowitz rastgele çeşitlendirmeye portföy riskinin azaltılamayacağını, negatif korelasyona sahip menkul kıymetlerle oluşturulacak portföyün riskinin portföy içerisinde yer alacak menkul kıymetlerin ayrı ayrı risklerinden daha düşük olacağını hatta sıfırlanabileceğini öne sürmüştür. Ancak yine de her bir yatırımcının riske karşı tutumu, piyasa bilgilerine ulaşma yetenekleri göz önüne alındığında tüm yatırımcılara hitap edebilecek optimum portföy stratejisi geliştirmek mümkün değildir (Ding, 2006: 458). Çünkü optimum portföyü oluşturmaya çalışan modeller genellikle tek bir karar vericinin olduğu durumları dikkate almaktadır. Oysa menkul kıymet tercihi yapılırken üstlenilen risk düzeyinde elde edilebilecek kazanç ve kayıpların yanı sıra birçok yatırımcının karşı hamleleri bir diğer ifadeyle piyasa dinamikleri de oluşturulacak portföyde etkili olabilmektedir (Güler çalık vd., 2016: 332; Avşarlıgil, 2017: 1; İpek, 2019: 1). Bu noktada birbiriyle etkileşim halinde olan tüm yatırımcıları dikkate alarak optimum seçimin yapılmasına olanak sağlayan Oyun Teorisi büyük önem kazanmaktadır (Pekkaya ve Gümüş, 2021: 2). Bir oyunda her biri hedefleri ve rakiplerin olası stratejilerini bilen iki veya daha fazla oyuncu bulunmaktadır. Oyun Teorisi, oyuncuların rasyonel davranmaları durumunda, her durum için bir çözümün, oyuncuların beklenen minimum getirilerini maksimuma çıkarmaya veya maksimum kayıplarını minimuma indirmeye yöneldiklerini varsayarak belirlenebileceğini varsaymaktadır (Farias vd., 2006: 391). Ancak yatırımcıların hem kendi yatırım kararlarını hem de diğer yatırımcıların kararlarını değerlendirebileceği bir oyunun modellenmesi oyuncuların, her bir oyuncunun stratejilerinin, oyun kurallarının ve ödemelerin bulunmasına bağlıdır. Böylece yatırımcıların hangi menkul kıymeti, hangi zaman diliminde ve hangi ağırlıkla portföye dahil etmeleri gerektiğini belirlemek mümkün olacaktır (Er ve Demir, 2017: 77, Acar, 2022: 2289, Acar ve Ünal, 2022: 76). Bu çalışmanın temel motivasyonu da portföy seçiminin geçmiş getiri verileri ile yapılması ve optimal portföyün temeli oyun teorisine dayanan doğrusal programlama ile oluşturulması üzerine kurgulanmıştır.

## 2. LİTERATÜR TARAMASI

Oyun Teorisi alanındaki çalışmaların temeli 17. Yüzyıla dayanmaktadır. Her ne kadar bir matematikçi tarafından geliştirilmiş olsa da rakiplerin stratejilerini de dikkate alarak geliştirilmiş olan bu matematiksel model, matematik bilimiyle sınırlı kalmamış satranç, briç, poker gibi rakip hamlelerinin önemli olduğu alanlarda da sınırlanmıştır. Ardından askeriye alanında da kullanılmaya başlayan oyun teorisi daha sonrasında felsefe, sosyoloji, psikoloji, politika, tıp ve ekonomi gibi birçok alanda da geçerliliğini ispatlamıştır. Yatırım stratejisinin de birçok oyuncunun birbiriyle rekabet halinde olduğu bir ekonomik kazanç oyunu olduğu düşünüldüğünde sermaye piyasalarına girmek, menkul kıymetlere yatırım yapmak, ülke bütçesinden hangi sektöre ne oranda pay ayrılması gibi kararlar da oyun teorisi aracılığıyla çözüme kavuşabilmektedir. Bu çalışmada da oyun teorisinin finans alanında kullanımı üzerinde durulmuş ve literatürde oyun teorisi ve yatırım kararları ilişkisini inceleyen çalışmalar araştırılmıştır. Bu çalışmaların bazıları kullandıkları değişkenler, uyguladıkları yöntemler ve elde ettikleri bulgular Tablo 1'de özet olarak gösterilmiştir.

Tablo 1: Oyun Teorisi ile Portföy Oluşturan Çalışmalar

Yazar	Değişkenler	Yöntem	Bulgular
Farias vd. (2006)	Çalışmada varyans, standart sapma ve aylık getiri değişkeni olarak kullanılarak Brezilya Hisse Senetleri Piyasası (BOVESPA) incelenmiştir.	Ortalama Varyans (MV), Ortalama Mutlak Sapma (MAD) ve Minimax modelleri kullanılmıştır.	Genel olarak Minimax modelinin daha başarılı olduğu kanısına varılmıştır.
Ding (2006)	Risk getiri değişkenleri baz alınarak modeller oluşturulmuştur.	Doğrusal ve doğrusal olmayan programlama modellerini kullanarak bir algoritma oluşturulmuştur. Bu algoritma, MV ve Young'ın Minmaks modeli ile de karşılaştırılmıştır.	Çalışmada geliştirilen model ile Young'ın Minmaks modeli arasındaki benzerlik ve farklılıklara dikkat çekilmiştir.
Yang (2013)	Risk ve düzeltilmiş getiri ölçüleri değişkenleri kullanılmıştır.	Ortalama varyans modeli, Nash Dengesi Teoremi, İşbirlikçi Olmayan Oyun Teoremi kullanılmıştır.	Sonuç olarak piyasa portföyü ile Genelleştirilmiş Nash Denge Problemini (GNP) karşılaştırdıklarında kabul edilebilir bir sonuç elde etmişlerdir.



Özçalık vd. (2016)	Türkiye Odalar ve Borsalar Birliği (TOBB) ve Türkiye İstatistik Kurumu (TÜİK)'nden 2011-2015 dönem aralığına sahip Borsa, Altın, Dolar, Euro ve Faiz verileri elde edilmiş, beklenen getiri, reel getiri, yıllık enflasyon oranı ve TÜFE değerleri gibi değişkenler dikkate alınarak portföyler oluşturulmuştur.	Analizler QM for Windows programı ile çözülmüş olup getiri matrisleri için doğrusal programlama kullanılmıştır.	Faiz getirisinin en yüksek olduğu dönemler %93 oranıyla nisan ile %91 oranıyla Kasım ayı, hisse senedi stratejisindeki en yüksek değer %26 ile Ekim ayı, dolar seçeneği %90 ile haziran ayı, Euro seçeneği en yüksek %35 ile aralık ayı, altın stratejisi %99 pay ile ağustos ayı olarak belirlenmiştir.
Yavuz ve Eren (2016)	Finansal varlığın t dönemdeki fiyatı, finansal varlığın t-1 dönemdeki fiyatı ve getiri oranı değişkenleri kullanılarak, Altın, Euro, Dolar ve İMKB 100 endekslerinin son 6 yıllık hisse değerleri ele alınarak portföy oluşturulmuştur.	Kazanç matrisleri doğrusal programlama ile çözülmüştür.	Elde edilen bulgulara göre İMKB 100 yatırım aracı her dönemde, Altın ve Euro sadece 1 dönemde, Dolar 2 dönemde getiri sağlamıştır.
Avşarlıgil (2017)	Çalışmada, Japon Yeni kuru, Euro kuru, Dolar kuru, Cumhuriyet Altını fiyatı ve BIST'te işlem gören işlem hacmi sıralamasına göre ilk dört büyük bankanın (Garanti, Akbank, İş Bankası C ve Yapı Kredi) pay senedi fiyatları değişken olarak belirlenmiştir.	Oyun teorisi teoremlerinden Maks-Min, Min-Maks teoremleri uygulanmıştır. Doğrusal programlama, Konno Yamazaki doğrusal programlama, Verdegay bulanık doğrusal programlama teknikleri kullanılmıştır.	Yeni Verdegay Bulanık Doğrusal Programlama Modelinin, hem Konno-Yamazaki doğrusal programlama tekniği hem de Klasik doğrusal programlama tekniğinden daha başarılı olduğu görülmüştür.
Demirci vd (2017)	2009 – 2015 yılları arasında BIST 100'de işlem gören holding ve yatırım şirketinden Türkiye'de ilk 100'e girmiş 8 adet holding ve yatırım şirketi seçilerek endeks değerleri incelenmiş	Endeks değerlerine ait getiriler iki kişili sıfır toplamlı oyun yaklaşımı ile analiz edilmiştir.	1.dönem için portföyün %11'inin 2. şirkete, %38'inin 6. şirkete, %51'ni 7. şirkete, 2.dönem portföyün %17'sinin 1. şirkete, %51'inin 4. şirkete, %32'sinin 5. şirkete, 3.dönem %11'inin 3. şirkete, %89'unun 5. şirkete ait hisse senetleri alımı yapılmasının, optimal çözüm olduğu sonucuna varılmıştır
Eren vd. (2017)	BIST-100'de işlem gören ve Türkiye'de ilk 100 içerisinde yer alan 8 holding/yatırım şirketinin endeks değerleri alınarak fiyat getirileri analiz edilmiştir.	Doğrusal programlama ve İki Kişili Sıfır Toplamı Oyun Teorisi ile analiz gerçekleştirilmiştir.	Yatırımcı, portföy yaklaşımı aracılığıyla kazancını maksimum seviyeye çıkararak portföyün beklenen getirisini ölçüp karşılaştırma yapabilecektir.
Er ve Demir (2017)	8 döviz kurunun Ocak 2016-Mart 2016 dönem aralığı haftalık kapanış verileri kullanılmıştır.	Gri Sistem Teorisi ve Oyun Teorisi yöntemi kullanılmıştır.	Sonuç olarak yöntemlerde veri sayısı azaldıkça daha başarılı sonuçlar elde edilmiştir.
Essid vd. (2018)	Paris Borsası'da 2010-2015 döneminde 500 şirketin aylık hisse senedi getirileri ve kapanış fiyatları dikkate alınarak portföyler	Oyun teorisi yöntemleri ve Veri Zarflama Analizi Çapraz Verimlilik Değerlendirmesi yöntemleri kullanılmıştır.	Elde edilen sonuçlara göre oluşturdukları portföyle Paris borsasındaki tüm gösterge portföylerini geride bırakmışlardır.

	oluşturulmuştur.			
İpek (2019)	Çalışmada 2018 Ocak ayında BIST-30 Endeksinde yer alan ve Ocak 2008-Aralık 2017 döneminde sürekli olarak işlem gören 25 hissenin ay sonu kapanış fiyatları kullanılarak portföyler oluşturulmuştur.	Portföy Modern teorilerden yararlanılmıştır. Analizde ise oyun teorisinin içerisinde yer alan ödemeler matrisi kullanılmıştır.	oluşturmada portföy teorisi	Analiz sonuçlarına göre portföy oluşturulurken en iyi performansı, eşit yatırım yapılması durumu verirken en kötü performansı Modern portföy teorisi ile yapılan yatırım vermiştir.
Barbosa ve Rodrigues (2020)	Çalışma 2018, 2019 ve 2020 yılları içerisinde toplam 128 öğrenciye proje portföy yönetimini değerlendirmeye yönelik anket uygulanmıştır.	Çevrimiçi bir anket ile elde edilen öğrenci algıları nitel ve nicel analiz yöntemleri ile incelenmiştir.		Sonuç olarak proje ve portföy yönetimini öğretim üzerine yaklaşım önermiş ve değerlendirmiştir.
Pekkaya ve Gümüş (2020)	Çalışmada Game, oyun teorisi, işbirlikçi oyun, portfolio, stok exchange models, portfolio optimization, investment, portföy optimizasyonu kelimeleri ile taramaların ardından portföy ve oyun teorisi konularının birlikte yer aldığı 300 çalışma incelenmiştir.	Oyun yöntemlerinden yararlanılmıştır.	teorisi	Elde edilen bulgulara göre çalışmaların çoğunun pay senedi ile ilgilenirken bir kısmının ise döviz kuru, altın, kripto para, vb. seçenekleri de portföye dahil ettiği görülmektedir. Ayrıca genel olarak Markowitz MW yaklaşımı ile portföy oluşumunun da çok olduğu görülmüştür.
Nokhandan vd. (2021)	Çalışmada Veriler İran Menkul Kıymetler Borsasına yatırım yapan iki büyük yatırım fonundan, işlem maliyetleri, risksiz varlık, nakit, entropi, ortalama, mutlak yarı sapma ve ortalama riske maruz değer değişkenleri kullanılmıştır.	Çalışmada Statik, İşbirlikçi Olmayan ve Sıfır Toplamlı Olmayan, Eksiksiz Bilgi içeren bir oyun için Cournot Rekabet İlkesine uygun olarak bir Rekabetçi Portföy Modeli (CPM) geliştirilmiştir.		Bir yatırımcının piyasa gücüne bağlı işlem hacminin, rakiplerin nihai serveti üzerinde önemli bir etkiye sahip olduğunu sonucuna ulaşılmıştır.
Acar ve Ünal (2022)	Çalışmada Borsa İstanbul'da 2013-2021 yılları arasında her ay sürekli işlem görmüş işlem hacmi en yüksek 100 hisse senedinin aylık ortalama getirileri, standart sapmaları ve Sharpe oranları değişken olarak belirlenmiştir.	Min-Maks yaklaşımı ile simpleks algoritması kullanılmıştır.		Elde edilen sonuçlara göre oyun teorisi ile oluşturulan portföyler diğer yatırım araçlarına göre daha iyi performans göstermiştir.
Acar (2022)	Çalışmada 2012-2018 yılları arası Bist-100 Endeks, Dolar ve Euro kur değerleri kapanış verileri, gram altın için satış verileri, faiz oranları ve Bitcoin değerleri kullanılmıştır.	Doğrusal programlama modellerinden Simpleks yöntemini kullanmıştır.		Elde edilen bulgulara göre, oluşturulan modelin yatırım kararı ve portföy seçimi için alternatif bir model olarak yararlı ve verimli bir yaklaşım sağlayabileceği belirtilmiştir.

Tablo 1'de görüldüğü üzere oyun teorisi ve yatırımın ortak kullanıldığı çalışıldığı çalışmaları üç ana gruba ayırmak mümkündür. İlk grup çalışmada maksimum kazancı verecek portföyün hangi yatırım araçlarıyla hangi ağırlıkta oluşturulması gerektiği konusunda önerilerde bulunmuşlardır (Özçalık vd., 2016; Yavuz ve Eren, 2016; Demirci vd., 2017). Özçalık vd., (2016) çalışmalarında nisan ayında %93, kasım ayında %91 oranıyla faize, ekim ayında %26 oranıyla hisse senedine, haziran ayında %90 oranıyla dolara, aralık ayında %35 oranıyla euroya ve

ağustos ayında %99 oranıyla altına yatırım yapıldığında maksimum getirinin elde edileceğini ortaya koymuşlardır. Yavuz ve Eren (2016) İMKB 100 endeksinin her dönemde, altın ve euronun sadece bir dönemde, doların ise iki dönemde getiri sağladığını ortaya koymuştur. Demirci vd. (2017) 1.dönem için portföyün %11'inin 2. şirkete, %38'inin 6. şirkete, %51'nin 7. şirkete, 2.dönem portföyün %17'sinin 1. şirkete, %51'inin 4. şirkete, %32'sinin 5. şirkete, 3.dönem %11'inin 3. şirkete, %89'unun 5. şirkete ait hisse senetleri alımı yapılmasının, optimal çözüm olduğunu belirtmişlerdir. İkinci grup çalışmada ise oyun teorisiyle oluşturulan portföylerin başarıları değerlendirilmiştir. Bu çalışmalardan Farias vd. (2006), Ding (2006) çalışmalarında Minimax modelinin diğer modellere göre daha başarılı sonuçlar verdiğini ortaya koyarken, Yang (2013) Genelleştirilmiş Nash Denge Problemi ile oluşturdukları portföyün getirisinin piyasa portföyüne yakın sonuçlar verdiğini belirtmiştir. Aşarlıgil (2017) Yeni Verdegay Bulanık Doğrusal Programlama Modelinin, hem Konno-Yamazaki doğrusal programlama tekniği hem de Klasik doğrusal programlama tekniğinden daha başarılı olduğunu tespit etmiş, Essid vd. (2018) ile Acar ve Ünal (2022) farklı borsalarda yaptıkları analizlerle oyun teorisi ile oluşturdukları portföyün piyasada oluşturulan tüm portföylerden daha başarılı olduğunu göstermiştir. İpek (2019) ise modern portföy ile oyun kuramını kıyaslamış ve portföy oluşturulurken en iyi performansı, eşit yatırım yapılması durumu verirken en kötü performansı Modern portföy teorisi ile yapılan yatırımın verdiği sonucuna ulaşmıştır. Üçüncü grup çalışmalardan Barbosa ve Rodrigues (2020) proje ve portföy yönetimini öğretme üzerine yaklaşım önerirken, Nokhandan vd. (2021) bir yatırımcının piyasa gücüne bağlı işlem hacminin, rakiplerin nihai serveti üzerinde önemli bir etkiye sahip olduğunu sonucuna ulaşmıştır.

### 3. VERİ SETİ VE BULGULAR

Çalışmanın temel amacı oyun teorisi yaklaşımı ile 2019/5-2023/8 dönem aralığına ait 9 finansal yatırım aracı (Altın, Bitcoin, Brent Petrol, Dolar, Ethereum, Euro, Faiz, Gümüş, Hisse Senedi) ile optimal portföy elde etmektir. Bu amaçtan hareketle finansal yatırım araçlarının verilerine ulaşılmıştır. Türkiye Cumhuriyeti Merkez Bankası (TCMB) resmi sitesinden Altın, Dolar, Euro ve Faiz verileri, Investing resmi sitesinden de Bitcoin, Brent Petrol, Ethereum, Gümüş ve Hisse Senedi verileri çekilmiştir. Sonrasında elde edilen bu veriler ile her dönemde 13 aylık olacak şekilde 4 dönemlik periyotlar oluşturulmuştur. Doğrusal programlama ile analizi gerçekleştirilen bu dönemlerin ardından her döneme ilişkin portföy değerleri saptanmıştır. Bu çalışmanın temel motivasyonunu ise portföy seçiminin geçmiş getiri verileri ile yapılması ve optimal portföyün temeli oyun teorisine dayanan doğrusal programlama ile oluşturulması üzerine kurgulanması oluşturmuştur.

#### 3.1. Araçların Oyun Teorisi İle Analiz Edilmesi

Çalışmada 2019/5 – 2023/8 dönem aralığına ait birbirinden farklı 9 finansal aracın hisse değerleri oyun teorisi bağlamında analiz edilmiştir.

#### 3.2. Finansal Araçların Seçimi

Araştırmada kullanılan finansal araçların listesi aşağıdaki bölümde verilmiştir.

Tablo 2: Araştırmada Kullanılan Finansal Araçların Listesi

Altın	Dolar	Faiz
Bitcoin	Ethereum	Gümüş
Brent Petrol	Euro	Hisse Senedi

Finansal araçlar yardımıyla 4 farklı portföy oluşturulmuştur. 2019 Mayıs ayı başlangıç, 2023 Ağustos ayı kapanış olmak üzere toplamda 52 aylık süreç incelenmiştir. Kazanç matrisi oluşturulurken bir önceki fiyat dönemi baz alınmak suretiyle fiyat değişimleri hesaplanarak getiri endeksleri oluşturulmuştur. Kazanç matrisi 2019/5 – 2023/8 dönem aralığı olan 52 aylık periyotluk dönem için her portföyde 13 ay olacak şekilde hesaplanmıştır. Oluşturulan her portföy ayrı ayrı olmak üzere yatırımcının minimum risk düzeyinde, maksimum getiri kazandıran portföy elde edilmiştir.

Portföy oluşturulurken yatırımcının yatırım dönemi için en kısa sürenin 1 aylık dönem (30 gün) olduğu varsayılmış olup her ay sonunda portföyün genel durumu hakkında tekrardan karar verilmiştir. Oyun içerisindeki piyasanın stratejilerinin ifade edildiği 2019-2023 dönem aralığı fiyatlarına Tablo 3'te yer verilmiştir. Tablo 3'teki veriler istikametinde piyasa ve yatırımcı için stratejiler belirlenerek her 30 günlük dönemler için kazanç matrisi oluşturulmuştur. Sonrasında oluşturulan kazanç matrisleri doğrusal programlama modeline çevrilerek, her bir dönem aralığı için optimal portföy belirlenmiştir.

### 3.3. Stratejilerin Tanımlanması

Yatırımcının stratejileri aşağıdaki gibi tanımlanmaktadır.

1 nolu strateji: Altın; 1 Ons Altın Londra Satış Fiyatı (ABD Doları/Ons)

2 nolu strateji: Bitcoin; Bitcoin Geçmiş Verileri

3 nolu strateji: Brent Petrol; Brent Petrol Vadeli İşlemleri Geçmiş Verileri

4 nolu strateji: Dolar; (USD) ABD Doları (Döviz Alış)-Düzy

5 nolu strateji: Euro; (EUR) Euro (Döviz Alış)-Düzy

6 nolu strateji: Ethereum Geçmiş Verileri

7 nolu strateji: Faiz; Türkiye-Bir Hafta Vadeli Repo Faiz Oranı

8 nolu strateji: Gümüş Vadeli İşlem Geçmiş Verileri

9 nolu strateji: Hisse Senedi

Tablo 3: 2019 Nisan – 2023 Ağustos Dönem Aralığı Finansal Araçların Değeri

Dönemler	Altın	Bitcoin	Brent Petrol	Dolar	Euro	Ethereum	Faiz	Gümüş	Hisse Senedi
2019/4	1.285,66	4.102,30	67,58	5,74	6,45	141,77	22,96	15,175	939,08
2019/5	1.282,23	5.321,10	71,73	6,05	6,77	161,84	22,23	14,975	957,3
2019/6	1.385,80	8.556,90	61,64	5,81	6,56	267,94	21,74	16,8	903,36
2019/7	1.414,08	10.821,40	65,05	5,67	6,37	292,23	21,42	15,315	986,63
2019/8	1.489,62	10.081,90	64,09	5,62	6,26	217,23	21,10	19,255	1.013,42
2019/9	1.504,65	9.594,70	58,8	5,71	6,29	171,62	20,13	18,415	967,38
2019/10	1.495,43	8.285,00	59,38	5,78	6,39	180,36	18,48	17,045	1.052,75
2019/11	1.472,89	9.153,10	59,45	5,73	6,34	182,38	17,42	18,115	986,9
2019/12	1.479,18	7.546,50	60,73	5,84	6,48	151,93	14,56	17,025	1.073,50
2020/1	1.561,69	7.196,40	66,41	5,92	6,58	129,21	13,25	17,905	1.149,03
2020/2	1.601,80	9.349,30	56,16	6,04	6,59	179,88	12,72	18,135	1.194,37
2020/3	1.621,58	8.543,80	48,95	6,31	6,99	217,51	11,58	16,5	1.083,79
2020/4	1.679,92	6.412,40	25,99	6,82	7,42	132,88	10,78	14,175	882,86
2020/5	1.724,10	8.628,60	26,95	6,95	7,56	206,23	10,15	15,075	1.002,54
2020/6	1.724,82	9.454,50	37,56	6,81	7,66	231,8	9,52	18,74	1.064,81
2020/7	1.847,27	10.961,10	41,58	6,85	7,82	225,61	8,96	18,58	1.171,68
2020/8	1.964,40	11.333,20	43,53	7,25	8,58	346,48	8,73	24,48	1.140,39
2020/9	1.921,06	11.644,20	45,6	7,51	8,86	433,89	8,66	27,735	1.081,66
2020/10	1.903,37	10.776,60	42,17	7,87	9,27	359,5	10,02	23,355	1.150,07
2020/11	1.878,86	18.394,60	37,37	8,00	9,46	386,36	10,57	23,71	1.119,72
2020/12	1.864,98	19.697,80	47,79	7,72	9,38	616,78	13,51	22,69	1.302,25
2021/1	1.872,32	28.951,70	51,5	7,39	9,01	735,87	14,61	27,2	1.482,17
2021/2	1.787,08	33.106,80	54,91	7,07	8,56	1.312,69	15,45	28	1.484,86
2021/3	1.717,01	45.160,50	64,85	7,63	9,09	1.418,91	17,09	28,03	1.491,88
2021/4	1.758,23	58.763,20	63,12	8,16	9,73	1.918,82	17,58	27,4	1.399,34
2021/5	1.862,62	57.719,10	66,7	8,34	10,13	2.772,27	18,13	25,99	1.400,15
2021/6	1.832,85	37.294,30	69,39	8,60	10,37	2.707,94	18,42	28,005	1.424,47
2021/7	1.810,55	35.030,70	74,69	8,61	10,19	2.274,50	18,57	26,25	1.358,20
2021/8	1.778,57	41.510,00	75,39	8,48	9,98	2.530,94	18,69	24	1.397,98
2021/9	1.780,26	47.129,20	71,68	8,51	10,03	3.429,65	18,52	23,1	1.475,62
2021/10	1.777,80	43.824,40	78,49	9,14	10,60	2.999,86	18,29	22,61	1.398,93
2021/11	1.831,07	61.310,10	83,63	10,52	12,01	4.287,41	17,82	24,19	1.522,28
2021/12	1.793,21	56.891,70	69,8	13,53	15,29	4.628,72	17,85	23,05	1.823,06
2022/1	1.811,89	46.217,50	78,11	13,52	15,31	3.677,69	19,63	23,77	1.871,25
2022/2	1.853,56	38.475,60	89,62	13,62	15,44	2.686,82	18,51	22,75	2.013,97
2022/3	1.953,40	43.187,20	98,43	14,57	16,05	2.922,44	18,35	26,81	1.969,13

2022/4	1.943,90	45.529,00	105,25	14,68	15,93	3.282,33	18,30	26,2	2.238,73
2022/5	1.844,97	37.642,00	106,3	15,62	16,53	2.727,20	18,29	21,8	2.460,80
2022/6	1.837,12	31.793,10	116,08	16,96	17,96	1.941,81	18,23	22,66	2.554,28
2022/7	1.745,34	19.926,60	109,49	17,39	17,77	1.069,13	17,98	20,7	2.408,64
2022/8	1.766,83	23.303,40	103,92	17,99	18,25	1.679,98	17,26	21,175	2.600,28
2022/9	1.681,17	20.049,90	95,18	18,28	18,13	1.554,57	16,87	18,25	3.168,41
2022/10	1.659,18	19.422,90	86,35	18,56	18,25	1.328,73	16,72	21,89	3.195,81
2022/11	1.728,53	20.496,10	92,67	18,59	18,92	1.572,89	16,45	19,945	3.987,44
2022/12	1.793,53	17.163,40	86,78	18,64	19,70	1.294,40	16,38	23,54	5.046,30
2023/1	1.901,82	16.537,50	85,96	18,76	20,20	1.195,69	15,72	25,15	5.568,43
2023/2	1.844,98	23.124,70	85,56	18,82	20,19	1.585,27	14,28	24,565	4.998,82
2023/3	1.927,60	23.130,60	83,05	18,97	20,29	1.604,69	13,87	21,9	5.258,74
2023/4	1.994,37	28.473,70	86	19,30	21,15	1.821,62	13,52	24,965	4.806,40
2023/5	1.982,26	29.252,10	80,11	19,68	21,43	1.869,05	13,52	25,93	4.628,36
2023/6	1.953,50	27.216,40	72,15	23,06	24,94	1.873,62	13,79	24,18	4.928,63
2023/7	1.947,71	30.472,90	75	26,42	29,20	1.933,80	16,27	23,29	5.867,23
2023/8	1.916,86	29.232,30	84,78	26,95	29,43	1.856,17	17,95	25,25	7.209,59
2022/10	1.659,18	19.422,90	86,35	18,56	18,25	1.328,73	16,72	21,89	3.195,81
2022/11	1.728,53	20.496,10	92,67	18,59	18,92	1.572,89	16,45	19,945	3.987,44
2022/12	1.793,53	17.163,40	86,78	18,64	19,70	1.294,40	16,38	23,54	5.046,30
2023/1	1.901,82	16.537,50	85,96	18,76	20,20	1.195,69	15,72	25,15	5.568,43
2023/2	1.844,98	23.124,70	85,56	18,82	20,19	1.585,27	14,28	24,565	4.998,82
2023/3	1.927,60	23.130,60	83,05	18,97	20,29	1.604,69	13,87	21,9	5.258,74
2023/4	1.994,37	28.473,70	86	19,30	21,15	1.821,62	13,52	24,965	4.806,40
2023/5	1.982,26	29.252,10	80,11	19,68	21,43	1.869,05	13,52	25,93	4.628,36
2023/6	1.953,50	27.216,40	72,15	23,06	24,94	1.873,62	13,79	24,18	4.928,63
2023/7	1.947,71	30.472,90	75	26,42	29,20	1.933,80	16,27	23,29	5.867,23
2023/8	1.916,86	29.232,30	84,78	26,95	29,43	1.856,17	17,95	25,25	7.209,59
2022/10	1.659,18	19.422,90	86,35	18,56	18,25	1.328,73	16,72	21,89	3.195,81
2022/11	1.728,53	20.496,10	92,67	18,59	18,92	1.572,89	16,45	19,945	3.987,44
2022/12	1.793,53	17.163,40	86,78	18,64	19,70	1.294,40	16,38	23,54	5.046,30
2023/1	1.901,82	16.537,50	85,96	18,76	20,20	1.195,69	15,72	25,15	5.568,43
2023/2	1.844,98	23.124,70	85,56	18,82	20,19	1.585,27	14,28	24,565	4.998,82
2023/3	1.927,60	23.130,60	83,05	18,97	20,29	1.604,69	13,87	21,9	5.258,74
2023/4	1.994,37	28.473,70	86	19,30	21,15	1.821,62	13,52	24,965	4.806,40
2023/5	1.982,26	29.252,10	80,11	19,68	21,43	1.869,05	13,52	25,93	4.628,36
2023/6	1.953,50	27.216,40	72,15	23,06	24,94	1.873,62	13,79	24,18	4.928,63
2023/7	1.947,71	30.472,90	75	26,42	29,20	1.933,80	16,27	23,29	5.867,23
2023/8	1.916,86	29.232,30	84,78	26,95	29,43	1.856,17	17,95	25,25	7.209,59

Yatırımcı, tercih ettiği strateji seçimleri sonucunda her bir finansal aracın getirisi ile doğru orantılı olacak şekilde gelir elde etmiştir. Strateji seçimi sonucunda yatırımcının elde ettiği gelir fonksiyonu şu şekilde ifade edilmektedir:

$$Y = f\{\text{Altın, Bitcoin, Brent Petrol, Dolar, Euro, Ethereum, Faiz, Gümüş, Hisse Senedi}\}$$

Yatırımcı, kendisi için piyasanın iyimser olmayan bir bakış açısı ile en kötü stratejiyi tercih edeceğini düşünmektedir. Burada yatırımcının olası en düşük kayıp ile en düşük getiriyi sağlayacak getiriler arasında en yüksek getiriyi tercih edecek şekilde strateji oluşturması gereklidir.

### 3.4. Kazanç Matrisinin Oluşturulması

Kazanç matrisi oluşturulurken aşağıdaki bölümde yer alan formül yardımı ile finansal aracın bir önceki döneme göre değişimi hesaplanmıştır. Getirilerin hesaplanmasının ardından kazanç matrisinde bulunan her bir değer anapara bağlamında ele alınarak (+1) eklenmiştir. Bu ekleme işleminin yapılması ile matriste negatif sonuçların çıkmasının önüne geçilmiştir. Kazanç matrisinde bulunan 1'den büyük değerler (+), 1'den küçük değerler (-) getiriyi belirtmektedir.

$F_t =$  Finansal varlığın  $t$  dönemdeki fiyatı

$F_{t-1} =$  Finansal varlığın  $t - 1$  dönemdeki fiyatı

$G =$  Getiri Oranı

$$G = \frac{F_t - F_{t-1}}{F_{t-1}}$$

Kazanç matrisinde yer alan birinci dönemde mevcut 2019 yılı Mayıs ayına ilişkin Altın finansal aracı için getiriler aşağıda verilen şekilde hesaplanmıştır:

$$2019 \text{ yılı Mayıs ayı Altın} = \frac{1.282,23 - 1.285,66}{1.285,66} = -0.00267$$

Matriste yer alan diğer değerlerinde belirlenmesinin ardından her bir döneme ait getiriler Tablo 4'te gösterilmiştir.

Tablo 4: Dönemlere Ait Getiri Oranları Matrisi

	Dönemler	YATIRIMCI									
		Altın	Bitcoin	Brent Perol	Dolar	Euro	Ethereum	Faiz	Gümüş	Hisse Senedi	
PİYASA	1. Dönem	2019/5	-0,0027	0,2971	0,0614	0,0547	0,1416	0,0496	-0,0318	-0,0132	0,0194
		2019/6	0,0808	0,6081	-0,1407	-0,0393	0,6556	-0,0311	-0,0220	0,1219	-0,0563
		2020/1	0,0558	-0,0464	0,0935	0,0138	-0,1495	0,0145	-0,0900	0,0517	0,0704
		2020/2	0,0257	0,2992	-0,1543	0,0213	0,3922	0,0029	-0,0400	0,0128	0,0395
		2020/3	0,0123	-0,0862	-0,1284	0,0447	0,2092	0,0599	-0,0896	-0,0902	-0,0926
		2021/1	0,0039	0,4698	0,0776	-0,0424	0,1931	-0,0401	0,0814	0,1988	0,1382
		2021/2	-0,0455	0,1435	0,0662	-0,0435	0,7839	-0,0502	0,0575	0,0294	0,0018
		2021/3	-0,0392	0,3641	0,1810	0,0786	0,0809	0,0625	0,1061	0,0011	0,0047
		2022/1	0,0104	-0,1876	0,1191	-0,0007	-0,2055	0,0016	0,0997	0,0312	0,0264
		2022/2	0,0230	-0,1675	0,1474	0,0075	-0,2694	0,0084	-0,0571	-0,0429	0,0763
	2022/3	0,0539	0,1225	0,0983	0,0693	0,0877	0,0395	-0,0086	0,1785	-0,0223	
	2023/1	0,0604	-0,0365	-0,0094	0,0065	-0,0763	0,0249	-0,0403	0,0684	0,1035	
	2023/2	-0,0299	0,3983	-0,0047	0,0035	0,3258	-0,0001	-0,0916	-0,0233	-0,1023	
	2. Dönem	2019/7	0,0204	0,2646	0,0553	-0,0240	0,0907	-0,0286	-0,0147	-0,0884	0,0922
		2019/8	0,0534	-0,0683	-0,0148	-0,0084	-0,2566	-0,0178	-0,0149	0,2573	0,0272
		2020/4	0,0360	-0,2495	-0,4691	0,0799	-0,3891	0,0612	-0,0691	-0,1409	-0,1854
		2020/5	0,0263	0,3456	0,0369	0,0195	0,5520	0,0192	-0,0584	0,0635	0,1356
		2020/6	0,0004	0,0957	0,3937	-0,0206	0,1240	0,0136	-0,0621	0,2431	0,0621
		2021/4	0,0240	0,3012	-0,0267	0,0691	0,3523	0,0707	0,0287	-0,0225	-0,0620
		2021/5	0,0594	-0,0178	0,0567	0,0230	0,4448	0,0408	0,0313	-0,0515	0,0006
		2021/6	-0,0160	-0,3539	0,0403	0,0305	-0,0232	0,0237	0,0160	0,0775	0,0174
		2022/4	-0,0049	0,0542	0,0693	0,0081	0,1231	-0,0076	-0,0027	-0,0228	0,1369
		2022/5	-0,0509	-0,1732	0,0100	0,0640	-0,1691	0,0374	-0,0005	-0,1679	0,0992
	2022/6	-0,0043	-0,1554	0,0920	0,0858	-0,2880	0,0866	-0,0033	0,0394	0,0380	
	2023/3	0,0448	0,0003	-0,0293	0,0078	0,0123	0,0047	-0,0287	-0,1085	0,0520	
	2023/4	0,0346	0,2310	0,0355	0,0176	0,1352	0,0424	-0,0252	0,1400	-0,0860	
	3. Dönem	2019/9	0,0101	-0,0483	-0,0825	0,0156	-0,2100	0,0060	-0,0460	-0,0436	-0,0454
		2019/10	-0,0061	-0,1365	0,0099	0,0126	0,0509	0,0147	-0,0820	-0,0744	0,0882
		2020/7	0,0710	0,1594	0,1070	0,0062	-0,0267	0,0207	-0,0588	-0,0085	0,1004
		2020/8	0,0634	0,0339	0,0469	0,0585	0,5357	0,0965	-0,0257	0,3175	-0,0267
2020/9		-0,0221	0,0274	0,0476	0,0352	0,2523	0,0332	-0,0080	0,1330	-0,0515	
2021/7		-0,0122	-0,0607	0,0764	0,0019	-0,1601	-0,0173	0,0081	-0,0627	-0,0465	
2021/8	-0,0177	0,1850	0,0094	-0,0159	0,1127	-0,0210	0,0065	-0,0857	0,0293		

4. Dönem	2021/9	0,0010	0,1354	-0,0492	0,0043	0,3551	0,0050	-0,0091	-0,0375	0,0555
	2022/7	-0,0500	-0,3732	-0,0568	0,0249	-0,4494	-0,0104	-0,0137	-0,0865	-0,0570
	2022/8	0,0123	0,1695	-0,0509	0,0349	0,5714	0,0270	-0,0400	0,0229	0,0796
	2022/9	-0,0485	-0,1396	-0,0841	0,0159	-0,0746	-0,0068	-0,0226	-0,1381	0,2185
	2023/5	-0,0061	0,0273	-0,0685	0,0198	0,0260	0,0131	0,0000	0,0387	-0,0370
	2023/6	-0,0145	-0,0696	-0,0994	0,1717	0,0024	0,1642	0,0200	-0,0675	0,0649
	2019/11	-0,0151	0,1048	0,0012	-0,0092	0,0112	-0,0072	-0,0574	0,0628	-0,0626
	2019/12	0,0043	-0,1755	0,0215	0,0186	-0,1670	0,0222	-0,1642	-0,0602	0,0877
	2020/10	-0,0092	-0,0745	-0,0752	0,0488	-0,1714	0,0466	0,1570	-0,1579	0,0632
	2020/11	-0,0129	0,7069	-0,1138	0,0164	0,0747	0,0198	0,0549	0,0152	-0,0264
	2020/12	-0,0074	0,0708	0,2788	-0,0353	0,5964	-0,0077	0,2781	-0,0430	0,1630
	2021/10	-0,0014	-0,0701	0,0950	0,0738	-0,1253	0,0571	-0,0124	-0,0212	-0,0520
	2021/11	0,0300	0,3990	0,0655	0,1513	0,4292	0,1330	-0,0257	0,0699	0,0882
	2021/12	-0,0207	-0,0721	-0,1654	0,2856	0,0796	0,2729	0,0017	-0,0471	0,1976
	2022/10	-0,0131	-0,0313	-0,0928	0,0155	-0,1453	0,0067	-0,0089	0,1995	0,0086
	2022/11	0,0418	0,0553	0,0732	0,0014	0,1838	0,0368	-0,0161	-0,0889	0,2477
	2022/12	0,0376	-0,1626	-0,0636	0,0025	-0,1771	0,0414	-0,0043	0,1802	0,2655
	2023/7	-0,0030	0,1197	0,0395	0,1456	0,0321	0,1708	0,1798	-0,0368	0,1904
	2023/8	-0,0158	-0,0407	0,1304	0,0200	-0,0401	0,0077	0,1033	0,0842	0,2288

1. döneme ait değerler, bu dokuz yatırım aracından herhangi birinin yatırımcıya sağladığı kazanç ve kayıp oranlarını temsil etmektedir.

2019 yılı Mayıs ayında %0,27, %29,71, %6,14, %5,47, %14,16, %4,96, %-3,18, %-1,32, %1,94,  
2019 yılı Haziran ayında %8,1, %60,8, %-14,1, %-3,9, %65,6, %-3,1, %-2,2, %12,2, %-5,6,  
2020 yılı Ocak ayında %5,6, %-4,6, %9,4, %1,4, %-15, %1,5, %-9, %5,2, %7,  
2020 yılı Şubat ayında %2,6, %29,9, %-15,4, %2,1, %39,2, %0,3, %-4,0, %1,3, %4,  
2020 yılı Mart ayında %1,2, %-8,6, %-12,8, %4,5, %20,9, %6, %-9, %-9, %-9,3,  
2021 yılı Ocak ayında %0,4, %47, %7,8, %-4,2, %19,3, %-4, %8,1, %19,9, %13,8,  
2021 yılı Şubat ayında %-4,6, %14,4, %6,6, %-4,4, %78,4, %-5, %5,8, %2,9, %0,2,  
2021 yılı Mart ayında %-3,9, %36,4, %18,1, %7,9, %8,1, %6,3, %10,6, %0,1, %0,5,  
2022 yılı Ocak ayında %1, %-18,8, %11,9, %-0,1, %-20,6, %0,2, %10, %3,1, %2,6,  
2022 yılı Şubat ayında %2,3, %-16,8, %14,7, %0,8, %-26,9, %0,8, %-5,7, %-4,3, %7,6,  
2022 yılı Mart ayında %5,4, %12,3, %9,8, %6,9, %8,8, %4, %-0,9, %17,9, %-2,2,  
2023 yılı Ocak ayında %6, %-3,7, %-0,9, %0,7, %-7,6, %2,5, %-4, %6,8, %10,4,  
2023 yılı Şubat ayında %-3, %39,8, %-0,5, %0,4, %32,6, %0, %-9,2, %-2,3, %-10,2 oranında kazanç sağlamaktadır.

2. döneme ait değerler, bu dokuz yatırım aracından herhangi birinin yatırımcıya sağladığı kazanç ve kayıp oranlarını temsil etmektedir.

2019 yılı Temmuz ayında %2, %26,5, %5,5, %-2,4, %9,1, %-2,9, %-1,5, %-8,8, %9,2,  
2019 yılı Ağustos ayında %5,3, %-6,8, %-1,5, %-0,8, %-25,7, %-1,8, %-1,5, %25,7, %2,7,  
2020 yılı Nisan ayında %3,6, %-25, %-46,9, %8, %-38,9, %6,1, %-6,9, %-14,1, %-18,5,  
2020 yılı Mayıs ayında %2,6, %34,6, %3,7, %2, %55,2, %1,9, %-5,8, %6,4, %13,6,  
2020 yılı Haziran ayında %0, %9,6, %39,4, %-2,1, %12,4, %1,4, %-6,2, %24,3, %6,2,  
2021 yılı Nisan ayında %2,4, %30,1, %-2,7, %6,9, %35,2, %7,1, %2,9, %-2,3, %-6,2,  
2021 yılı Mayıs ayında %5,9, %-1,8, %5,7, %2,3, %44,5, %4,1, %3,1, %-5,2, %0,1,  
2021 yılı Haziran ayında %-1,6, %-35,4, %4, %3,1, %-2,3, %2,4, %1,6, %7,8, %1,7,  
2022 yılı Nisan ayında %-0,5, %5,4, %6,9, %0,8, %12,3, %-0,8, %-0,3, %-2,3, %13,7,  
2022 yılı Mayıs ayında %-5,1, %-17,3, %1, %6,4, %-16,9, %3,7, %-0,1, %-16,8, %9,9,  
2022 yılı Haziran ayında %-0,4, %-15,5, %9,2, %8,6, %-28,8, %8,7, %-0,3, %3,9, %3,8,  
2023 yılı Mart ayında %4,5, %0, %-2,9, %0,8, %1,2, %0,5, %-2,9, %-10,9, %5,2,  
2023 yılı Nisan ayında %3,5, %23,1, %3,6, %1,8, %13,5, %4,2, %-2,5, %14, %-8,6 oranında kazanç sağlamaktadır.

3. döneme ait değerler, bu dokuz yatırım aracından herhangi birinin yatırımcıya sağladığı kazanç ve kayıp oranlarını temsil etmektedir.

2019 yılı Eylül ayında %1, %-4,8, %-8,3, %1,6, %-21, %0,6, %-4,6, %-4,4, %-4,5,  
2019 yılı Ekim ayında %-0,6, %-13,7, %1, %1,3, %5,1, %1,5, %-8,2, %-7,4, %8,8,  
2020 yılı Temmuz ayında %7,1, %15,9, %10,7, %0,6, %-2,7, %2,1, %-5,9, %-0,9, %10,  
2020 yılı Ağustos ayında %6,3, %3,4, %4,7, %5,9, %53,6, %9,7, %-2,6, %31,8, %-2,7,  
2020 yılı Eylül ayında %-2,2, %2,7, %4,8, %3,5, %25,2, %3,3, %-0,8, %13,3, %-5,2,

2021 yılı Temmuz ayında %-1,2, %-6,1, %7,6, %0,2, %-16, %-1,7, %0,8, %-6,3, %-4,7,  
2021 yılı Ağustos ayında %-1,8, %18,5, %0,9, %-1,6, %11,3, %-2,1, %0,7, %-8,6, %2,9,  
2021 yılı Eylül ayında %0,1, %13,5, %-4,9, %0,4, %35,5, %0,5, %-0,9, %-3,8, %5,6,  
2022 yılı Temmuz ayında %-5, %-37,3, %-5,7, %2,5, %-44,9, %-1, %-1,4, %-8,7, %-5,7,  
2022 yılı Ağustos ayında %1,2, %17, %-5,1, %3,5, %57,1, %2,7, %-4, %2,3, %8,  
2022 yılı Eylül ayında %-4,9, %-14, %-8,4, %1,6, %-7,5, %-0,7, %-2,3, %-13,8, %21,9,  
2023 yılı Mayıs ayında %-0,6, %2,7, %-6,9, %2, %2,6, %1,3, %0, %3,9, %-3,7,  
2023 yılı Haziran ayında %-1,5, %-7, %-9,9, %17,2, %0,2, %16,4, %2, %-6,8, %6,5 oranında kazanç sağlamaktadır.

4. döneme ait değerler, bu dokuz yatırım aracından herhangi birinin yatırımcıya sağladığı kazanç ve kayıp oranlarını temsil etmektedir.

2019 yılı Kasım ayında %-1,5, %10,5, %0,1, %-0,9, %1,1, %-0,7, %-5,7, %6,3, %-6,3,  
2019 yılı Aralık ayında %0,4, %-17,6, %2,2, %1,9, %-16,7, %2,2, %-16,4, %-6, %8,8,  
2020 yılı Ekim ayında %-0,9, %-7,5, %-7,5, %4,9, %-17,1, %4,7, %15,7, %-15,8, %6,3,  
2020 yılı Kasım ayında %-1,3, %70,7, %-11,4, %1,6, %7,5, %2, %5,5, %1,5, %-2,6,  
2020 yılı Aralık ayında %-0,7, %7,1, %27,9, %-3,5, %59,6, %-0,8, %27,8, %-4,3, %16,3,  
2021 yılı Ekim ayında %-0,1, %-7,0, %9,5, %7,4, %-12,5, %5,7, %-1,2, %-2,1, %-5,2,  
2021 yılı Kasım ayında %3, %39,9, %6,6, %15,1, %42,9, %13,3, %-2,6, %7, %8,8,  
2021 yılı Aralık ayında %-2,1, %-7,2, %-16,5, %28,6, %8, %27,3, %0,2, %-4,7, %19,8,  
2022 yılı Ekim ayında %-1,3, %-3,1, %-9,3, %1,6, %-14,5, %0,7, %-0,9, %20, %0,9,  
2022 yılı Kasım ayında %4,2, %5,5, %7,3, %0,1, %18,4, %3,7, %-1,6, %-8,9, %24,8,  
2022 yılı Aralık ayında %3,8, %-16,3, %-6,4, %0,3, %-17,7, %4,1, %-0,4, %18, %26,6,  
2023 yılı Temmuz ayında %-0,3, %12, %4, %14,6, %3,2, %17,1, %18, %-3,7, %19,  
2023 yılı Ağustos ayında %-1,6, %-4,1, %13, %2, %-4, %0,8, %10,3, %8,4, %22,9 oranında kazanç sağlamaktadır.

Tablo 5: Çözüm Fonksiyonuna Ait Kısıtlar

Dönem	Altın	Bitcoin	Brent Petrol	Dolar	Euro	Ethereum	Faiz	Gümüş	Hisse Senedi
X	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9
2019 Mayıs 1. Dönem	0,9973	1,2971	1,0614	1,0547	1,1416	1,0496	0,9682	0,9868	1,0194
2019 Haziran 1. Dönem	1,0808	1,6081	0,8593	0,9607	1,6556	0,9689	0,9780	1,1219	0,9437
2019 Temmuz 2. Dönem	1,0204	1,2646	1,0553	0,9760	1,0907	0,9714	0,9853	0,9116	1,0922
2019 Ağustos 2. Dönem	1,0534	0,9317	0,9852	0,9916	0,7434	0,9822	0,9851	1,2573	1,0272
2019 Eylül 3. Dönem	1,0101	0,9517	0,9175	1,0156	0,7900	1,0060	0,9540	0,9564	0,9546
2019 Ekim 3. Dönem	0,9939	0,8635	1,0099	1,0126	1,0509	1,0147	0,9180	0,9256	1,0882
2019 Kasım 4. Dönem	0,9849	1,1048	1,0012	0,9908	1,0112	0,9928	0,9426	1,0628	0,9374
2019 Aralık 4. Dönem	1,0043	0,8245	1,0215	1,0186	0,8330	1,0222	0,8358	0,9398	1,0877
2020 Ocak 1. Dönem	1,0558	0,9536	1,0935	1,0138	0,8505	1,0145	0,9100	1,0517	1,0704
2020 Şubat 1. Dönem	1,0257	1,2992	0,8457	1,0213	1,3922	1,0029	0,9600	1,0128	1,0395
2020 Mart 1. Dönem	1,0123	0,9138	0,8716	1,0447	1,2092	1,0599	0,9104	0,9098	0,9074
2020 Nisan 2. Dönem	1,0360	0,7505	0,5309	1,0799	0,6109	1,0612	0,9309	0,8591	0,8146
2020 Mayıs 2. Dönem	1,0263	1,3456	1,0369	1,0195	1,5520	1,0192	0,9416	1,0635	1,1356
2020 Haziran 2. Dönem	1,0004	1,0957	1,3937	0,9794	1,1240	1,0136	0,9379	1,2431	1,0621
2020 Temmuz 3. Dönem	1,0710	1,1594	1,1070	1,0062	0,9733	1,0207	0,9412	0,9915	1,1004
2020 Ağustos 3. Dönem	1,0634	1,0339	1,0469	1,0585	1,5357	1,0965	0,9743	1,3175	0,9733
2020 Eylül 3. Dönem	0,9779	1,0274	1,0476	1,0352	1,2523	1,0332	0,9920	1,1330	0,9485
2020 Ekim 4. Dönem	0,9908	0,9255	0,9248	1,0488	0,8286	1,0466	1,1570	0,8421	1,0632
2020 Kasım 4. Dönem	0,9871	1,7069	0,8862	1,0164	1,0747	1,0198	1,0549	1,0152	0,9736
2020 Aralık 4. Dönem	0,9926	1,0708	1,2788	0,9647	1,5964	0,9923	1,2781	0,9570	1,1630
2021 Ocak 1. Dönem	1,0039	1,4698	1,0776	0,9576	1,1931	0,9599	1,0814	1,1988	1,1382
2021 Şubat 1. Dönem	0,9545	1,1435	1,0662	0,9565	1,7839	0,9498	1,0575	1,0294	1,0018
2021 Mart 1. Dönem	0,9608	1,3641	1,1810	1,0786	1,0809	1,0625	1,1061	1,0011	1,0047
2021 Nisan 2. Dönem	1,0240	1,3012	0,9733	1,0691	1,3523	1,0707	1,0287	0,9775	0,9380



2021 Mayıs 2. Dönem	1,0594	0,9822	1,0567	1,0230	1,4448	1,0408	1,0313	0,9485	1,0006
2021 Haziran 2. Dönem	0,9840	0,6461	1,0403	1,0305	0,9768	1,0237	1,0160	1,0775	1,0174
2021 Temmuz 3. Dönem	0,9878	0,9393	1,0764	1,0019	0,8399	0,9827	1,0081	0,9373	0,9535
2021 Ağustos 3. Dönem	0,9823	1,1850	1,0094	0,9841	1,1127	0,9790	1,0065	0,9143	1,0293
2021 Eylül 3. Dönem	1,0010	1,1354	0,9508	1,0043	1,3551	1,0050	0,9909	0,9625	1,0555
2021 Ekim 4. Dönem	0,9986	0,9299	1,0950	1,0738	0,8747	1,0571	0,9876	0,9788	0,9480
2021 Kasım 4. Dönem	1,0300	1,3990	1,0655	1,1513	1,4292	1,1330	0,9743	1,0699	1,0882
2021 Aralık 4. Dönem	0,9793	0,9279	0,8346	1,2856	1,0796	1,2729	1,0017	0,9529	1,1976
2022 Ocak 1. Dönem	1,0104	0,8124	1,1191	0,9993	0,7945	1,0016	1,0997	1,0312	1,0264
2022 Şubat 1. Dönem	1,0230	0,8325	1,1474	1,0075	0,7306	1,0084	0,9429	0,9571	1,0763
2022 Mart 1. Dönem	1,0539	1,1225	1,0983	1,0693	1,0877	1,0395	0,9914	1,1785	0,9777
2022 Nisan 2. Dönem	0,9951	1,0542	1,0693	1,0081	1,1231	0,9924	0,9973	0,9772	1,1369
2022 Mayıs 2. Dönem	0,9491	0,8268	1,0100	1,0640	0,8309	1,0374	0,9995	0,8321	1,0992
2022 Haziran 2. Dönem	0,9957	0,8446	1,0920	1,0858	0,7120	1,0866	0,9967	1,0394	1,0380
2022 Temmuz 3. Dönem	0,9500	0,6268	0,9432	1,0249	0,5506	0,9896	0,9863	0,9135	0,9430
2022 Ağustos 3. Dönem	1,0123	1,1695	0,9491	1,0349	1,5714	1,0270	0,9600	1,0229	1,0796
2022 Eylül 3. Dönem	0,9515	0,8604	0,9159	1,0159	0,9254	0,9932	0,9774	0,8619	1,2185
2022 Ekim 4. Dönem	0,9869	0,9687	0,9072	1,0155	0,8547	1,0067	0,9911	1,1995	1,0086
2022 Kasım 4. Dönem	1,0418	1,0553	1,0732	1,0014	1,1838	1,0368	0,9839	0,9111	1,2477
2022 Aralık 4. Dönem	1,0376	0,8374	0,9364	1,0025	0,8229	1,0414	0,9957	1,1802	1,2655
2023 Ocak 1. Dönem	1,0604	0,9635	0,9906	1,0065	0,9237	1,0249	0,9597	1,0684	1,1035
2023 Şubat 1. Dönem	0,9701	1,3983	0,9953	1,0035	1,3258	0,9999	0,9084	0,9767	0,8977
2023 Mart 2. Dönem	1,0448	1,0003	0,9707	1,0078	1,0123	1,0047	0,9713	0,8915	1,0520
2023 Nisan 2. Dönem	1,0346	1,2310	1,0355	1,0176	1,1352	1,0424	0,9748	1,1400	0,9140
2023 Mayıs 3. Dönem	0,9939	1,0273	0,9315	1,0198	1,0260	1,0131	1,0000	1,0387	0,9630
2023 Haziran 3. Dönem	0,9855	0,9304	0,9006	1,1717	1,0024	1,1642	1,0200	0,9325	1,0649
2023 Temmuz 4. Dönem	0,9970	1,1197	1,0395	1,1456	1,0321	1,1708	1,1798	0,9632	1,1904
2023 Ağustos 4. Dönem	0,9842	0,9593	1,1304	1,0200	0,9599	1,0077	1,1033	1,0842	1,2288

Dönemsel hesaplanan getiri oranlarına (+1) eklenerek ulaşılan çözüm fonksiyonuna ait veriler Tablo 5'te yer almaktadır.

### 3.5. Doğrusal Programlama ile Çözüm

Doğrusal Programlama (DP) tekniği, Yöneylem Araştırması grubu arasında en yaygın kullanılan matematiksel programlama tekniklerinden biridir (Cohen vd., 2022: 3). Bu çalışmada da doğrusal programlama ile analiz

gerçekleştirilmiştir. Doğrusal programlama ile analiz aşamasında ilk olarak  $v$  değeri pozitif olarak işleme dahil

edilir. Şayet oyun matrisinde negatif  $a_{ij}$  değerleri var ise, tüm değerlere sabit bir sayı eklenir. Bu şekilde de tüm negatif değerler pozitif değerlere dönüştürülür. Sonuç aşamasına gelince ise eklenen sayı oyunun içerinden

çıkartılarak, gerçek  $v$  değerine ulaşılmış olur. Öncelikle doğrusal programlamada en kötü seçenekler belirlenir. Sonrasında bu seçenekler içerisinden en iyi seçenekler bulunarak tercih edilir (Yavuz ve Eren, 2016: 133). Çalışmanın çözüm aşamaları aşağıdaki bölümde yer almaktadır.

Burada yatırımcının amacı beklenen kazancı oyun değerine ( $v$ ) eşit veya oyun değerinden büyük yapmaktır. 1. döneme ilişkin beklenen gelir eşitsizlikleri, aşağıdaki bölümde yer almaktadır.

**2019 Mayıs 1. Dönem;**

$$0,9973Y1 + 1,2971Y2 + 1,0614Y3 + 1,0547Y4 + 1,1416Y5 + 1,0496Y6 + 0,9682Y7 + 0,9868Y8 + 1,0194Y9 \geq v$$

2019 Haziran 1. Dönem;

$$1,0808Y_1 + 1,6081Y_2 + 0,8593Y_3 + 0,9607Y_4 + 1,6556Y_5 + 0,9689Y_6 + 0,9780Y_7 + 1,1219Y_8 + 0,9437Y_9 \geq v$$

2020 Ocak 1. Dönem;

$$1,0558Y_1 + 0,9536Y_2 + 1,0935Y_3 + 1,0138Y_4 + 0,8505Y_5 + 1,0145Y_6 + 0,9100Y_7 + 1,0517Y_8 + 1,0704Y_9 \geq v$$

2020 Şubat 1. Dönem;

$$1,0257Y_1 + 1,2992Y_2 + 0,8457Y_3 + 1,0213Y_4 + 1,3922Y_5 + 1,0029Y_6 + 0,9600Y_7 + 1,0128Y_8 + 1,0395Y_9 \geq v$$

2020 Mart 1. Dönem;

$$1,0123Y_1 + 0,9138Y_2 + 0,8716Y_3 + 1,0447Y_4 + 1,2092Y_5 + 1,0599Y_6 + 0,9104Y_7 + 0,9098Y_8 + 0,9074Y_9 \geq v$$

2021 Ocak 1. Dönem;

$$1,0039Y_1 + 1,4698Y_2 + 1,0776Y_3 + 0,9576Y_4 + 1,1931Y_5 + 0,9599Y_6 + 1,0814Y_7 + 1,1988Y_8 + 1,1382Y_9 \geq v$$

2021 Şubat 1. Dönem;

$$0,9545Y_1 + 1,1435Y_2 + 1,0662Y_3 + 0,9565Y_4 + 1,7839Y_5 + 0,9498Y_6 + 1,0575Y_7 + 1,0294Y_8 + 1,0018Y_9 \geq v$$

2021 Mart 1. Dönem;

$$0,9608Y_1 + 1,3641Y_2 + 1,1810Y_3 + 1,0786Y_4 + 1,0809Y_5 + 1,0625Y_6 + 1,1061Y_7 + 1,0011Y_8 + 1,0047Y_9 \geq v$$

2022 Ocak 1. Dönem;

$$1,0104Y_1 + 0,8124Y_2 + 1,1191Y_3 + 0,9993Y_4 + 0,7945Y_5 + 1,0016Y_6 + 1,0997Y_7 + 1,0312Y_8 + 1,0264Y_9 \geq v$$

2022 Şubat 1. Dönem;

$$1,0230Y_1 + 0,8325Y_2 + 1,1474Y_3 + 1,0075Y_4 + 0,7306Y_5 + 1,0084Y_6 + 0,9429Y_7 + 0,9571Y_8 + 1,0763Y_9 \geq v$$

2022 Mart 1. Dönem;

$$1,0539Y_1 + 1,1225Y_2 + 1,0983Y_3 + 1,0693Y_4 + 1,0877Y_5 + 1,0395Y_6 + 0,9914Y_7 + 1,1785Y_8 + 0,9777Y_9 \geq v$$

2023 Ocak 1. Dönem;

$$1,0604Y_1 + 0,9635Y_2 + 0,9906Y_3 + 1,0065Y_4 + 0,9237Y_5 + 1,0249Y_6 + 0,9597Y_7 + 1,0684Y_8 + 1,1035Y_9 \geq v$$

2023 Şubat 1. Dönem;

$$0,9701Y_1 + 1,3983Y_2 + 0,9953Y_3 + 1,0035Y_4 + 1,3258Y_5 + 0,9999Y_6 + 0,9084Y_7 + 0,9767Y_8 + 0,8977Y_9 \geq v$$

Olasılıklar toplamı ise, şu şekilde gerçekleşecektir.

$$Z_{min} = x_1 + x_2 + x_3 + x_4 + x_5 + x_6 + x_7 + x_8 + x_9$$

Bütün eşitsizliklerin her iki bölümü de  $v'$  ye bölünerek  $Y'_i = Y_i/v$  dönüşümü yapılmıştır. Ulaşılan sonuçlara ilişkin denklemler aşağıda yer almaktadır.

#### 1. Dönem Kısıtları

$$0,9973Y'_1 + 1,2971Y'_2 + 1,0614Y'_3 + 1,0547Y'_4 + 1,1416Y'_5 + 1,0496Y'_6 + 0,9682Y'_7 + 0,9868Y'_8 + 1,0194Y'_9 \geq 1 \text{ (2019)}$$

$$1,0808Y'_1 + 1,6081Y'_2 + 0,8593Y'_3 + 0,9607Y'_4 + 1,6556Y'_5 + 0,9689Y'_6 + 0,9780Y'_7 + 1,1219Y'_8 + 0,9437Y'_9 \geq 1 \text{ (2019)}$$

$$1,0558Y'_1 + 0,9536Y'_2 + 1,0935Y'_3 + 1,0138Y'_4 + 0,8505Y'_5 + 1,0145Y'_6 + 0,9100Y'_7 + 1,0517Y'_8 + 1,0704Y'_9 \geq 1 \text{ (2020)}$$

$$1,0257Y'_1 + 1,2992Y'_2 + 0,8457Y'_3 + 1,0213Y'_4 + 1,3922Y'_5 + 1,0029Y'_6 + 0,9600Y'_7 + 1,0128Y'_8 + 1,0395Y'_9 \geq 1 \text{ (2020)}$$

$$1,0123Y'_1 + 0,9138Y'_2 + 0,8716Y'_3 + 1,0447Y'_4 + 1,2092Y'_5 + 1,0599Y'_6 + 0,9104Y'_7 + 0,9098Y'_8 + 0,9074Y'_9 \geq 1 \text{ (2020)}$$

$$1,0039Y'_1 + 1,4698Y'_2 + 1,0776Y'_3 + 0,9576Y'_4 + 1,1931Y'_5 + 0,9599Y'_6 + 1,0814Y'_7 + 1,1988Y'_8 + 1,1382Y'_9 \geq 1 \text{ (2021)}$$

$$0,9545Y'_1 + 1,1435Y'_2 + 1,0662Y'_3 + 0,9565Y'_4 + 1,7839Y'_5 + 0,9498Y'_6 + 1,0575Y'_7 + 1,0294Y'_8 + 1,0018Y'_9 \geq 1 \text{ (2021)}$$

$$0,9608Y'_1 + 1,3641Y'_2 + 1,1810Y'_3 + 1,0786Y'_4 + 1,0809Y'_5 + 1,0625Y'_6 + 1,1061Y'_7 + 1,0011Y'_8 + 1,0047Y'_9 \geq 1 \text{ (2021)}$$

$$1,0104Y'_1 + 0,8124Y'_2 + 1,1191Y'_3 + 0,9993Y'_4 + 0,7945Y'_5 + 1,0016Y'_6 + 1,0997Y'_7 + 1,0312Y'_8 + 1,0264Y'_9 \geq 1 \text{ (2022)}$$

$$1,0230Y'_1 + 0,8325Y'_2 + 1,1474Y'_3 + 1,0075Y'_4 + 0,7306Y'_5 + 1,0084Y'_6 + 0,9429Y'_7 + 0,9571Y'_8 + 1,0763Y'_9 \geq 1 \text{ (2022)}$$

$$1,0539Y'_1 + 1,1225Y'_2 + 1,0983Y'_3 + 1,0693Y'_4 + 1,0877Y'_5 + 1,0395Y'_6 + 0,9914Y'_7 + 1,1785Y'_8 + 0,9777Y'_9 \geq 1 \text{ (2022)}$$

$$1,0604Y'_1 + 0,9635Y'_2 + 0,9906Y'_3 + 1,0065Y'_4 + 0,9237Y'_5 + 1,0249Y'_6 + 0,9597Y'_7 + 1,0684Y'_8 + 1,1035Y'_9 \geq 1 \text{ (2023)}$$

$$0,9701Y'_1 + 1,3983Y'_2 + 0,9953Y'_3 + 1,0035Y'_4 + 1,3258Y'_5 + 0,9999Y'_6 + 0,9084Y'_7 + 0,9767Y'_8 + 0,8977Y'_9 \geq 1 \text{ (2023)}$$

#### Amaç Fonksiyonu

$$Y'_1 + Y'_2 + Y'_3 + Y'_4 + Y'_5 + Y'_6 + Y'_7 + Y'_8 + Y'_9 = 1/v$$

Oyun değerinin ( $v$ ) yatırımcı tarafından değerinin arttırılmaya çalışılması  $1/v$ 'ye en küçük değer vermesi ile aynı anlamdadır. Bu durumla bağıntılı olarak amaç denklemi şu şekilde ifade edilmektedir.

$$Z_{min} = \left(\frac{1}{v}\right) = Y'_1 + Y'_2 + Y'_3 + Y'_4 + Y'_5 + Y'_6 + Y'_7 + Y'_8 + Y'_9$$

Elde edilen doğrusal programlama modeli 1. dönem için çözülerek, optimal çözüm elde edilmiştir. Çözüme ilişkin optimal çözüm modeli Tablo 6'da yerini almaktadır.

Tablo 6: 1. Dönem için Oyunun Değeri ve Karma Strateji Vektörü

Yatırım Araçları	$Y'_i$	$Y_i$
Altın	0,3549	0,3502
Bitcoin	0,0000	0,0000
Brent Petrol	0,1911	0,1886
Dolar	0,0000	0,0000
Euro	0,0872	0,0861
Ethereum	0,3125	0,3084
Faiz	0,0412	0,0407
Gümüş	0,0000	0,0000
Hisse Senedi	0,0000	0,0000
$Z = 1/v$	1,0133	
Oyun Değeri ( $v$ )	0,9869	

$$Y_i = [0,35, 0,00, 0,19, 0,00, 0,09, 0,31, 0,04, 0,00, 0,00], v = 0,9869$$

Kazanç matrisinin çözümlenmesinin ardından ulaşılan sonuçlar incelendiğinde karma bir strateji elde edilmiştir. 2019/5-2023/8 dönem aralığına ait 1. dönem verileri incelenmiş ve portföyün %35'inin Altın, %19'unun Brent Petrol, %9'unun Euro, %31'inin Ethereum, %4'ünün ise Faiz'den oluştuğu sonucuna varılmıştır. Yatırımcıların portföy oluştururken bu oranlar doğrultusunda finansal araçları tercih etmelerinin en uygun çözüm olacağı sonucuna varılmıştır.

Analizde kullanılan doğrusal programlama modeli, 2. dönem için de çözülerek optimal çözüme ilişkin bilgiler Tablo 7'de verilmiştir.

Tablo 7: 2. Dönem için Oyunun Değeri ve Karma Strateji Vektörü

Yatırım Araçları	$Y'_i$	$Y_i$
Altın	0,3848	0,3806
Bitcoin	0,0000	0,0000
Brent Petrol	0,0279	0,0276
Dolar	0,4407	0,4359
Euro	0,0000	0,0000
Ethereum	0,0000	0,0000
Faiz	0,0000	0,0000
Gümüş	0,0023	0,0023
Hisse Senedi	0,1334	0,1319
$Z = 1/v$	1,0111	
Oyun Değeri ( $v$ )	0,9891	

$$Y_i = [0,38, 0,00, 0,03, 0,44, 0,00, 0,00, 0,00, 0,00, 0,13], v = 0,9891$$

Kazanç matrisinin çözümlenmesinin ardından ulaşılan sonuçlar incelendiğinde karma bir strateji elde edilmiştir. 2019/5-2023/8 dönem aralığına ait 2. dönem verileri incelenmiş ve portföyün %38'inin Altın, %3'ünün Brent Petrol, %44'ünün Dolar, %0,23'ünün Gümüş, %13'ünün ise Hisse Senedi'nden oluştuğu sonucuna varılmıştır. Yatırımcıların portföy oluştururken bu oranlar doğrultusunda finansal araçları tercih etmelerinin en uygun çözüm olacağı sonucuna varılmıştır.

Analizde kullanılan doğrusal programlama modeli, 3. dönem için de çözümlenerek optimal çözüme ilişkin bilgiler Tablo 8’de verilmiştir.

Tablo 8: 3. Dönem için Oyunun Değeri ve Karma Strateji Vektörü

Yatırım Araçları	$Y_i'$	$Y_i$
Altın	0,0000	0,0000
Bitcoin	0,0347	0,0348
Brent Petrol	0,0127	0,0127
Dolar	0,7260	0,7274
Euro	0,0000	0,0000
Ethereum	0,0000	0,0000
Faiz	0,1560	0,1563
Gümüş	0,0000	0,0000
Hisse Senedi	0,0725	0,0726
$Z = 1/v$	0,9981	
Oyun Değeri ( $v$ )	1,0019	

$$Y_i = [0,00, 0,03, 0,01, 0,73, 0,00, 0,00, 0,16, 0,00, 0,07], \quad v = 1,0019$$

Kazanç matrisinin çözümlenmesinin ardından ulaşılan sonuçlar incelendiğinde karma bir strateji elde edilmiştir. 2019/5-2023/8 dönem aralığına ait 3. dönem verileri incelenmiş ve portföyün %3’ünün Bitcoin, %1’inin Brent Petrol, %73’ünün Dolar, 16’sının Faiz, %7’sinin ise Hisse Senedi’nden oluştuğu sonucuna varılmıştır. Yatırımcıların portföy oluştururken bu oranlar doğrultusunda finansal araçları tercih etmelerinin en uygun çözüm olacağı sonucuna varılmıştır.

Analizde kullanılan doğrusal programlama modeli, 4. dönem için de çözümlenerek optimal çözüme ilişkin bilgiler Tablo 9’da verilmiştir.

Tablo 9: 4. Dönem için Oyunun Değeri ve Karma Strateji Vektörü

Yatırım Araçları	$Y_i'$	$Y_i$
Altın	0,0000	0,0000
Bitcoin	0,0187	0,0186
Brent Petrol	0,0609	0,0605
Dolar	0,0000	0,0000
Euro	0,0000	0,0000
Ethereum	0,7644	0,7598
Faiz	0,0000	0,0000
Gümüş	0,1500	0,1491
Hisse Senedi	0,0000	0,0000
$Z = 1/v$	1,0060	
Oyun Değeri ( $v$ )	0,9940	

$$Y_i = [0,00, 0,02, 0,06, 0,00, 0,00, 0,76, 0,00, 0,15, 0,00], \quad v = 0,9940$$

Kazanç matrisinin çözümlenmesinin ardından ulaşılan sonuçlar incelendiğinde karma bir strateji elde edilmiştir. 2019/5-2023/8 dönem aralığına ait 4. dönem verileri incelenmiş ve portföyün %2’sinin Bitcoin, %6’sının Brent Petrol, %76’sının Ethereum, %15’inin ise Gümüş’ten oluştuğu sonucuna varılmıştır. Yatırımcıların portföy oluştururken bu oranlar doğrultusunda finansal araçları tercih etmelerinin en uygun çözüm olacağı sonucuna varılmıştır.

### 3.6. Optimal Strateji Seçimi

Kazanç matrisinin çözümleri sonucunda elde edilen portföyler 2019 Mayıs-2023 Ağustos dönem aralığına ait her 1 aylık dönem aralığı için uygulanmıştır. Her bir dönem için hesaplanan olası getiri değerleri Tablo 10’da yer almaktadır.

Tablo 10: Portföy Çözümleri

Dönem	Altın	Bitcoin	Brent Petrol	Dolar	Euro	Ethereum	Faiz	Gümüş	Hisse Senedi
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1.Dönem	%35,02	%0,00	%18,86	%0,00	%08,61	%30,84	%04,07	%0,00	%0,00
2.Dönem	%38,06	%0,00	%02,76	%43,59	%0,00	%0,00	%0,00	%00,23	%13,19
3.Dönem	%0,00	%03,48	%01,27	%72,74	%0,00	%0,00	%15,63	%0,00	%07,26
4.Dönem	%0,00	%01,86	%06,05	%0,00	%0,00	%75,98	%0,00	%14,91	%0,00

#### 4. SONUÇ

Bu çalışmada oyun teorisi yaklaşımı ile 9 farklı finansal yatırım aracının 2019/5-2023/8 dönem aralığına ait aylık getirileri ile optimal portföy oluşturmak hedeflenmiştir. Dönem aralığı dikkate alınarak 52 aylık süreç 4 periyota bölünerek her periyot içerisinde 13 ay incelenmiştir. Oyun teorisi yaklaşımı ile hazırlanan matrisler doğrusal programlama ile çözümlenmiştir. Çalışmanın dönem aralıklarında 2023 yılının tüm verilerine ulaşamaması çalışmanın 1. kısıtını oluşturmakla birlikte oyun teorisi yaklaşımlarından tek birinin çalışmaya dahil edilmesi de çalışmanın diğer kısıtını oluşturmaktadır. Doğrusal programlama sonucu elde edilen bulgular incelendiğinde ise Altın 1. dönem ve 2. dönemde birbirine yakın oranda getiri sağlarken, 3. dönem ve 4. dönem oluşturulan portföyde herhangi bir yüzdelerik dilim elde edememiştir. Bitcoin, altına oranla getirilerinin düşük olmasıyla birlikte 1. ve 2. dönem belli bir yüzdelerik dilime giremeyerek oluşturulan portföylerde yer almamıştır. 3. ve 4. dönem ise sırasıyla %03,48, %01,86 olarak portföylerde düşük bir oranla yer almıştır. Brent Petrol'un 4 dönem içerisinde oluşturulan portföylerin hepsinin içerisinde de yer aldığı görülmektedir. Yine aynı şekilde 1. dönem haricinde diğer dönemler içerisinde oluşturulan portföylerde de Dolar'ın yer aldığı görülmektedir. Euro 1. dönem %08,61 oranında getiri sağlarken, diğer tüm dönemler içerisinde portföyde yer edinememiştir. Ethereum'un yüzdelerik dilimlerinin diğer finansal yatırım araçlarına oranla yüksek olduğu görülmektedir. 2. ve 3. dönemde herhangi bir getirisinin olmamasının aksine 1. dönem %30,84 oranında 4. dönemde ise portföyün %75,98'lik bölümünü oluşturmuştur. Kripto para piyasası incelendiğinde Ethereum'un portföyde ağırlıklı olarak yer aldığı dönem kripto paralarda boğa piyasasının yaşandığı döneme denk gelmektedir. Bu dönemde Ethereum fiyatının 1000\$ ile boğa dönemine girdiği ve dönem içerisinde 4651\$ fiyata ulaştığı görülmektedir. Faiz ise 2. ve 4. dönemde oluşturulan portföyler içerisinde yer almamakla birlikte 1. dönem %04,07, 3. dönem ise %15,63 oranında portföye dahil olmuştur. Gümüş ise 1. ve 3. dönem portföylerde bulunamamakla, 2. dönemde de çok düşük bir oranda dahil olmuştur. 4. dönemde oluşturulan portföyde ise %14,91 oranında portföyde yer almıştır. Son olarak hisse senedine bakıldığında, 1. ve 4. dönem portföylerde bulunmuyorken 2. dönem %13,19, 3. dönem %07,26 gibi düşük oranlarla portföye katılmıştır.

Genel sonuç olarak en yüksek yüzdelerik dilimin 4. dönemde oluşturulan portföyde %75,98 oranıyla Ethereum ve 3. dönemde oluşturulan portföyde de %72,74 oranı ile Dolar'ın sahip olduğu görülmektedir. Yavuz ve Tamer'in 2016 yılında gerçekleştirdiği çalışmada ise yine oyun teorisi yaklaşımı 2009-2014 yılları 3 aylık dönemler şeklinde baz alınarak Altın, Euro, Dolar ve İMKB100 finansal yatırım araçları ile portföy oluşturulmuştur. Elde edilen portföy sonuçlarında ise büyük oran farklarıyla ön planda İMKB100 finansal yatırım aracının geldiği görülmektedir. Bu çalışmada ise diğer çalışmadan farklı olarak 2019/5-2023/8 dönem aralığına ait süreç aylık olarak incelenmiş olup 9 farklı finansal yatırım aracı kullanılmıştır. Bu çalışma kesin sonuçlar vermemekle birlikte hem portföy oluşturulurken hem de diğer çalışmaların geliştirilmesine katkıda bulunacağı düşünülmektedir. Aynı zamanda çalışmaların Oyun Teorisi yaklaşımı ile ele alınması, karmaşık ve uygulanması mümkün olmayan problemlerin anlaşılmasını sağlayarak problemleri kompleks durumdan basit duruma indirgeyerek daha kolay çözülmesini sağlamaktadır.

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## Algılanan Tüketici Kullanışlılık, Kolaylık ve Etkileşiminin Dijital İçerik Sunum Hizmetleri Sunan Uygulamaları (SPOTIFY) Kullanma Niyetine Etkisinin İncelenmesi

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**Özet:** Günümüzde teknolojik bilgi, araç ve olanakların işletmeler açısından önemi her geçen gün artmaktadır. Bu teknolojik bilgi, araç ve olanakların işletmeler tarafından kullanılmasıyla hem işletme verimliliğini artırmada hem de rekabet üstünlüğü kazanma noktasında tüketicilere daha iyi hizmet verilebilmesinde çok önemli bir payı bulunmaktadır. Tüketiciler satın alma sürecinde birçok unsurdan etkilenen bir süreçten geçmektedir. Gelişen ve değişen teknolojiyle biçim değiştiren satın alma sürecinin anlaşılması ve yeni teknolojilerin takip edilerek işletmenin süreçlerinde uygulanması için işletme yöneticileri yoğun bir çaba harcamaktadır. Günümüzde internet kullanımının yaygınlaşmasıyla birlikte teknolojinin gelişmesi tüketici istek ve ihtiyaçlarını da ciddi bir biçimde değişikliğe uğratmıştır. Bu değişikliklerle çevrimiçi ticaret hacminin yükselmesi, işletmelerin çevrimiçi satış kanallarında kendilerini yoğun bir rekabet içerisinde bulmasına ve kendilerini de bu alanda geliştirmeye yöneltmiştir. Çalışmada algılanan tüketici kullanışlılık, kolaylık ve etkileşiminin dijital içerik hizmeti sunan işletmeler üzerinde kullanma niyetine etkisinin incelenmesi yapılmıştır.

**Anahtar Kelimeler:** Algılanan Tüketici Kullanışlılık, Kolaylık, Etkileşim, Dijital İçerik Sunan Uygulamalar.

### Investigation of the Effect of Perceived Consumer Convenience, Convenience and Interaction on Intention to Use Applications Providing Digital Content Presentation Services (SPOTIFY)

**Abstract:** Nowadays, the importance of technological knowledge, tools and facilities for enterprises is increasing every day. With the use of this technological knowledge, tools and facilities by enterprises, it has a very important role in both increasing operational efficiency and providing better service to consumers at the point of gaining a competitive advantage. Consumers are going through a process that is affected by many elements in the purchasing process. Business managers make intensive efforts to understand the purchasing process, which changes shape with developing and changing technology, and to follow new technologies and implement them in the processes of the enterprise. Today, with the widespread use of the Internet, the development of technology has also changed consumer desires and needs in a serious way. With these changes, the increase in the volume of online commerce has led businesses to find themselves in intense competition in online sales channels and to develop themselves in this area. In the study, the effect of perceived consumer convenience, convenience and interaction on the intention to use digital content services on enterprises was examined.

**Keywords:** Perceived Consumer Usefulness, Convenience, Interaction, Applications that Offer Digital Content.

#### 1. GİRİŞ

Mobil endüstride en hızlı büyüyen segmentlerden biri mobil uygulama pazarlarıdır. Mobil uygulamalar, dünya genelinde insanların yaşam tarzını dahi etkileyen bir teknolojidir. Mobil uygulamaları, tablet bilgisayar ile akıllı telefonlar vb. mobil vasıtalarla çalışacak bir biçimde dizayn edilmiş yazılım uygulamalarıdır. Bilgi teknolojileri, medya, internet ve ileri teknolojilerin yakınsaması nedeni ile mobil uygulamalar meydana gelmiştir. Ayrıca mobil iletişim, uzun sürelerdir mobil cihaz imalatçıları, mobil hizmet sağlayıcıları, uygulama geliştiricileri ve bilgi teknolojileriyle bilgi sistemleri alanındaki pek çok araştırmacı tarafından incelenmektedir (Phongtraychack ve Dolgaya, 2018).

Mobil yazılımların gelişimiyle bağlantılı olarak yenilikçi mobil uygulamalar geliştirilmektedir. Mobil uygulamalar, mobil bir araç ile çalışan ve kullanıcı için belli görevleri ifa eden yazılım ve programlar dizisinden oluşmaktadır. Mobil uygulama, küresel bilgi ve iletişim teknolojisinin yeni ve hızlı gelişen bir segmentidir. Mobil uygulamalar indirilebilir, kullanıcı dostu, kolay, ucuz ve ana seviyede telefon dahil çoğu cep telefonunda çalıştırılabilmektedir. Mobil uygulama, mesajlaşma, arama, sohbet, sosyal ağ iletişimi, gezinme, ses, oyun, video gibi bir çalışma alanı nedeni ile çok geniş bir kullanım ortamı bulunmaktadır. Bu noktada fazla sayıda mobil uygulama piyasası, mobil uygulama yayıncı, geliştirici ve sağlayıcısı tarafından servis sunulmaktadır. Teknik

bakımdan incelendiğinde, farklı mobil uygulamalar Symbian, BlackBerry, iPhone, Android, Windows vb. farklı ortamlarda çalışabilmektedir (Islam, 2010).

Çok sayıda araştırmacı teknolojinin benimsenmesi modeli üzerine çalışmıştır. Childers vd., (2001) yaptıkları çalışmada müşterilerin online perakende alışverişi yapar iken hem faydacı hem de hedonik motivasyonların proste etkili olduğu ifade edilmiştir. Araştırma sonucunda faydacı bir motivasyona ilaveten, zevkin etkileşimli alışverişe dair tutumun güçlü bir yordayıcısı olduğu tespit edilmiştir. Bu, Dabholkar ve Bagozzi'nin (2002) Teknoloji Kabul Modeliyle içsel bir motivasyonun, eğlencenin kullanıldığı ve teknoloji tabanlı self-servis kabulü üzerinde önemli bir etkiye sahip olduğu saptanan çalışması ile tutarlı bulunmaktadır. Ama bu çalışmaların hiçbiri tam olarak Teknoloji Kabul Modelini test etmemiştir. Bruner ve Kumar (2005), Teknoloji Kabul Modeli'nin tüm bileşenleriyle bir eğlence değişkenini araştırmaya dahil etmiştir. Çalışma sonucuna göre eğlencenin tutum üzerinde doğrudan bir etkisi olduğu ve bu etkinin, bilişin bir teknoloji ürününün kullanımına dair tutum üzerindeki etkisinin bir buçuk katından fazla olduğu belirlenmiştir. Önceki araştırmaların tersine Kulviwat vd. (2007) çalışmalarında müşterilerin yeni teknolojileri benimsemesini etkileyebilecek birçok duyguya odaklanmışlardır. Bu çalışma Teknoloji Kabul Modeline duyguların tam olarak dâhil edildiği öncül bir araştırma olmaktadır. Müşterilerin benimseme niyetlerini geliştirir iken yaşayabilecekleri çok farklı duygusal tepkileri içeren bir modele duyulan gereksinimden yola çıkan Kulviwat vd. (2007), Tüketici Teknoloji Kabul Modeli'ni geliştirmişlerdir.

Çalışmanın temel amacı, tüketicilerin mobil uygulamalar hizmetlerini kullanma niyetini etkileyen faktörleri belirlemektir. Ayrıca, kullanışlılık, kolaylık ve algılanan etkileşim ile mobil uygulama hizmetlerini kullanmaya yönelik tutum unsurları arasındaki ilişki keşfedilmesidir. Ayrıca, mobil uygulamalar hizmetlerini kullanmaya yönelik tutum ile mobil uygulamalar kullanma niyeti arasındaki ilişkiler saptanması amaçlanmaktadır. Bu ilişkileri en iyi açıklayan model olarak teknoloji kabul modelinden yararlanılmıştır.

## 2. LİTERATÜR İNCELEMESİ

### 2.1. Teknoloji Kabul Modeli (TKM)

Fred Davis tarafından ortaya atılan, Teknoloji Kabul Modeli (TKM); dış uyarıcıların gerçek sistemin özellikleri ve yeteneklerinden oluştuğunu ve kullanıcıların sistemi kullanma motivasyonunu yönettiğini ve bunun da sistemin kullanımını öngördüğünü savunmaktadır. Ayrıca, kullanıcıların fiili kullanım motivasyonunun, algılanan kullanım kolaylığı, algılanan kullanışlılık ve kullanıcıların davranışsal niyetinin aracılık ettiği bir sistemi kullanmaya yönelik tutumlar olarak üç faktör üzerinden düzenlendiğini iddia etmektedir. Algılanan fayda, bir kişinin belirli bir sistemi kullanmanın iş performansını artıracığına inanma derecesi iken algılanan kullanım kolaylığı, bir kişinin belirli bir sistemi kullanmanın çaba gerektirmeyeceğine inanma derecesi olarak açıklanmıştır (Davis vd., 1989).

### 2.2. Algılanan Kullanışlılık

Davis (1989), algılanan kullanışlılığı bir kullanıcının belli bir sistemi kullanarak kendi performansını artıracığına inanma derecesi olarak tanımlamaktadır. Algılanan kullanışlılık, kişilerin teknolojiyi kullanımlarıyla birlikte yaptıkları işlerdeki performanslarının artması açısından sahip oldukları eğilimi ifade etmektedir (Davis, 1989). Algılanan kullanışlılık, bireyin bir teknolojiyi kullanmasıyla belirli görevleri yapar iken ve problemleri çözerken kendisine sağlayacağı performans artışıyla alakalıdır (Keller, 2005).

### 2.3. Algılanan Kolaylık

Algılanan kolaylık, bireylerin bir teknolojiyi kullanmasıyla beraber gerçekleştirilen çabaları değerlendirmesiyle (Öztürk vd., 2016) alakalı bir olgudur. Davranışsal karar alma teorisine göre kişiler, davranışlarındaki çabayı minimuma indirme arzusu ve eğilimi içindedirler (Akour vd., 2006). Bundan dolayı eğer bütün koşulların eşit olması halinde, algılanan kolaylık yüksek olan bir sistemin, bireyler tarafından kabul edilmesinin daha kolay olacağı ifade edilmektedir.

### 2.4. Algılanan Etkileşim

Yeni medyayı klasik medyadan ayırt edilmesini sağlayan en önemli niteliklerinden birisi iletişim sürecinde karşılıklı etkileşime imkân vermesidir. Etkileşim yeni medyanın temel özelliği olarak ifade edilmektedir (McMillan, 2006). Yeni medya, bireyin enformasyonun pasif bir müşterisi yerine aktif bir müşterisi yapma eğilimi içindedir. Bunun sağlanabilmesi içinse yeni medya, bireyin sistemle etkileşim içinde olmaya teşvik ederek kullanıcılar ve enformasyon üreticileri arasında online platformda etkileşimli linkler sağlamaktadır.

Keil vd. (1995) yaptıkları çalışmada bilgi sistemlerinin bireyler açısından kabul edilmesinde AF ve AKK değişkenlerin ne ölçüde etkili olduğunu araştırmışlar ve bilgi sistemi kullanımında AF değişkeninin AKK değişkeninden daha önemli/etkili olduğu sonucuna ulaşmışlardır.



Straub vd. (1997), çalışmalarında TAM'ın farklı ülkeler içerisinde (ABD, Japonya ve İsviçre) geçerliliğini test edebilmek için üç farklı havayolu çalışanlarının üzerinde araştırma yapmışlardır. İsviçre ve ABD ülkelerinde TAM'ın geçerli olduğu, Japonya'daysa bu durumun geçerli olmadığı tespit edilmiştir.

Hu vd. (1999) Hong Kong'da bulunan üçüncü düzey kamu hastanelerinde çalışmakta olan doktorların sağlık servisi bağlamında Teletıp teknolojisini kabul etmelerinde etkili olan faktörleri araştırmışlardır. Yapılan araştırma neticesinde, AF'nin niyet ve tutum değişkenlerinin önemli bir belirleyicisi olduğu sonucuna ulaşılrken AKK'nin tutum ve niyetin belirleyicisi olmadığı saptanmıştır.

Chau ve Lai (2003), yaptıkları çalışmalarında internet bankacılığın kabulünde etkili olan faktörler araştırılmaya çalışılmıştır. Araştırma neticesinde bireylerin internet bankacılığı kabulünde en etkili olan değişkenin AKK olduğu sonucuna ulaşılrken; kişiselleştirme ve erişilebilirlik yapılarına AF ve AKK üzerinde önemli bir etkiye sahip olduğu ve bu durumun da internet bankacılığı kabulüne dair tutumların gelişiminde önemli bir değişken olarak rol aldığı tespit edilmiştir.

Zmijewska vd. (2004) yaptıkları çalışmada AKK, mobilite, kullanılabilirlik, güven, maliyet ve anlamlılık olarak bir takım faktörün her birinin, m-ödeme uygulamalarını benimseme üzerinde etkiye sahip olduğu varsayımını TAM'ı genişleterek test etmişlerdir. Çalışmayla mobil ödeme kabul modelini iyileştirmek ve doğrulamak hedeflenmiştir.

Ustasüleyman ve Eyüboğlu (2010), internet bankacılığı kabulünde etkili olan faktörler TAM'a algılanan web güvenliği ve güven değişkenleri ilave edilerek araştırılmaya çalışılmışlardır. Araştırma neticesinde internet bankacılığına duyulan güven üzerinde algılanan kullanılabilirliğin anlamlı etkisi olduğu; güven ve algılanan web güvenliğinsene internet bankacılığı kullanım niyetini etkilediği ortaya konulmuştur.

Özer vd. (2010), yaptıkları çalışmada muhasebecilerin bilgi teknolojilerini kullanma nedenlerinin TAM'la araştırmışlardır. Analiz sonucunda bilgi teknolojisinin algılanan kullanım kolaylığıyla algılanan faydanın tutum üzerinde, tutumunsa bilgi teknolojilerini kullanmaya dair niyet üzerinde olumlu açıdan etkisi olduğu tespit edilmiştir.

Menzi vd. (2012), çalışmalarında TAM değişkenleri içeriğinde akademisyenlerin mobil teknolojileri eğitimde kullanılmaya dair düşünceleri içerik analiziyle araştırmışlardır. Araştırma neticesinde mobil teknoloji kullanımının kolay olması eğitimde bu araçları kullanmaya dair tutumları olumlu açıdan etkilediği belirlenmiştir.

Ceylan vd. (2013), bireysel banka müşterilerinin internet bankacılığını tercihinde etkili olan faktörler TAM kapsamında araştırmışlardır. Araştırma neticesinde, müşterilerin internet bankacılığına dair algılanan fayda ve kullanım kolaylığının, internet bankacılığı kullanmaya dair tutumları etkilediği bununla birlikte tutumlarına internet bankacılığını kullanmaya dair niyetleri etkilediği saptanmıştır.

Tüfekçi (2014), yaptığı çalışmada üniversite öğrencilerinin karekodları pazarlama iletişiminde kullanılmasına dair görüşleri TAM'la tespit edilmeye çalışılmıştır. Araştırma sonucunda karekodların yapısal özelliklerinin teknolojiyi kullanma niyeti üzerinde olumlu etkisi olduğu belirlenmiştir.

Çabuk vd.(2014), çalışmalarında ilaç pazarında faaliyet gösteren satış gücünün teknoloji kabulüne etki eden unsurlar TAM'a kişisel yenilik değişkeni ilave edilerek incelenmiştir. Analiz sonucunda, TAM'da yer alan değişkenlerin etki yönleri teyit edilmekle beraber kişisel inovasyonun da bu değişkenleri etkilediği tespit edilmiştir.

Özbek vd. (2015) Antalya'yı ziyaret eden Rus turistler arasında hem algılanan kullanım kolaylığının hem de algılanan kullanılabilirliğin online rezervasyon kullanmaya yönelik davranışsal niyet üzerinde önemli bir etkisi olduğunu bulmuştur.

Cho ve Sagynov (2015), müşterilerin internetten alışveriş yapma davranışlarına etki eden unsurları araştırdıkları çalışma sonucunda güven, AF ve AKK unsurlarının müşterilerin internetten alışveriş yapma niyeti üzerinde anlamlı bir etkiye sahip olduğu saptanmıştır.

Ohk vd. (2015), AF, AKK ve TAM'a ilave edilen yeni değişkenlerin (etkileşim ve navigasyon kolaylığı) mobil uygulama memnuniyeti üzerinde olan etkilerini araştırdıkları çalışma sonucunda AF, AKK ve etkileşim algısının müşteri memnuniyetini olumlu açıdan etkilediği ve memnuniyetinsene mobil uygulamayı kullanma niyetini olumlu yönde etkilediği belirlenmiştir.

Kalyoncuoğlu (2018), yaptığı çalışmada online alışverişlerde sanal kart kullanımına etki eden unsurların TAM'la incelemiştir. Araştırma sonucunda TAM'ın alt değişkenlerinin 0,61 seviyesinde online alışverişlerde sanal kart kullanımını açıkladığı saptanmıştır.

Özer vd. (2019), çalışmalarında bireylerin e-ödeme vasıtalarını kabul etme ve kullanma seviyeleri ile alakalı öngörü ve tahminlerde bulunmak ve kullanıcıların bu konudaki niyet ve tutumlarını ortaya çıkarmayı amaçlamışlardır. Yapılan araştırma neticesinde AKK, AF, algılanan risk ve tutum değişkenlerinin e-ödeme vasıtalarını fiili olarak kullanma değişkeni üzerinde etkili olmadığı fakat davranışsal niyetin fiili kullanım üzerinde etkili olduğu gözlemlenmiştir.

Malaquias ve Hwang (2019) yaptıkları çalışmada ABD ve Brezilya örneğinde mobil bankacılık kullanımına etki eden unsurları belirlemeye çalışmışlardır. Araştırma sonucunda algılanan kullanım kolaylığı ve güven parametrelerinin her iki ülke örneğinde mobil bankacılığın algılanan faydasına etki ettiği tespit edilmiştir.

Liv d. (2019) Genişletilmiş TAM ile Çin örneğinde kullanıcının Alipay'ı (ödeme sistemi) benimsemesine etkili olan unsurların araştırıldığı çalışmada, algılanan kullanılabilirliğin ve algılanan kullanım kolaylığının kullanıcıların Alipay'ı kullanmaya dair niyet ve tutumlarında olumlu etkisinin olduğu ama risk algısının, algılanan kullanım kolaylığı ve algılanan kullanılabilirlik üzerinde olumsuz etkisinin olduğu saptanmıştır.

Sonuçlar, algılanan kullanılabilirlik ve algılanan kullanım kolaylığının mobil uygulamalardaki davranışsal niyeti önemli ölçüde etkilediğini göstermektedir.

### 3.ARAŞTIRMA MODELİ GELİŞTİRME

#### 3.1.Model Özellikleri

Wu vd. (2015), Arvidsson (2014), Hsieh (2015), Tung vd. (2014) ve Li vd. (2015) tarafından bulunan ilişkilere dayanarak, bu çalışmada yer alan değişkenler için Şekil 1'de gösterildiği gibi bağımsız değişkenler olarak kullanılabilirlik, kolaylık, algılanan etkileşim, dolaylı aracı etki olarak Dijital İçerik Sunum Hizmetleri Sunan Uygulamaları (SPOTIFY) kullanmaya yönelik tutum ve bağımlı değişken olarak Dijital İçerik Sunum Hizmetleri Sunan Uygulamaları (SPOTIFY) kullanma niyetinden oluşan kavramsal bir çerçeve geliştirilmiş ve aşağıdaki gibi yedi hipotez geliştirilmiştir:

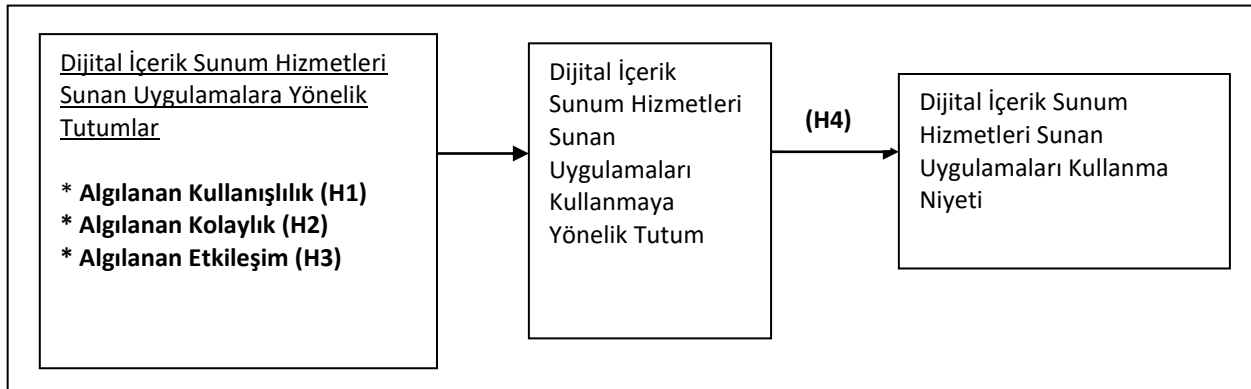
**H1:** Algılanan Kullanılabilirliğin, Dijital İçerik Sunum Hizmetleri Sunan Uygulamaları (SPOTIFY) kullanmaya yönelik tutum üzerinde etkisi vardır.

**H2:** Algılanan Kolaylığın, Dijital İçerik Sunum Hizmetleri Sunan Uygulamaları (SPOTIFY) kullanmaya yönelik tutum üzerinde bir etkisi vardır.

**H3:** Algılanan etkileşimin, Dijital İçerik Sunum Hizmetleri Sunan Uygulamaları (SPOTIFY) kullanmaya yönelik tutum üzerinde bir etkisi vardır.

**H4:** Dijital İçerik Sunum Hizmetleri Sunan Uygulamaları (SPOTIFY) kullanmaya yönelik tutumun Dijital İçerik Sunum Hizmetleri Sunan Uygulamaları (SPOTIFY) kullanma niyeti üzerinde bir etkisi vardır.

Şekil 1: Araştırmanın Teorik Modeli



Bu çalışmada mevcut olan sınırlı bütçe ve zaman kısıtlarından ötürü kolayda örnekleme yöntemi benimsenmiş ve ulaşılabilen üniversite öğrencileri üzerinde uygulanmıştır. Bu çalışmada, katılımcılardan veri toplamak için veri toplama yöntemi olarak çevrimiçi tabanlı anket formu kullanılmıştır. Üniversite öğrencileri gönderilen çevrimiçi bağlantıya tıklayarak ve gönüllü katılım esasına göre ankete katılım göstermişlerdir. Bu yöntem, daha

az maliyetli olması, daha az zaman gerektirmesi ve katılımcıları yanıtlarında daha uygun zamanlarında cevaplamaları aynı zamanda samimi olmaya teşvik etmesi nedeniyle avantaj sağlamaktadır.

Anket, Likert ölçeği sorularından oluşmaktadır. Kullanışlılık ve kolaylık yapıları Luarn ve Lin (2005), Venkatesh ve Morris (2000), Ong ve Lai (2006) ve Lee'den (2009) uyarlanmıştır. Bunun yanı sıra, algılanan etkileşim maddeleri McMillan ve Hwang'dan (2002) alınmıştır. Ayrıca, tutum ve kullanım niyeti maddeleri Lee (2009), Schierz ve diğerleri (2010), Luarn ve Lin (2005), Ong ve Lai (2006) ve Alsheikh ve Bojei'den (2014) uyarlanmıştır.

Veriler Aralık 2023-Şubat 2024 tarihleri arasında toplanmıştır. 214 anket değerlendirmeye alınmıştır. Çalışmada yapısal eşitlik modellemesi (YEM) yaklaşımı benimsenmiştir.

### 3.1.Model Tahmini

#### 3.1.1.Keşifsel Faktör Analizi

Kullanışlılık, kolaylık ve algılanan etkileşim Dijital İçerik Sunum Hizmetleri Sunan Uygulamaları (SPOTIFY) kullanmaya yönelik tutum ve Dijital İçerik Sunum Hizmetleri Sunan Uygulamaları (SPOTIFY) kullanma niyetini içeren maddeler üzerinde bir faktör analizi uygulanmıştır. Faktör analizi Temel bileşenler analizi kullanılarak gerçekleştirilmiştir. Kaiser-Meyer-Olkin (KMO) ve Bartlett's test değerleri: KMO değeri 0.919 ve Ki-kare 13486,837 ve mükemmel olarak değerlendirilmiştir (Hutcheson ve Sofroniou, 1999).

#### 3.1.2. Güvenilirlik Analizi

Güvenilirlik analizi, anketin iç tutarlılığını test etmek için gerçekleştirilmiştir. Cronbach'ın alfa değerine dayalı olarak veri setindeki yapıların Cronbach's Alpha değeri 0,7'nin üzerindedir ve kabul edilebilir büyüklüktedir. Dolayısıyla, yapıların güvenilirliği Tablo 1'de gösterildiği gibi doğrulanmıştır (Nunnally ve Bernstein, 1994).

Tablo1: Güvenilirlik Analizi

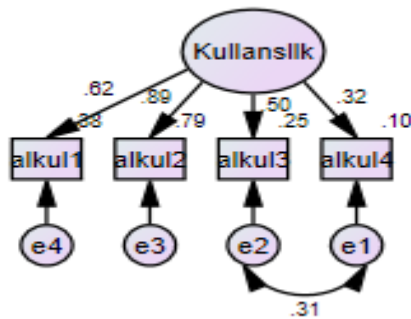
Değişken	C-Alpha
Kullanışlılık	0,945
Kolaylık	0,934
Algılanan etkileşim	0,802
Mobil uygulamalar kullanımına yönelik tutum	0,946
Mobil uygulamalar kullanma niyeti	0,951

### 3.2.Doğrulayıcı Faktör Analizi (DFA)

#### 3.2.1.Algılanan Kullanışlılık

Algılanan kullanışlılık için DFA gerçekleştirilmiştir. Bu nedenle, Tablo 2'de gösterildiği gibi anlamlı bir model uyum indeksleri ölçüm modeli incelenmiştir. Kullanışlılık yapısı için ölçüm modeli kabul edilebilir durumdadır (Ki-kare/df <5, CFI>0.9, RMSEA<0.08). Tüm faktör yükleri>0.6 ve AVE %65'dir.

Şekil 2: Kullanışlılığın Doğrulayıcı Faktör Analizi



Tablo 2: Doğrulayıcı Modele Ait Uyum İndisleri

CMIN/DF	RMR	CFI	RMSEA
.004	.001	1.000	.000

Tablo 3: Doğrulayıcı Modele ait istatistikler

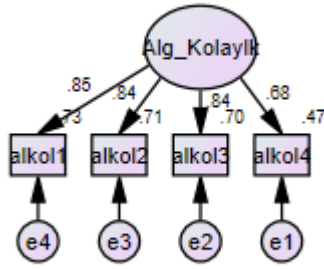
St. B	B	S.H.	T Değeri	Anlam
-------	---	------	----------	-------

alkul4	<---	Kullansllk	.323	.584	.134	4.358	***
alkul3	<---	Kullansllk	.504	.630	.097	6.482	***
alkul2	<---	Kullansllk	.887	1.234	.210	5.881	***
alkul1	<---	Kullansllk	.618	1.000			

### 3.2.2. Algılanan Kolaylık

Şekil 3'te Algılanan kolaylık için DFA gerçekleştirilmiştir. Bu nedenle, Tablo 4'te gösterildiği gibi önemli bir mutlak uyum ortaya koyan ölçüm modeli incelenmiştir. Algılanan Kolaylık yapısı için ölçüm modeli kabul edilebilirdir (Ki-kare/df <5, CFI>0.9, RMSEA<0.08). Tüm faktör yükleri >0.6 ve AVE %78'tir.

Şekil 3: Kolaylığın Doğrulayıcı Faktör Analizi



Tablo 4: Doğrulayıcı Modele Ait Uyum İndisleri

CMIN/DF	RMR	CFI	RMSEA
1.284	.013	.999	.034

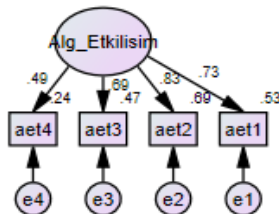
Tablo 5: Doğrulayıcı Modele ait istatistikler

		St. B	B	S.H.	T Değeri	Anlam	
alkol4	<---	Alg_Kolaylık	.684	.727	.062	11.689	***
alkol3	<---	Alg_Kolaylık	.839	1.053	.069	15.150	***
alkol2	<---	Alg_Kolaylık	.841	1.129	.073	15.485	***
alkol1	<---	Alg_Kolaylık	.855	1.000			

### 3.2.3. Algılanan Etkileşim

Algılanan Etkileşimlilik için yapılan DFA, Normlaştırılmış Ki-kare, uyum CFI ve RMSEA'nın mutlak uyumu ile sonuçlanmıştır. Temel olarak, tüm uyum indeksleri Tablo 6'da gösterildiği gibi eşik değerler içerisinde. Algılanan Etkileşim yapısı için Şekil 4'te gösterilen ölçüm modeli kabul edilebilirdir (Ki-kare/df <5, CFI>0.9, RMSEA<0.08). Tüm faktör yükleri>0.6 ve AVE %70'tir.

Şekil 4: Etkileşimin Doğrulayıcı Faktör Analizi



Tablo 6: Doğrulayıcı Modele Ait Uyum İndisleri

CMIN/DF	RMR	CFI	RMSEA
1.018	.010	1.000	.009

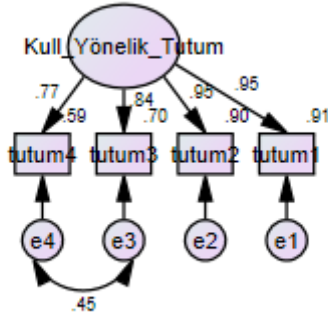
Tablo 7: Doğrulatoryıcı Modele ait istatistikler

			St. B	B	S.H.	T Değeri	Anlam
Aet1	<---	Alg_Etklsm	.728	1.000			
Aet2	<---	Alg_Etklsm	.831	1.293	.125	10.305	***
Aet3	<---	Alg_Etklsm	.688	1.133	.122	9.291	***
Aet4	<---	Alg_Etklsm	.492	1.019	.150	6.800	***

### 3.2.4 Mobil Uygulama Kullanımına Yönelik Tutum

Mobil uygulamalar kullanımına yönelik tutum için DFA yapılmıştır. Tablo 8 ve Şekil 5'de gösterildiği gibi daha kayda değer bir mutlak uyum ortaya koyan ölçüm modeli incelenmiştir. Mobil uygulamalar kullanımına yönelik tutum yapısı için ölçüm modeli kabul edilebilir değerlerde olduğu görülmektedir. (Ki-kare/df <5, CFI>0.9, RMSEA<0.08). Tüm faktör yükleri >0.6 ve AVE %80'dir.

Şekil 5: Kullanıma Yönelik Tutum Doğrulatoryıcı Faktör Analizi



Tablo 8: Doğrulatoryıcı Modele Ait Uyum İndisleri

CMIN/DF	RMR	CFI	RMSEA
.141	.001	1.000	.000

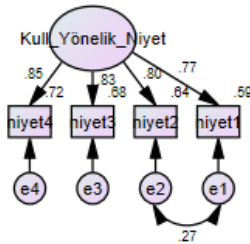
Tablo 9: Doğrulatoryıcı Modele ait istatistikler

			St. B	B	S.H.	T Değeri	Anlam
tutum1	<---	Kull_Yönelik_Tutum	.954	1.000			***
tutum2	<---	Kull_Yönelik_Tutum	.948	1.070	.037	28.988	***
tutum3	<---	Kull_Yönelik_Tutum	.839	.991	.048	20.533	***
tutum4	<---	Kull_Yönelik_Tutum	.769	.971	.058	16.845	***

### 3.2.5. Mobil Uygulama Kullanma Niyeti

Mobil uygulamalar kullanma niyeti için DFA gerçekleştirilmiştir. Tablo 10 ve Şekil 6'da gösterildiği gibi, ölçüm modeli incelenmiştir. Mobil uygulamalar kullanma niyeti yapısı için ölçüm modeli kabul edilebilirdir (Ki-kare/df <5, CFI>0.9, RMSEA<0.08). Tüm faktör yükleri >0.7 ve AVE %86'tür.

Şekil 6: Kullanıma Yönelik Niyet Doğrulatoryıcı Faktör Analizi



Tablo 10: Doğrulatoryıcı Modele Ait Uyum İndisleri

CMIN/DF	RMR	CFI	RMSEA
1.778	.008	.999	.057

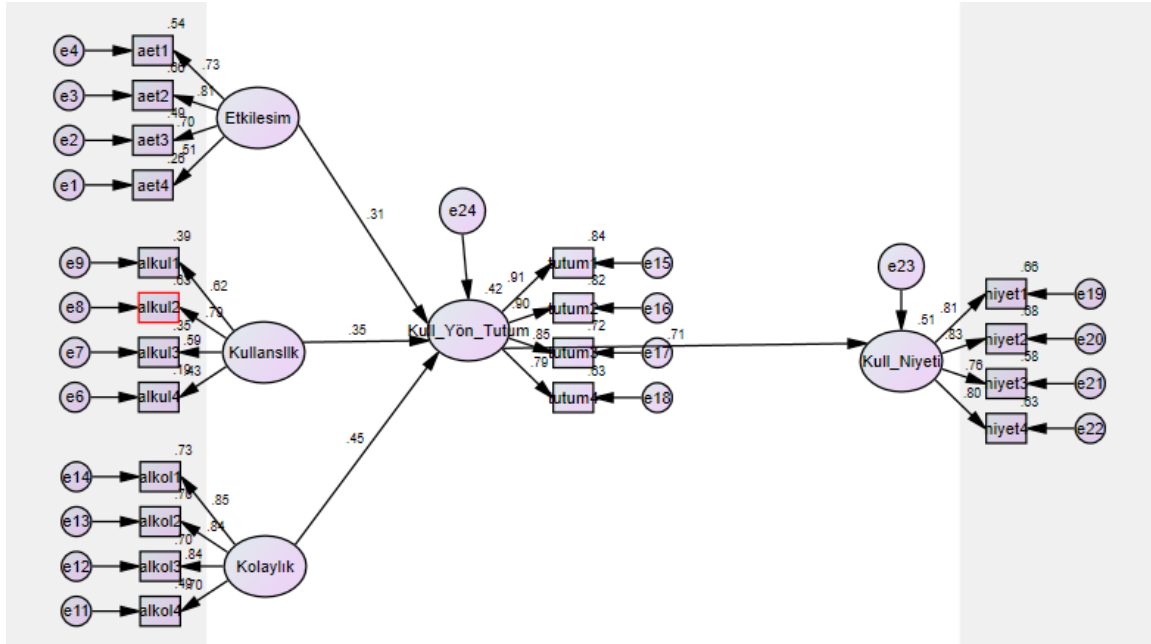
Tablo 11: Doğrulamalı Modele ait istatistikler

			St. B	B	S.H.	T Değeri	Anlam
niyet1	<---	Kull_Yönelik_Niyet	.769	1.000			
niyet2	<---	Kull_Yönelik_Niyet	.798	.946	.064	14.693	***
niyet3	<---	Kull_Yönelik_Niyet	.827	1.063	.085	12.441	***
niyet4	<---	Kull_Yönelik_Niyet	.851	1.066	.083	12.893	***

### 3.3. Hipotez Testi

Yapılar arasındaki ilişkiyi test etmek için YEM gerçekleştirilmiştir. Yapısal regresyon modelinin model uyum göstergeleri Hipotez testleri kritik oran (CR) istatistiği kullanılarak incelenir ve  $CR > \pm 1.96$  ise hipotez reddedilmez (Byrne, 2013). Mobil uygulamalar yapısal model Şekil 7'deki gibi oluşturulmuştur.

Şekil 7: Tüketicilerin Mobil Uygulama Kullanma Niyetine İlişkin Yapısal Model



Tablo 12: Yapısal regresyon modeline ait Uyum İndisleri

CMIN/DF	CFI	RMR	RMSEA
2.915	.903	.062	.080

Tablo 13: Yapısal Regresyon Modeline Ait İstatistikler

			St. B	B	S.H.	T Değeri	Anlam	Hipotez Test
Kull_Yön_Tutum	<---	Etkilesim	0.31	0.43	0.117	3.674	****	H3 (Kabul)
Kull_Yön_Tutum	<---	Kullansllk	0.35	0.50	0.135	3.703	****	H1 (Kabul)
Kull_Yön_Tutum	<---	Kolaylık	0.45	0.41	0.069	5.915	****	H2 (Kabul)
Kull_Niyeti	<---	Kull_Yön_Tutum	0.71	0.92	0.077	11.999	****	H4 (Kabul)

Genel olarak, araştırma modelinin değişkenleri arasındaki doğrudan ilişkilerle ilgili tüm hipotez yolları  $P < 0.05$ 'e sahiptir, dolayısıyla ilgili hipotezlerin anlamlılığı desteklenmektedir (Hair vd., 2006). Algılanan kullanılabilirliğin Dijital İçerik Sunum Hizmetleri Sunan Uygulamaları kullanmaya yönelik tutum üzerinde anlamlı bir etkisi ( $\beta = 0.35$ ,  $CR > \pm 1.96$ ,  $P < 0.05$ ) vardır ve bu da kullanılabilirliğin önemli bir etkileyici olduğunu göstermektedir. (Ki-kare/df < 5, CFI > 0.9, RMSEA < 0.08). **H1** hipotezi desteklenmiştir. Tüketicilerin mobil uygulamalarla ilgili olarak algıladıkları kullanılabilirliğin Dijital İçerik Sunum Hizmetleri Sunan Uygulamaları kullanmaya yönelik tutum üzerinde anlamlı bir etkisi vardır.

Ayrıca, algılanan kolaylığın Dijital İçerik Sunum Hizmetleri Sunan Uygulamaları kullanmaya yönelik tutum üzerinde anlamlı bir etkisi ( $\beta = 0.45$ ,  $CR > \pm 1.96$ ,  $P < 0.05$ ) vardır ve bu da kolaylığın önemli bir etkileyici olduğunu göstermektedir. **H2** hipotezi desteklenmiştir. Tüketicilerin mobil uygulamalarla ilgili olarak algıladıkları kolaylığın Dijital İçerik Sunum Hizmetleri Sunan Uygulamaları kullanmaya yönelik tutum üzerinde anlamlı bir etkisi vardır.

Algılanan etkileşimin Dijital İçerik Sunum Hizmetleri Sunan Uygulamaları kullanmaya yönelik tutum üzerinde anlamlı bir etkisi ( $\beta = 0.31$ ,  $CR > \pm 1.96$ ,  $P < 0.05$ ) vardır ve bu da algılanan etkileşimin anlamlı bir etkileyici olduğunu göstermektedir. **H3** hipotezi desteklenmiştir. Tüketicilerin mobil uygulamalarla ilgili olarak algıladıkları etkileşimin Dijital İçerik Sunum Hizmetleri Sunan Uygulamaları kullanmaya yönelik tutum üzerinde anlamlı bir etkisi vardır.

Dijital İçerik Sunum Hizmetleri Sunan Uygulamaları kullanmaya yönelik tutumun Dijital İçerik Sunum Hizmetleri Sunan Uygulamaları kullanma niyeti üzerinde anlamlı bir etkisi ( $\beta = 0.71$ ,  $CR > \pm 1.96$ ,  $P < 0.05$ ) vardır ve bu da mobil bankacılığı kullanmaya yönelik tutumun önemli bir etkileyici olduğunu göstermektedir. **H4** hipotezi desteklenmiştir. Tüketicilerin mobil uygulamalarla ilgili olarak algıladıkları kullanışlılığın Dijital İçerik Sunum Hizmetleri Sunan Uygulamaları kullanmaya yönelik tutum üzerinde anlamlı bir etkisi vardır.

#### 4. SONUÇ

Bu çalışma, mobil uygulamaların algılanan kullanışlılığı ve kolaylığı arttıkça, tüketicilerin Dijital İçerik Sunum Hizmetleri Sunan Uygulamaları (SPOTIFY) kullanmaya yönelik tutumlarının da arttığını ortaya koymuştur. Bu sonuç, algılanan kullanışlılık ve algılanan kullanım kolaylığının tutum üzerinde önemli bir etkisi olduğunu ortaya koyan (Fu vd., 2012) çalışmasıyla da doğrulanmaktadır. Wu ve diğerleri (2015) tüketicilerin tutumunun algılanan kullanışlılık ve algılanan kolaylıktan önemli ölçüde etkilendiğini ortaya koymuştur. Bu çalışmada, göreceli avantajın Dijital İçerik Sunum Hizmetleri Sunan Uygulamaları (SPOTIFY) kullanmak için daha fazla kişiye ilham veren hayati bir faktör olduğu da kanıtlanmıştır. Algılanan etkileşimlilik ile ilgili olarak, tüketicilerin Dijital İçerik Sunum Hizmetleri Sunan Uygulamaları (SPOTIFY) kullanmaya yönelik tutumu algılanan etkileşimlilikten önemli ölçüde etkilenmektedir. Bu durum, Wu'nun (1999) algılanan etkileşimin tutum üzerinde önemli bir etkisi olduğunu ortaya koyan çalışmasıyla da desteklenmektedir. Dolayısıyla; **H1**, **H2**, **H3** ve **H4** verileri tarafından desteklenmektedir.

Bu araştırma mobil uygulamalar alanındaki gereksinimleri karşılamaktadır. Ayrıca, mobil uygulamalar konusundaki az sayıda literatüre bir katkı niteliğindedir. Bu geniş kapsamlı yapısal eşitlik modellemesi yaklaşımının bulgularından hareketle, mobil uygulamalar hizmet sağlayıcıları ve mobil uygulamalar uygulama geliştiricileri, tüketici davranışlarını bilmenin ve anlamının üstünlüklerini kabul etmek zorunda kalacaklardır. Buna ek olarak, hem mobil uygulamalar hizmet sağlayıcıları hem de mobil uygulamalar uygulama geliştiricileri, pazar paylarını artırmak için bu araştırmanın bulgularını referans olarak kullanabilirler. Bu, tüketicilere yönelik hizmetlerin kişiselleştirilmesi konseptiyle aşamalı olarak yapılabilir. Bunun dışında, tüketicilerin ihtiyaçlarına uygun pazarlama stratejileri geliştirilebilir. Dolayısıyla, bu araştırmanın bulguları Dijital İçerik Sunum Hizmetleri Sunan Uygulamaları, mobil uygulamalar hizmet sağlayıcıları ve mobil uygulamalar uygulama geliştiricileri tarafından pazarlama stratejilerinde kullanılabilir.

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## Continuing Education and its Role in Strengthening Education in Albania.

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**Abstract:** From 1990 onwards, the Albanian education system has faced great challenges that have come as a result of complex changes after the fall of the dictatorial system. Teachers are the most important link to catch and cope with the pace of changes. Change management is a constant challenge. Depending on the capacity to understand change, manage it and turn it into inspiration for the future, societies also differ. Of course, education and training cannot be seen outside the Albanian cultural reality. In this statement, I will aim to present arguments on how this change cannot be realized without involving teachers and principals in a continuous process. Continuing education is one of the key concepts that gives the opportunity for all teachers to return to the knowledge of innovations, teaching models, strategies, new methods and to include them in the teaching process. The question I raise is related to the concern of whether teachers are able and have the capacity to effect change. Referring to M. Fullan, the question is: how capable are teachers to turn into “agents of change”? Using experience, direct contacts with teachers and leaders in the system, through field ethnography, as well as analyzing the data through a questionnaire related to the continuing education of teachers, I will try to answer the questions raised.

**Keywords:** culture, dictatorship, change, teacher, change agent, continuing education.

### 1. Introduction

The reforms undertaken in Albania after the fall of the dictatorship in the field of education were very deep and dynamic. Initially, the ideological separation of the curriculum content was intended. Then there were efforts to change the teaching method that directly affects student learning. The transition from formal learning, influenced by the Eastern model of Russia, to learning with objectives was undoubtedly a big turning point in the Albanian curriculum system. While in the western world since 2000 learning with competences had started to be implemented, in Albania this legal change happened only in 2014. All these changes had a formal attempt to prepare teachers to become "agents of change", as people self-aware of the nature of change and the process of change (Fullan 2010). Law 69/2012 in article 56 point 2/c specifies that "The teacher has the right to be created opportunities for professional development" and in point 3/ç of this article it is specified that "The teacher has the duty to update professional competences" (Law 69 /2012).

At the legal level, an attention is felt to continuously qualify teachers not only as a need for personal professional development but as an efficient opportunity to cope with changes in the curriculum. In this paper, several research questions are posed: How able were the Albanian teachers trained in the dictatorship to cope with the curricular changes? What were the instruments that were used to practically implement the changes? How can teachers become "agents of change" through continuing education? In the conditions of Albania, the transition from dictatorship to democracy and at the same time experiencing rapid changes at the global level makes the confrontation even more difficult. The transition from the use of chalk to applied technology methods exemplifies the vital need for lifelong qualified teachers.

### 2. Literature review

The teaching profession was included in the law "On regulated professions in the Republic of Albania" in 2010, recognizing it in the list of professions subject to certification and registration in the Professional Order (Law No. 10 357, 2010). In this way, every teacher candidate must develop professional practice after his education and undergo the exam to obtain the license. This development has set a new standard for those who want to get involved in the system. Those teachers who were part of the system before the entry into force of this law are exempt from this obligation. With the legal changes for retirement, the working age was extended to 65 years for men and the aim is for women to go towards this age as well (currently in 2024 they retire at the age of 61 years and 8 months). These legal acts increased the tenure of teachers in the system, making it necessary to intervene for their continued qualification. This is the only way to cope with change.

The teacher's competence for inclusiveness must include a pluralistic pedagogy that affirms the fact that informed teaching decisions must take into account the individual characteristics of children, the learning that takes place outside the school environment, the student's prior knowledge, experiences and interests.

individual and cultural (Florian & Rouse, 2009). The continuing qualification and development of teachers refers to the education and training activities in which primary and secondary school teachers engage, after having obtained a professional certificate of initial education, intended mainly or exclusively to improve knowledge, attitudes and skills their professional in order to educate children more effectively in the contexts of social and cultural diversity. Everything is developed in accordance with the "Standardized general basis for the teacher" (IZHA, 2010) and the curriculum framework.

## 2.1. The current teacher qualification system in Albania

It has long been established that the most important factor in determining student success or failure is well-trained teachers in a coherent education system (Darling-Hammond, 2006b). Sarason (1993) in *The Case for Change: Rethinking the Preparation of Educators* explains this simple primary prevention dialectic; identify and nurture great teachers in a dynamic and supportive environment who, in turn, can foster self-actualized and successful learners in adulthood. Changes in teacher education and training over the past two and a half decades have driven valuable teachers out of the field, while younger generations are leaving the profession altogether (Jackson & Lewis 2010). Countries with high performance have joint strategies for the professional development of teachers. These countries not only train individual educators well, but they intentionally organize the sharing of expertise between teachers and administrators within and across schools so that the system as a whole becomes more and more effective. Their success comes because they have properly understood the political and social context and have evaluated these components: Teacher recruitment, teacher preparation, mentoring, professional learning, teacher feedback and evaluation, career and leadership development. They not only cultivate innovative practices but also incorporate them into the system as a whole, not allowing them to exist as exceptions (Darling-Hammond 2017). These countries established policies for continuing education that helped teachers identify areas for growth, learn from each other, and improve their teaching practices.

In Albania, teachers are qualified at the Universities of Tirana, Elbasan, Korça, Vlora, Shkodra, Durrës and Gjirokastra and at the Sports Academy. The Law on Higher Education recognizes five types of higher education institutions: universities, academies, professional colleges, higher schools and inter-university centers. University faculties and teacher training departments are responsible for organizing and designing the programs. The main activity of these institutions is the theoretical and practical preparation of students with professional teaching skills. Scientific research is a secondary activity and usually has little financial support and systematic application. Currently, the university system of teacher education and qualification is 3+2 years according to the Bologna system. This system currently does not produce teachers for children aged 0 to 3 years (except for the 2-year programs that take place at the University of Durrës and Elbasan), nor does it offer psycho-pedagogical education for teachers of professional subjects at the higher professional levels of the system of education. Pre-school educators and lower cycle teachers (grades 1-5 of primary school) are qualified within the same department in each of the universities in Elbasan, Korce, Vlorë, Durrës and Gjirokastër, collectively known as the "Primary Cycle" department ". Teachers for the level above the primary cycle (grades 6-9) and secondary schools (grades 10-12 according to the recently changed system) are qualified in the universities of Elbasan, Korça, Vlora, Gjirokastra and Shkodra (SCIENTER 2009).

According to instruction number 8, dated 26.03.2020, "On the criteria and procedures for the qualification of teachers", the qualification of teachers is carried out through an exam, which is guided by the principle of transparency, meritocracy and equal treatment. According to this instruction, all teachers who meet the condition of seniority are subject to the qualification exam:

- At least 5 (five) years of work for the "Qualified Teacher" qualification classification;
- At least 10 (ten) years of work for the "Specialist Teacher" qualification category and at least 5 (five) years of work after receiving the "Qualified Teacher" category;
- At least 20 (twenty) years of work for the "Master Teacher" qualification category and at least 10 (ten) years of work after obtaining the "Specialist Teacher" category (MAS Instruction No. 8, 2020).

All teachers who have completed at least 3 (three) days of training per calendar year, which are equivalent to 18 hours of training reflected with 1 (one) credit, have the right to undergo the qualification exam. The exam has the weight of 70% of the overall assessment and the "Candidate's Portfolio" constitutes 30% of the assessment. The evaluation is done with 5 (five) scales: "Excellent", "Very good", "Good", "Sufficient" and "Poor" (with the last evaluation the candidate "does not qualify").

As noted, the qualification of teachers is based on the criterion of "longevity". This practice is inherited and almost the same structure has remained. Continuing qualification does not lead to a salary increase and is not formally obligatory, although teachers attend seminars and workshops even when they are not interested, usually either because of the content related to their work, or because of specialist knowledge or the coach. Many teachers are reluctant to report that they often attend seminars because they are 'required' to do so by their superior. The state system of teacher qualification provides continuous qualification for teachers to help staff to: apply changes in curricula for different subjects; introduce new subjects at school; to improve the teaching process through methods and strategies; to develop cross-curricular and extra-curricular knowledge; and deal with other issues. While many of the training activities, organized by government agencies, have been supported by domestic and foreign NGOs, teachers have been trained in topics such as critical thinking, human rights, democratic education, global and European civilization, gender equality and disability issues, health care and environmental protection.

The salary system for public servants is financed from the national budget, and salaries in the education system are determined by the Decision of the Council of Ministers. Under this system, salaries consist of a basic component that is the same for everyone and of the allowances on top of the basic salary. The level of the basic salary is set in accordance with the qualification levels (high school or university) of the employee. Seniority and additional qualifications are considered for higher remuneration levels. Other allowances are based on a hierarchy that takes into account the level of the workplace and the sector in the "cycle" of education where the teacher works (primary, lower secondary, upper secondary). Studies have shown that: "Teaching is chosen more as an easy career, for reasons of salary, free time and job security, and less for reasons of having the skills for this profession, of wanting to work with it young people, to invest for society [...] the new generation will have as teachers persons who are oriented more by pragmatics than by values" (Tamo & Tamo 2013).

### 3. Results

As a result of this study, a Google Forms<sup>1</sup> questionnaire was created through which the teachers were asked about issues related to the continued qualification of teachers and the role it plays in facing the challenges of change. 207 teachers participated in the questionnaire. The Likert scale was used to measure the agreement of the respondents in relation to the qualification system and its role in strengthening education in Albania. Sixty direct interviews were also conducted.

Question / Statement	5 Totally agree	4 Agreed	3 Neutral	2 Somewhat agree	1 Not at all agree
The qualification system in Albania is in accordance with the teachers' requirements.	28 14.4%	100 51.3%	13 6.7%	38 19.5%	16 8.2
The trainings that are currently conducted by licensed private and public agencies is the right way to develop teachers professionally.	18 9.4%	84 43.8%	22 11.5%	44 22.9%	24 12.5%
The teacher qualification system in Albania responds to the curriculum requirements.	17 8.8%	114 58.8%	19 9.8%	37 19.1%	7 3.6%
This system serves teachers to develop professionally.	30 15.5%	96 49.5%	24 12.4%	36 18.6%	8 4.1%
The current qualification system allows teachers to become "agents of change" in education.	14 7.2%	80 41.2%	32 16.5%	47 24.2%	21 10.8%
Continuous training and qualification of teachers and leaders is the key to cope with the changes in education.	48 26.4%	100 51.3%	12 6.2%	23 11.8%	12 6.2%
The qualification exam is transparent, guarantees meritocracy and treats teachers equally for the same objective situations.	31 15.9%	97 49.7%	17 8.7%	39 20%	11 5.6%
The criterion of "seniority in work" is appropriate for the qualification of teachers.	56 28.9%	98 50.5%	10 5.2%	14 7.2%	16 8.2%
The qualification exam is appropriate as it checks the scientific and pedagogical knowledge of the teacher.	32 16.4%	99 50.8%	16 8.2%	36 18.5%	12 6.2%

1 <https://docs.google.com/forms/d/1673k8pH-rY-UK9QPRG5fvLH1-370xLvQw8v1xV2qBqg/edit#responses>

The qualification exam helps teachers improve their scientific and pedagogical knowledge and learn new teaching strategies and methods.	23 11.9%	102 52.6%	18 9.3%	40 20.6%	11 5.7%
The continuing education of the teacher helps to overcome the challenges of teaching and learning.	45 23.1%	118 60.5%	11 5.6%	17 8.7%	4 2.1%
Reforms are realized if teachers are trained and qualified.	46 23.7%	103 53.1%	18 9.3%	19 9.8%	8 4.1%

As can be seen from the questionnaire, the teachers affirm to a significant degree, 65.7%, that the qualification system is in accordance with the teachers' requirements. A little more than half of the respondents, 53.2%, support the current training system for professional development. The questionnaire shows that 67.6% think that the qualification system meets the requirements of the curriculum and 65.1% think that this system helps teachers to develop professionally. Only 48.4% of respondents fully agreed with the statement that "the current qualification system allows teachers to become agents of change in education". This data is very important to understand the relationship with the reforms undertaken in the Albanian education system and the way teachers approached the changes. Although 78% of them see continuing training and qualification, their continuing education, as the key to successfully cope with the reforms and overcome the challenges of teaching and learning.

During the conducted interviews, among others, several issues are highlighted:

- ✚ The qualification system must be changed as it is unfair and does not respond to needs;
- ✚ The role of the teacher is underestimated;
- ✚ Continuing education helps teachers overcome difficulties;
- ✚ Teacher training should be adapted to the newest teaching methods;
- ✚ The qualification should become specialized for the relevant subjects;
- ✚ Trainings are necessary for teachers, but they must be free and inclusive.

The international indicators of educational that measure quality that emphasize the kinds of higher-order skills needed in contemporary societies, such as OECD's Program for International Student Assessment (PISA). PISA tests go beyond recall and recognition of information, emphasizing students' ability to apply knowledge in new circumstances—the type of competence that is increasingly important for 21st century learners. Albania was ranked 70th (PISA Score 2022) and one of the factors for this result has to do with the ability of teachers to adapt to the reforms undertaken in the curriculum system.

Some of the reasons why quality teachers are lacking: lack of lifelong career satisfaction, large numbers of graduate teachers who do not get teaching jobs, beginners who get jobs in urban schools but fail or leave, lack of specialties, opportunities the largest outside of education. Teachers pay their own expenses for continuing education, training, participation in conferences, publications, various professional activities. (Meanwhile in developed countries it is either free or heavily subsidized. While training as a teacher they may receive a full salary.)

#### 4. Conclusions

- It is worth noting that successful countries in the reforms undertaken in education such as Finland, Singapore, Shanghai, etc. have applied policies that attach special importance to the teacher and his qualification;
- The data show that there is a variable relationship between the continuous qualification of teachers, coping with changes and the success of teaching and learning;
- The teacher qualification system in Albania turns out to be rigid and does not motivate teachers to develop professionally.
- Teachers fail to become "agents of change" as the conditions for their continuing education have not been created.

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## Kapadokya Bölgesindeki Turizmin İncelenmesi

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**Özet:** İnsanların turizme yönelik beklentileri değiştiğinde ve turizm olguları çeşitlendikçe kültür turizmi faaliyetlerine gösterdikleri ilgi de artmaktadır. Dolayısıyla kültür ve mekân arasındaki etkileşim ve etkileşimin neticeleri giderek daha da ön plana çıkmaktadır. Turizmin dünya ekonomisindeki payı yıllar geçtikçe önemli ölçüde artmış ve içinde bulunduğumuz zamanda ülkeler için değerli olan bir pazar durumuna gelmiştir. Türkiye gibi hem gelişen hem de turizm çeşitliliği bakımından iyi durumda olan bir ülke için turizm, ülke ekonomisine ve topluma büyük katkı sağlamaktadır. Bu nedenle Türkiye son yıllarda turizm yatırımlarını önemli ölçüde artırmıştır. Bu yatırımlarla ülkeyi ziyaret eden turist sayısının, kişi başına düşen turizm gelirin ve turizm harcamalarının artırılması hedeflenmektedir. Kapadokya bölgesi de bu turizm yatırım alanlarından biri olan eşsiz doğal güzele sahip bir bölgedir. Kapadokya bölgesi turistik güzellikleri nedeniyle Türkiye'de önemli bir turizm merkezi haline gelmiştir.

Bu çalışmada yapılan döküman analizlerine göre Kapadokya bölgesinin en güçlü özelliği içerdiği eşsiz yer şekilleri (peribacaları), en zayıf özelliği bölgede altyapı sorunlarının bulunması, en büyük fırsat unsuru ise jeolojik varlığıdır. Alternatif turizm türleri için yeterli potansiyelin hayata geçirilmesi için en büyük tehdidin bölgenin jeomorfolojik yapısının ve doğal kaynaklarının tahrip edilmesi olduğu tespit edilmiştir.

**Anahtar kelimeler:** Turizm Sektörü, Kültürel Turizm, Turizm ve Kapadokya, Turizm Sorunları, Nevşehir.

**Abstract:** As people's expectations towards tourism change and tourism phenomena diversify, their interest in cultural tourism activities also increases. Therefore, the interaction and the results of the interaction between culture and space are becoming more and more prominent. The share of tourism in the world economy has increased significantly over the years and has become a valuable market for countries in our current time. Especially for a country like Turkey, which is both developing and in good condition in terms of tourism diversity, tourism makes a great contribution to the country's economy and society. For this reason, Türkiye has significantly increased its tourism investments in recent years. These investments aim to increase the number of tourists visiting the country, tourism income per capita and tourism expenditures. Cappadocia region is a region with unique natural beauty, which is one of these tourism investment areas. Cappadocia region has become an important tourism center in Turkey due to its touristic beauties.

According to the document analysis made in this study, the strongest feature of the Cappadocia region is the unique landforms (fairy chimneys) it contains, the weakest feature is the presence of infrastructure problems in the region, and the biggest opportunity element is its geological existence. It has been determined that the biggest threat to the realization of sufficient potential for alternative tourism types is the destruction of the geomorphological structure and natural resources of the region.

**Key words:** Tourism Sector, Cultural Tourism, Tourism and Cappadocia, Tourism Problems, Nevşehir.

### GİRİŞ

Sanayi devriminin gelişiyle birlikte toplumda, özellikle gelişmiş ülkelerde çalışma saatleri azalmaya devam etmiş, insanların iş sonrası kendilerine fazlasıyla zaman ayırma düşüncesi ve sağlığa verdikleri önem, turizm ve eğlence kavramlarının doğmasına neden olmuştur. Boş zaman kavramıyla birlikte insanlar mevcut faaliyetlerle yetinmeyip eğlence, dinlenme, farklı toplumlarla etkileşim gibi çeşitli uğraşlarla meşgul olmaktadır. Bu şekildeki arayışlar bireylerin başka alanlara doğru yönelmesiyle turizm olgusunun hızlanmasına yol açmıştır (Köybaşı, 2006). Turizmle uğraşan kişilerin yapmak istediği faaliyetler ve merak ettikleri alanlar turizm talebinin doğasını oluşturmaktadır. Geçmişte geniş ölçekte ve sınırlı bir alanda gerçekleştirilen turizm faaliyetleri, günümüzde teknolojinin gelişmesi ve ulaşım olanaklarının gelişmesiyle birlikte fazlaca çeşitlenmiştir. Turizmin varlığının yanında sürdürülebilir olması ve planlama çerçevesinde sürdürülmesi de oldukça önemlidir. Planlamanın faaliyet alanındaki değişimlere uyum gösteren ve bunları yansıtan dinamik bir süreç olduğu söylenebilir. Teknolojik ilerlemelerin devamıyla birlikte seyahat eğilimleri, çeşitli coğrafi bölgelere odaklanmış ve bir dizi mekân turistler için daha ulaşılabilir hale gelmiştir. Turizm sektörünün geniş bir alana yayılması olumlu etkiler yaratırken aynı zamanda bazı sorunları da beraberinde getirmektedir. Turizmin zarar mı yoksa fayda mı getireceği tartışması uzun süredir gündemdedir. Bu nedenle turizm planlarının oluşturulması ve turistik bölgelerde yerel halkın hak ve çıkarlarının korunması oldukça önemlidir, çünkü turizm geliştirilmezse doğal çevreye ve topluma ciddi zararlar verecektir. Erişilecek hedefler, bu hedeflere ulaşmak için kullanılacak araçlar, sarf edilecek çabalar ve zaman çizelgeleri gibi kritik konular, turizmin daha etkin bir biçimde gerçekleştirilmesi için titiz bir değerlendirme ve geniş kapsamlı planlama bağlamında ele alınacaktır. Planlama aracılığıyla, doğal

ve kültürel kaynakların gelecek nesillere aktarılması yoluyla turizm alanında daha sürdürülebilir bir çerçevede oluşturulacaktır. Bu bağlamda, manzaralı bölgelerdeki görüntüleme noktaları, hizmet ve aktivite alanları, tesisler ve benzeri unsurlar, bölgedeki çeşitli faktörlerin koordineli bir biçimde düzenlenmesini ve birbirlerini desteklemesini sağlayacaktır. (Alaeddinoğlu ve Aliağaoğlu, 2005; Güngör ve Vural, 2021).

Turistik potansiyeli oldukça zengin olan Türkiye gibi ülkelerde, turizm sektörünün ekonomik değeri daha da önemli bir hale gelmektedir. Türkiye'nin coğrafi konumu, her mevsimde çeşitli turizm faaliyetlerine imkan tanıyan en büyük avantajlarından biridir. Bu nedenle, turizm sektörü, Türkiye için temel bir gelir kaynağı olarak öne çıkmaktadır. Bu önemli gelir kaynağına yönelik olarak, turizm sektörüne yapılan yatırımlar, geçtiğimiz dönemde belirgin bir artış göstermiştir.

Türkiye'nin turizm anlayışı nedeniyle bu yatırımlardan en büyük payı alan turizm türü ağırlıklı olarak kıyı turizmi olmakla birlikte, son yıllarda dünyanın ve Türkiye'nin turizm anlayışının değişmesiyle beraber birçok alternatif turizm türü ve yatırımlar da artış olmuştur. Türkiye'de bu yatırımların meyvelerini vermesiyle beraber doğa ve kültür turizmine ağırlık veren Kapadokya-Nevşehir bölgesinde turizm hareketliliğinde artış olmuştur.

Kapadokya bölgesi tarih, doğa, coğrafya ve kültürel unsurlarla dünyanın en mükemmel entegre olmuş turizm destinasyonlarından biridir. Kapadokya bölgesi M.Ö.'den bu yana insanlar tarafından tercih edilmiş ve tarihte birçok büyük medeniyet burada yaşamıştır (Gümüş, 2019). Bölgeye hâkim olan her uygarlığın geride bıraktığı benzersiz izler, Kapadokya'nın zengin ve çeşitli kültürel mirasının önünü açmaktadır. Bölgedeki kayalara oyulmuş kilise ve zindanlar, Roma döneminde Hıristiyanlık için çok önemli bir rol oynamış, Romalıların eziyetinden kaçan Hıristiyanlar tarafından barınak ve tapınak olarak kullanılmıştır (Türker, 2016). Bölge özellikle Hıristiyan kültürünün derin izlerini barındırmaktadır. Kapadokya kültürel, tarihi ve coğrafi açıdan o kadar eşsiz unsurlar barındırıyor ki, bölge zamanla eşsiz bir turizm destinasyonu haline gelmiştir. Dolayısıyla günümüzde Kapadokya bölgesini ziyaret eden birçok yerli ve yabancı turistlerin motivasyonları arasında bölgede doğal süreçlerle oluşan peribacalarını ziyaret etmek, inançlarına göre kutsal sayılan yerleri ziyaret düzenlemek veya farklı kültürlerin izlerini gözlemlemek yer almaktadır. Nevşehir İl Kültür ve Turizm Müdürlüğü'nün elde ettiği son verilere göre, Ekim 2023 itibarıyla bölgedeki müze ve ören yerlerini 3,6 milyondan fazla kişi gelip incelemiştir (Nevşehir İl Kültür ve Turizm Müdürlüğü, 2022). Ayrıca bölgede 452'si basit konaklama yerleri, 135'i turizm işletme belgeli tesis ve 21'i turizm yatırım belgeli tesis olmak üzere 608 konaklama tesisi mevcuttur. Ayrıca yapılan araştırmalar bölgenin alternatif turizm türleri bakımından da çeşitli potansiyellere sahip olduğunu göstermektedir. (Ersun ve Aslan, 2009; Şamiloğlu ve Karacer, 2012; Kül, 2015; Katlav vd., 2019). Fakat tüm bu potansiyeline ve zenginliğine rağmen bölge turizminin yeterli seviyede olmadığı düşünülmektedir (Karakuş, 2019).

Bu çalışmada öncelikle Kapadokya bölgesindeki turizm faaliyetlerine ilişkin genel bir açıklama yapılarak, bu aktarımlarda Kapadokya bölgesini değeri sunulacaktır.

## 1. TURİZM

Turizm, modern bir olgu olarak kabul edilen ve yüzyıllardır devam eden önemli hizmet sektörlerinden biridir. Sarı ve Bayraktar'a (2018) göre turizm kavramı Latince kökenlidir ve İngilizce "tour" sözcüğünden türetilmiştir. Turizm farklı araştırmacılarca farklı tanımlansa da bu tanımlarda ulaşım, kalacak yer ve eğlence faktörlerinin önemli rol oynadığı görülmektedir. Turizm aynı zamanda dünyada en fazla gelir getiren sektörler arasında yer alıp, ekonomik anlamdaki faydalarının yanında, doğru kullanıldığında kültürel, doğal ve tarihi açıdan farklı ülke ve bölgeler arasında köprü niteliğinde olabileceği de bilinmektedir. Turizmin meydana çıkışı, gelişimi ve etkisi dikkate alındığında çok yönlü ve karmaşık olduğunu belirtmek önemlidir. Turizmin ortaya çıkışı ve sonraki süreci birçok faktörden etkilenmektedir. Bu nedenle turizm birçok disiplinle ilişkilidir. Coğrafya, bir yerde meydana gelen ve o yerle iç içe olan turizm faaliyetleriyle de yakından ilişkilidir. Çünkü turizm ile coğrafyayı bir noktada birleştiren pek çok ortak durum vardır (Güngör ve Adıgüzel, 2022).

Kapadokya'da gerçekleştirilen turizm olarak en belirgin kültürel turizmdir. Aşağıda alt başlık olarak kültürel turizmin ne olduğu aktarılacaktır.

### 1.1. Kültürel Turizm

Küreselleşme derinleştikçe teknoloji ve ekonomi önemli değişimlere uğramıştır. İnsanlar deniz, kumsal ve güneş tercihlerinin yanı sıra ilgi duydukları alanlardaki turistik mekanlara da yönelmektedirler. Coğrafi ve kültürel farklılıklar dünya çapında giderek daha belirgin hale gelmiştir. Bir yerin kültürünün geniş bir anlamı olması



nedeniyle turistler farklı kültürlere ait çekicilikleri merak etmekte ve bunları yerinde görmek ve öğrenmek istemektedir. Bu bağlamda insanların turizm faaliyetlerine katılma nedenlerinde kültürel faktörler de önemli rol oynamaktadır. İnsanların seyahatle ilgili beklentileri değişmeye devam ettikçe ve seyahat gerçekleri çeşitlendikçe II. Dünya savaşlarından sonra kültür turizmi faaliyetlerine olan ilgi günümüze kadar artarak devam etmiştir. Bu nedenle güçlü kültürel özelliklere sahip şehirler, önemli turistik çekiciliklerinden dolayı turistik destinasyonlar durumunu almaktadır (Tapur, 2009). Dünya Turizm Örgütü (UNWTO), kültür turizmini yeni yüzyılda turizmin ortaya çıkan değerlerinden biri olarak listelemektedir. Kültür turizminin giderek artacağına, kültür turizmi merkezinin yüzyılın cazibe merkezlerinden biri haline geleceğine işaret etmektedir (Akova, 2018). Ayrıca UNWTO'nun "Turizm ve Kültür Sinerji Raporu"nda (2018) kültür turizminin turizm faaliyetlerinin %40'ını oluşturduğu belirtilmektedir. Kültür turizmi seyahat trendlerinin ilk günlerinden beri vardır. Ancak koşullar değiştikçe kültürün algılanışı ve onun çekicilik gücü de değişmiştir. Kültür ve turizm arasındaki ilişki bazen ekonomik büyüme ve kalkınmanın temel taşı olarak kabul edilmiştir (Emekli, 2021: 420).

## 2. KAPADOKYA BÖLGESİNDE TURİZM

### 2.1. Kapadokya Bölgesinin Tarihi

Kapadokya, Türkiye'nin eşsiz turistik destinasyonlarından biri olup, geçmişte birçok medeniyetin ev sahipliği yaptığı bir bölge olarak öne çıkmaktadır. İsmi, Farsça kökenli olan "Katpatuka"dan türemiş olup, 'Güzel Atlar Diyarı' anlamına gelmektedir. (Kaleli, 2016).

Kapadokya'nın tarihinin 7.000 sene öncesine kadar dayanabildiği anlaşılmaktadır. M.Ö. 1750-700 seneleri arasında Hititlerin burada hüküm sürdüğü bilinmektedir. Hititler uzun yıllar bölgede varlığını sürdürmüş ve Kapadokya'nın her yerine izlerini bırakmıştır. Kapadokya'nın önemli bir parçası olan pek çok yer altı şehrinin Hititler tarafından o dönemin işgalinden kaçmak için inşa edildiğine dair kanıtlar bulunmaktadır. 6. yüzyıldaki Pers istilasından sonra M.Ö. bölge Pers egemenliği altına girmiştir. Büyük İskender M.Ö. 332 senesinde burayı işgal etmiştir. Büyük İskender'in ölümünün ardından bu bölge Roma İmparatorluğu'nun egemenliği altına alınmıştır. Bölgede Hıristiyanlık hızla yayılmaya başlamış ve bu dönemde birçok kilise kurulmuştur. Roma İmparatorluğu'nun bölünmesinden sonra uzun yıllar Doğu Roma İmparatorluğu'nun egemenliği altında kalmıştır (www.kapadokyadayım.com).

1071 yılında Bizanslılar ile yapılan Malazgirt Savaşı'ndan sonra Türk beyliklerinden Danişment'in egemenlik kurmasıyla Kapadokya bölgesinin Türkleşme süreci başlamıştır. Daha sonraki yıllarda bölge Anadolu Selçuklularının egemenliğine girmiş, onların yıkılmasıyla Karaman Beyliği hakim olmuştur. Osmanlı ile Karaman Beyliği arasında uzun süredir devam eden çatışmanın tarihi Fatih dönemine kadar varmaktadır. İki Türk beyliğinin mücadelesi Osmanlı Devleti'nin bölgeye hâkim olmasıyla sona ermiştir (Dinleyen, 2012).

Uzun yıllar "Muşkara" olarak anılan bugünkü Nevşehir, Osmanlı İmparatorluğu'nun Sadrazamı Damat İbrahim Paşa'nın anısına 1718 yılında adını Nevşehir olarak değiştirmiş ve burayı il haline getirmiştir. Patrona Halil isyanı sırasında Damat İbrahim Paşa'nın ölmesi üzerine Damat İbrahim'in Nevşehir'i il yapma talebi olumsuz olmuştur. Nevşehir ancak 1954 yılında Nidai Vilayetinden ayrılarak il olmuştur (Dinleyen, 2012).

### 2.2. Kapadokya Bölgesinin Coğrafi Özellikleri

Kapadokya'da Dördüncü Jeolojik Çağ'dan sonra şiddetli yağışlarla yüzey erozyonu gerçekleşmiştir. Aynı zamanda vadi genişledi ve yamaçlardan aşağı akan su baskınları nedeniyle rüzgâr, tüflerden, tuf gruplarından, sütunlardan, kısacası insanların peribacaları, kalpaklı kaya, gelin kayaları şeytan kayası olarak bahsedilen meydana çıkmıştır. Erozyonla oluşan peribacalarının çeşitleri; şapkalı, mantar, koni benzeri sivri uçlu ve sütunlu kayalardır (Öcal, 2000).

Peribacalarının yanında vadi yamaçlarında yağmur damlacıklarının çarpmasıyla oluşan ilginç kıvrımlar da bölgeye eşsiz bir karakter eklemektedir. Bazı yamaçlarda göze çarpan renkler lav katmanlarındaki sıcaklık farklılıklarından dolayı olmaktadır. Çünkü her katman patlama dönemlerini yansıtmaktadır. Bu oluşumları Uçhisar, Ortahisar, Göreme, Guruder, Çavuşin, Meskendil, Kızılsuk ve Pankali vadilerinde görmek mümkündür (Gülyaz, 2012).

Ana volkanik yayla alanı ve antik plato alanı olarak tanımlanan alanda Kapadokya mimarisinin yüzey şekillerinin ve volkanik taşlardan oluşan sivil mimarinin örnekleri görülebilmektedir. Erciyes, Hasan ve Melendis dağlarından kaynaklanan volkanik kaya oluşumlarını ve bu kaya oluşumlarının sunduğu mimariyi, yapım

teknikleri ve malzeme olanakları açısından barındıran bölgeyi Kapadokya bölgesi olarak tanımlamak doğrudur. Kapadokya bölgesine özgü bu mimari farklılıklar ağırlıklı olarak Nevşehir ve çevre yerleşimlerde görülürken, bu farklılığın etkisi Kayseri'nin Taras, Hacılar, İnse Su ve Melikachi bölgelerinin yanı sıra Niğde kent merkezinin kuzeyi ve çevre yerleşimlere de yayılmaktadır (Şahin, 2014).

### 2.3. Kapadokya Bölgesinin Destinasyon Olarak Seçilmesinin Nedenleri

Kapadokya bölgesini destinasyon şeklinde seçmenin pek çok sebebi vardır. Birincisi, tarihsel olarak bölgeden geçen ipek ticaret yolları, Doğu Akdeniz ve Güneydoğu Anadolu bölgelerinin diğer gelişmiş olan şehirlere bağlanmasında önemli rol oynamıştır. Bir diğer sebep ise Kapadokya bölgesinin jeolojik yapısı sonucundaki özellikleridir. Kapadokya bölgesinde doğal olarak meydana gelen peribacalarına dünyanın başka hiçbir yerinde rastlanmamasıdır.

Kapadokyada tarihsel olarak pekçok medeniyet ve dinden insanların zamanında yaşadığı yer olduğu için her medeniyetten ve her dinden eserlere ev sahipliği yapmaktadır. Bu nedenle insanlar burayı tarihini öğrenmek ve dini inançları nedeniyle kutsal sayılan bir yeri gezmek ve vakit geçirmek için bir destinasyon şeklinde görmektedirler. Özellikle Hristiyanlık bakımından kutsal sayılan pek çok kiliseyi içerisinde bulundurmaktadır.

Türkiye geneli düşünüldüğü zaman deniz turizminin hâkim olduğu destinasyonlarda turistik faaliyetler çoğunlukla yaz mevsiminde yapılmaktadır. Kapadokya bölgesinde alternatif turizm çeşitliliğinin varlığı, turistik faaliyetlerin yalnızca yaz mevsiminde değil bütün bir yıl yapılmasına olanak sağlamaktadır. Bu durum turizm ürünleri sağlayan firmaların daha uzun hizmet saatleri sunmasına olanak sunmaktadır.

Kapadokya bölgesinde turizmin yükselişi ve gelişimi 1960'lı yıllara kadar uzanmaktadır. Ürgüp, Göreme, Ortahisar, Avanos, Kemaklı, Soğanlı Vadisi, Derinkuyu, İhlara Vadisi ve çevresi 1973 yılında "Turizm Gelişim Bölgesi" şeklinde belirlenmiştir. Kapadokya, ziyaretçilerine "kültür turizmi, inanç turizmi, kış turizmi, binicilik, doğa turizmi, vadi turizmi ve konferans turizmi" gibi alternatif turizm ürünleri sunan eşsiz bir bölge olması nedeniyle destinasyon şeklinde kendini göstermesinde önemli bir konuma sahiptir (Temizkan, 2005: 34).

### 2.4. Kapadokya Bölgesinin Alternatif Turizm Çeşitliliği

Bölgenin turistik yerleri, güzellikleri ile turistler için bir tabiat harikasıdır. Bölgede birçok farklı alternatif turizm çeşidinin bulunması nedeniyle bu bölge hem yabancı hem de yerli turistlerin tercih ettiği bir turizm alanıdır. Balon turlarından binicilik turlarına, safarilerden termal turizme kadar pek çok turizm türünü bu bölgede çoğu yerde görmek normaldir. Nevşehir'in turizm geliri her daha da artmaktadır. Özellikle kültür ve doğa turizmi bakımından Türkiye'nin ünlü turistik destinasyonlarından biridir. Tarihi ve kültürel değeri yüksek olan bölge, insanlık tarihinin çeşitli dönemlerinde öncü özellikler taşıyor ve çeşitli uygarlıkların izlerini barındırmaktadır (Nevşehir İl Kültür Turizm Müdürlüğü).

#### 2.4.1. Balon Turizmi

Balon turizmi Kapadokya bölgesine gelen yerli ve yabancı turistlerin en çok talep ettiği turizm türlerinden biri olan bir turizm ürünüdür. Bu tur türüyle ziyaretçiler Kapadokya'nın eşsiz doğal manzarasını havadan hayranlıkla izleme fırsatı bulmaktadırlar.

Kapadokya bölgesi ülkemizde sıcak hava balon turizmini başlatan ilk bölgelerden biri olup, sıcak hava balon turizmi etkinliklerinden bağımsız düşünülemez. Bölge açısından değer taşıyan tüm tanıtım ve pazarlama faaliyetlerine sıcak hava balonları ve peribacaları da dahil edilmektedir. Her iki unsur da alanla uyumludur. SHGM istatistiklerine göre, 2019 yılında sıcak hava balonu gezilerine katılan kişi sayısı 537 bine ulaşmıştır ve bu gezilerin turizm sektörüne 70 milyon euroluk katkısı olmuştur. Balon turları genellikle sabahın ilk ışıklarıyla, bazen de talebin yoğun olduğu akşam gün batımında gerçekleştirilmektedir (Özen, 2019).

#### 2.4.2. Bağ ve Şarap Turizmi

Kapadokya bölgesi, geçmiş senelerden günümüze üzüm bağlarıyla Türkiye'nin bağcılık yapılan bölgelerinden biridir. Bu bölgede yetişen üzümün kalitesinin mükemmel olmasının nedeni bölgenin tüflü toprağıdır. Bunun sonucunda bölgede üzüm yetiştiriciliği ve şarap üretimi oldukça ileri düzeydedir. Bölgedeki irili ufaklı şarapçılık işletmelerinin neredeyse tamamı bölgede yetişen üzümleri kullanılmaktadır. Gastronomi zenginliğinden dolayı turistler bölgede hazırlanan şarapların üretim sürecine dahil olup daha sonra bu ürünleri deneyerek benzersiz

turistik faaliyetlerde bulunmaktadır. Sonuç olarak bu durumdan hem yerel halk hem de bölge turizmi yararlanmaktadır (Katlav vd., 2019)

Bölgenin şarap geçmişi çok eskilere dayanmaktadır ve bölgeye entegre olan yeraltı şehirlerinde üzüm çiğneme alanları ve şarap hazırlama alanları vardır. Kapadokya, şarap turizmi bakımından oldukça verimli ve turizmin gelişmesine olanak sağlayan başlıca bölgemizdir (Türkben vd., 2012).

### 2.4.3. Atlı Doğa Turizmi

Kapadokya bölgesinin adıyla bütünleşen turizm faaliyetlerinden biri de atlı doğa turizmidir. Nevşehir bölgesinde turistik faaliyetlerin artması nedeniyle bölgede atlı turizme yönelik girişimlerde de artış yaşanmaktadır. Talebe göre saatlik, günlük veya haftalık olarak düzenlenen turlar, ziyaretçilerin özellikle araçla ulaşamayan vadilerde bölgenin kültürel, doğal ve tarihi dokusunu at üstünde gezerek eşsiz bir turistik aktivite gerçekleştirmesine olanak tanınmaktadır (Hazar, 2007).

Binicilik turları çoğunlukla gruplar halinde belirli rotalarda tur düzenleyen çiftlikler tarafından deneyimli biniciler eşliğinde gerçekleştirilmektedir. Farklı bölgelerde bu turistik aktiviteyi sunan farklı at çiftlikleri bulunmaktadır.

### 2.5.4. Termal ve Sağlık Turizmi

Bölgesel turizm çeşitliliğine bir katkı sağlayan unsurlardan biri de termal ve sağlık turizmidir. Türkiye, termal enerji kaynakları bakımından küresel ölçekte yedinci sırayı, Avrupa'da ise birinci sırayı işgal etmektedir. Bireylerin seyahat tercihlerindeki evrim, bu iki ayrı turizm kategorisinin birleşimine yol açmıştır. Bu tür turizm Kozaklı ilçesinde de oldukça fazladır. Bölgede çok sayıda otel ve motel bulunmaktadır. Burası yılın her döneminde yerli turistlerin genel olarak talep ettiği bir alandır. Alman Kaplıcalar Birliği'nin sınıflandırmasına göre Kozaklı Kaplıca, sodyum, kalsiyum ve klor içeren, A ve C Grubu şifalı sular arasında yer almaktadır. Su sıcaklığı 93°C ile 27°C ile arasında değişim göstermektedir (Nevşehir Termal Turizm Raporu, 2014).

Kaplıcalar sağlık turizmi açısından çok değerli olup, son senelerde gerçekleştirilen yatırımlarla Kozaklar bölgesi büyük ilerleme kaydetmiştir. Nevşehir'in Kozaklı ilçesindeki turistik konaklama tesisleri, 6.972 yatak kapasiteli 26 sağlık turizmi tesisleriyle Türkiye'nin en önemli termal sağlık merkezlerinden biridir. Termal ve sağlık turizminin geliştirilmesi ve bölgenin kalkınması amacıyla bölgede 170 yatak kapasiteli "Kozaklı Fizik Tedavi Hastanesi" yapılmıştır (Kozaklı Termal Turizm, 2020).

### 2.5.5. İnanç Turizmi Açısından Kapadokya

Tarihsel olarak Kapadokya bölgesindeki çeşitli medeniyetler Hıristiyan inancı için birçok kutsal mekân inşa edilmiştir. Bu durum sebebiyle Hıristiyan dini bakımından önemli birçok eseri içinde barındırmaktadır. Bu konuda dikkat çeken bazı mekanlar şunlardır:

**Tokalı Kilise:** Bölge düşünüldüğü zaman oradaki en büyük kaya kilisesi olarak bu kilise karşımıza çıkmaktadır. Bu kilise dört mekândan oluşmaktadır. Eski Tokalı Kilisenin tarihi 10. yüzyılın başlarına kadar uzanmaktadır ve bugün Yeni Tokalı Kilisenin girişidir. Kilise, nefi ve beşik tonozlu bir mimariye sahiptir. Kilisenin içerisinde, bekaretin sembolü olarak kabul edilen unsurlar, şarap mucizeleri, aziz tasvirleri, kutsal ziyaretler, müjdelere, Beytullahim'e yapılan hac yolculuğu, İsa'nın tapınağa sunuluşu, doğuşu, masum çocukların trajik katliamı, Mısır'a kaçış, üç müneccime tapınma, İsa'nın Vaftizci Yahya ile buluşması gibi dini temalar işlenmiştir. Kilise, Konsil, Çarmıhtaki İsa, Kana'da Düğün, Somun ve Balıkların Çoğaltılması, Körlerin İyileştirilmesi, Lazarus'un Dirilişi, Son Akşam Yemeği, İhanet, Platus'un önünde İsa'nın Golgota yolundaki durumu, İsa'nın gökten inişi gibi bir dizi dini sahneyi resmetmektedir.

**Elmalı Kilise:** İç avluya kiliseye girilen dar bir koridordan geçilmektedir. Kayadan oyulmuş, tüm unsurları kare bir mekânda yer alan, kubbeli, 4 sütunlu bir yapıdır. Vadiye açılan pencereler iç mekânı aydınlatmaktadır. Yer yer soyulmuş fresklerin altındaki duvarlarda geometrik ve haç desenleri vardır. Orta apsiste üç figür yer almakta olup, Meryem Ana, Vaftizci Yahya ve tahtta oturan İsa sahneleri bulunmaktadır. Orta kubbede İsa'nın, ikinci küçük kubbede ise Başmelek Cebrail'in tasvirlerine rastlanmaktadır. Bu alandaki dikkat çekici bir şekilde korunmuş olan duvar resimleri, özellikle İsa'nın vaftiz edilmesi ve çarmıha gerilme sahnelerini içermektedir. Ayrıca, kemerde yer alan figürlerin, İmparatorluğun önde gelen üyeleri veya kilise otoriteleri olabileceği düşünülmektedir. (Ayyıldız, 1990).

**Aziz Basil Şapeli:** Göreme Açık Hava Müzesi'nin giriş bölgesinde konumlanmıştır. Şapel, sütunlarla ayrılmış mezar çukurlarını içermektedir. Nef, geniş beşik tonozlu bir yapıya sahiptir ve üç apsise sahip dikdörtgen bir formu benimsemektedir. Dikdörtgen nefin sol tarafında büyük bir apsis ve iki küçük apsis bulunmaktadır, toplamda üç apsis mevcuttur. Kilise 11. yüzyılda inşa edilmiştir. Hertz kilisesinin ana apsisinde. Kuzey duvarında İsa'nın, Aziz Theodore'un at sırtında portreleri, ön yüzünde ise Hz. Muhammed'in portresi bulunmaktadır. Duvarda Meryem Ana ve Bebek İsa, güney duvarında ise ata binen ve ejderhalarla savaşan Aziz Demetrius ve Aziz George'un yanı sıra iki aziz tasviri mevcuttur.

**Karanlık Kilise:** Adından da anlaşılacağı gibi kiliselerin en karanlık ve derinliği en fazla olanıdır. Girişteki küçük pencereler neredeyse hiç ışık geçirmediği için buraya Karanlık Kilise denmektedir. Bu nedenle duvar resimlerinin renkleri net bir şekilde parlaktır (Öcal, 2000). Karanlık Kilise'nin bulunduğu kaya bloğunun tabanında isimsiz sütunlu bir kilise bulunmaktadır. Buranın ana apsis, zamanla diğer kiliselerde yıkılan bir bölmeye sahiptir. Kayaya oyulmuş bölücünün üç kemeri vardır. Girişin sol duvarındaki beş daireden oluşan haç deseni bölgede tektir (Ayyıldız, 1990).

**El Nazar Kilisesi:** Bu kilise ismini taşıdığı vadide yer almakta olup 12. yüzyılda yapılmıştır. İsa'nın çocukluk halleri bir nevi sahnelenmiştir. Kilise T planlıdır ve kemerler madalyonlarla süslenmiştir (Ekici, 2014).

**Paşabağları ve Aziz Simeon Hücresi:** Göreme Avanos Yolu'nun sağ tarafında, ana yola 1 km mesafede yer almaktadır. Bir zamanlar Rahipler Vadisi olan bu bölge şimdi Paşabağı olarak anılmakta ve eşsiz peribacalarıyla doludur. Birden fazla başlı olan bazı peribacalarının iç kısımlarına oyulmuş şapeller ve oturma alanları bulunmaktadır. Üç peri bacasından birinde Saint Simon adına inşa edilmiş bir şapel bulunmaktadır. Hücre girişi ters haçlıdır ve dar bir bacadan girilmektedir. İçeride uyumaya, oturmaya ve sobaya ışık sağlayacak pencereler bulunmaktadır (Gülyaz, 2012).

**Çarıklı Kilise:** Bu kilise, Göreme Açık Hava Müzesi'nin sınırları içinde, yamacın sol tarafında konumlanmış bir manastır topluluğuna aittir. Kilise, batıda köşe boşluğu olmayan, iki serbest destekli ve kapalı Yunan haçı düzlemi sunan bir plan düzenine sahiptir. Kilise, manastır avlusundan yüksekte olduğundan binaya sonradan hareketli bir demir merdiven eklenmiştir. Bölgedeki kiliselerin yaş farklılıkları Çarıklı kilise için de geçerlidir. Bina 11. yüzyılın ortaları, 12. yüzyılın sonları ve 13. yüzyılın başlarından kalmadır (Atak 2019).

**Kılıçlar Kilisesi:** Göreme Açık Hava Müzesi'ne yaklaşık 600 metre mesafede konumlanan bu kilise, kuzeydoğu yönünde bulunmaktadır ve adını bulunduğu coğrafi bölgeden almaktadır. Kapalı Rum haçı planlı olan kilisenin ana apsis, sunaktaki tapınak panelleri ile kuzeydoğu ve güneybatı sütunları maalesef hasar görmüştür. Giriş holünün ve kubbenin batı kısmı büyük ölçüde yıkılmıştır. Kılıçlar Kilisesi'nin tarihi 9. yüzyılın sonları ve 10. yüzyılın başlarına tarihlenir. Güney lades kemiğinin güney duvarının üst kısmındaki sahne, kilisedeki diğer sahneler gibi koyu kırmızı bir bordürle çerçevelenmiştir. Oluşturulan resimde hiçbir ayırım yapılmadan körlüğün tedavisine ilişkin sahne ile birlikte tasvir edilmiştir (Atak 2019).

**Barbara Kilisesi:** Adını, babası Dioscorus tarafından Hıristiyan etkisinden uzak tutmak için hapsedilen bir Nikomedia azizinin adından almaktadır. Barbara, zorluklara rağmen Hıristiyanlığın taleplerini karşılamayı başarmış ama babası Dioscorus tarafından başı kesilmek suretiyle öldürülmüştür. Olayın ardından Dioscorus'a yıldırım çarptı ve o gün havanın açık olmasına rağmen hayatını kaybetti. Bu kilise 11. yüzyılda bu Hıristiyan şehit azizinin anısına inşa edilmiştir. Yapı olarak Çarıklı Kilise'ye çok benzemektedir. İçi haç planlı olup ortası kubbelidir. Kubbede taht üzerinde İsa tasvir edildiğinde resim doğrudan kayanın üzerine doğal kırmızı renkte boyanmıştır. Ayrıca kilisenin kuzey duvarında Aziz George ve Aziz Theodore at sırtında ejderhayla savaşırken tasvir edilmiştir (<https://tr.wikipedia.org/wiki/G/>)

**Yılanlı Kilise:** Bu kilise, uzun koridoru ve alçak tonozlu tavanı ile karakterize edilen bir yapıdır. Adını, Aziz George ve Aziz Theodore'un duvarındaki bir tabloda alır, bu tabloda yılan veya ejderhayı öldüren sahneler resmedilmiştir. Kilisenin içinde aynı zamanda, İmparator Konstantin ve annesi Aziz Helena'nın tasvirleri de yer almaktadır. Kilisedeki diğer dikkat çekici tablolardan biri ise Aziz Onuprius'a aittir. Aziz Onuprius, Mısır'ın Thebes kenti yakınlarındaki çölde izole bir yaşam sürmüş ve genellikle uzun gri sakalı ve tek giysisi olan defne yapraklarıyla tasvir edilmiştir. (<https://tr.wikipedia.org/wiki/G/>)

## 2.6. Kapadokya'nın Mutfağı

Kapadokya mutfağı, geleneksel pişirme yöntemleri (taş fırınlar, kil fırınlar), kullanılan aletler, ekmekler ve hamur işleri göz önüne alındığında eşsiz bir mutfak olarak nitelendirilebilir (Yorgancı ve Buyruk, 2019).

**Testi (Çömlek) Kebabı:** Tandır kültürünün bölgesel etkisiyle birleşen bu yemek, tandırın yanı sıra odun fırınlarında ve açık ocaklarda da hazırlanabilir. Temel bileşeni doğranmış dana eti veya koyun etidir. Diğer malzemeler arasında domates, yeşil biber, sarımsak, yağ, tuz ve karabiber bulunur. Ağzı biraz geniş olan bir tencereye veya kavanoza malzemeleri koyduktan sonra ağzını patatesle kapatın. Hatta testi kebabı, Yozgat Belediyesi tarafından Türk Patent Kurumu nezdinde "Yozgat Yöresi Yemeği" olarak tescil edilmiştir. Ancak, testi kebabı sadece Yozgat bölgesine özgü bir yemek olmanın ötesinde, Anadolu'nun diğer şehirlerinde de yaygın olarak hazırlanan bir yemektir. Kültür ve Turizm Bakanlığı'nın kulturportali.gov.tr sayfasında gerçekleştirilen araştırmada, Yozgat testi kebabına özel bir vurgu bulunmamakta olup, sadece "Nevşehir testi kebabı" ve "Burdur testi kebabı" tariflerine de yer verilmiştir. (Buyruk vd., 2017: 150). Avanos bölgesi Türkiye'nin önemli çömlek üretim merkezlerinden biri olduğundan bu bölgede üretilen çömleklerden yapılan testi kebablarının son yıllarda Kapadokya'nın simgesi haline geldiği söylenebilir.

**Nevşehir Tava:** Bu yemeğin hazırlanmasında kullanılan sebzeler, özellikle domates, biber, patlıcan, sarımsak gibi, özenle doğranarak bir tepsi üzerine düzenlenir. Ardından doğranmış et, tercihen kuyruk yağı, tuz ve çeşitli baharatlar eklenir. Sebzeleri ve etleri fırında orta ateşte yumuşayana kadar pişirilir ve sıcak olarak servis yapılır. Nevşehir çömleği, adını çömlek adı verilen, çok derin olmayan ve çeşitli boylarda olan ve bu yemeğin pişirilmesinde kullanılan geleneksel toprak çömlekten almaktadır (İlhan vd., 2016: 756).

**Ayva Dolması:** Et ve meyveden oluşan bu yemekte ayva önce ikiye bölünür, içi özenle oyulur, ardından kabak ve kıyma karışımıyla doldurulur. Ayvaları tepsiye dizip fırında pişirin. Pişerken biraz su ve pekmez eklenir. Pekmezin diyetin vazgeçilmez bir parçası olduğu söylenebilir. Narenciye dolması, günümüzde unutulmaya yüz tutmuş bölgenin eski ve özgün yemeklerinden biridir (Nevşehir Belediyesi, 2021:49).

**Bitirgen Kayısı Yahnisi:** Yörede "bitirgen" adı verilen bir kilo kuru kayısı, derin bir kapta üzerini kaplayacak kadar su ile ıslatılır. Öte yandan 500 gr. Eti küp şeklinde doğrayıp tencerede su ilave ederek pişirilir. Bir sonraki aşamada pişen etler tereyağında kızartılır. Islak ve yumuşak olan kayısıların çekirdekleri çıkarılıp içi parmakla düzleştirilir. Yine ayrı bir kapta 150 gr. Pirinçler, yeterli su ilavesiyle bir tencerede haşlanır ve ardından kayısıların üzerine düzenlenir. Ayrı bir kap içerisinde 250 gram pekmez, bir bardak su, tuz, fesleğen ve karanfiller eklenerek 1-2 dakika boyunca pişirilir. Önceden hazırlanan kayısılar, bu karışıma eklenir ve daha önce pişirilmiş et ile birleştirilir. En son olarak, pekmez suyu süzülerek elde edilen sıvı, et karışımının üzerine dökülerek çeyrek saat boyunca kaynatılır. Yemek, sıcak veya soğuk olarak servis edilebilir ancak sıcak servis, lezzetin daha iyi anlaşılmasını sağlar. (Yorgancı, 2018).

**Kuru Salatalık Dolması:** Bu yemeği hazırlamak için ince doğranmış soğanlar, kızgın yağda kavrulur. Ardından bu kavrulmuş soğanlara domates salçası eklenerek bir süre daha kavrulur ve akabinde pirinç ile bulgur karışımı eklenir. Takip eden aşamada, tuz, karabiber, dereotu ve nane gibi baharatlar ilave edilir. Kurutulmuş salatalıkların suyu boşaltılıp sıcak suda bekletilerek yumuşaması sağlanır. Soğuduktan sonra, hazırlanan karışım ile salatalıklar doldurulur ve ağızları yukarı bakacak şekilde bir tencereye yerleştirilir. Salatalıkların üzeri isteğe bağlı olarak bir parça domatesle de kaplanabilir. Düşük ateşte 30 dakika pişirildikten sonra yemek servise sunulur. (Örgün vd., 2020).

**Ağ Pakla (Kuru Fasulye):** Bölgenin önde gelen yemeklerinden biridir. Yöre halkı "ak bakla" adını verdiği fasulyeyi, yemeğin adı da buradan gelen ağ pakla olarak telaffuz edmektedir. Ağ sürahisi önce kaynatılır, ardından suyu boşaltılır. Daha sonra domates, biber ve soğanı ekleyin. Daha sonra kemikli etler ilave edilerek pişirilir. Yemek, kil çömleklerde tandır ateşinde yaklaşık 3-4 saat pişerek sofraya servise hazır hale gelir (Nevşehir Belediyesi, 2021).

**Kulaklı Manti:** Un, tuz ve yumurta eklenerek elde edilen karışım, belirli bir miktar su ilavesiyle yoğrulur ve oluşturulan hamur dinlenme sürecine bırakılır. Bu dinlenme aşamasının ardından hamur topları merdane yardımıyla açılarak küçük karelere dönüştürülür. İç malzeme olarak kullanılan kıyma, soğan, maydanoz, karabiber ve tuz, açılan hamur kareleri içerisine yerleştirilir ve üçgen bir yapı oluşturacak şekilde kapatılır. Hazırlanan bu üçgen mantarlar, kaynayan suya eklenerek pişirilir. Servis aşamasında tabaklara dizilen mantarların üzerine sarımsaklı yoğurt, salça ve kavrulmuş tereyağı eklenir. (İlhan vd., 2016).

**Hamursuz Ekmeği:** Avanos ilçesi başta olmak üzere birçok firma tarafından üretilip satışı gerçekleştirilen bu pasta, un, tuz, yumurta ve yoğurttan elde edilen bir hamur kullanılarak hazırlanmaktadır. Yumurta büyüklüğündeki hamur bezeleri, merdane kullanılarak açılır. Daha sonra hamur rulo şeklinde sarılır ve yağlanmış, unlanmış fırın tepsisine halka şeklinde yerleştirilir. Üzerine yumurta sürülerek çörek otu, bazen de susam serpilir ve fırında pişirilir. (Örgün vd., 2016: 435).

**Bulamaç:** Kısa sürede hazırlanabilen bir tatlı çeşidi olan bu tarif, yeterli miktarda su ve unun topaksız bir kıvam alana kadar homojen bir şekilde karıştırılmasını içerir. Elde edilen karışıma pekmez eklenir ve ocak üzerinde muhallebi kıvamına ulaşıncaya kadar pişirilir. Pişirme işlemi tamamlandıktan sonra ocak kapatılarak tereyağı eklenir ve tereyağı tamamen eriyene kadar karıştırma işlemine devam edilir. Genellikle bu tatlı, servis öncesinde üzerine serpilmiş ceviz ile sunulmaktadır. (Örgün vd., 2016: 433).

**Dolaz (Şekerli Helva):** Süspansiyon yumurta, un ve sudan hazırlanır. Bu süspansiyon pembeleşinceye kadar yağ ile karıştırılır. Daha sonra bir kâseye boşaltılır ve üzerine pekmez ilave edilir (İlhan vd., 2016:757). Dolaz hazırlamanın bir başka yolu ise; yumurta ve un, süt veya su ile karıştırıldıktan sonra kızgın yağa dökülerek pişirilir; Düz bir bakır tabağa yerleştirildikten sonra üzerine şeker veya bal serpilir (Nevşehir Belediyesi, 2021:49).

**Aside (Pekmezli Helva):** Bu da bölgesel geleneklere uygun olarak pekmez kullanılarak hazırlanan diğer bir tatlı çeşididir. İlk aşamada, su, un, tereyağı ve bir bardak pekmez, topak oluşturmayacak şekilde özenle karıştırılarak tencerede bir araya getirilir. Bu aşama sırasında, ısı kontrolü yapılarak ocağın ateşi düşük seviyede tutulmalıdır. Ardından, fırın kapısı açılarak karışımın sürekli karıştırılması sağlanır. Karışım koyulaşır ve kaynama noktasına yaklaştığında, yavaşça bir bardak daha pekmez eklenir ve bu karışım tepsiye dökülerek düzenlenir. Tatlı, soğuduktan sonra dilimlere ayrılıp, cevizle süslenerek servise sunulur. (İlhan vd., 2016: 757).

**Çömlek Fasulyesi:** Fasulyeleri odun ateşinde haşladıktan sonra et ile beraber çömleğe aktarılır. Önce köz üzerinde kısa bir süre pişirilir, ardından soğanları ve salça eklenip pişirme işlemine devam edilir.

**Düğü çorbası:** Düğü bir nevi ince bulgurdur. Düğü, tereyağı ve domates sosu ile kavrulur ve su eklenir çorba hazırlanır. Bu çorba Kapadokya'daki turistler arasında da çok popülerdir.

**Tandırda Bulgur Çorbası:** Bölgede en çok pişirilen çorbalardan biridir. Geleneksel olarak tandır fırınında yavaş yavaş ve uzun süre pişirilerek hazırlanır. Akşam yemeğinin mezesi olan bu çorbadan sonra kalan yemekler servis edilir.

Bir avuç pilavlık bulgur, bir avuç pişmiş nohut, yarım avuç mercimek ve iki orta boy patates bir tencereye koyulup yarısına kadar suyla doldurulur. Patatesleri tandıra yerleştirdiğimiz tencerede birkaç saat (tandırın sıcaklığına bağlı olarak) pişirdikten sonra tenceden alıp başka bir kâsede ezip tekrar tencereye döküyoruz. Bu arada bir tavada zeytinyağını, salçayı, domatesi ve isteğe göre kuru naneyi kızartılır, üzerine sosu dökün ve tencereye dökülür. Çorbanın kıvamına uygun suyu tencereye dökün, kapağını kapatıp pişirilir. Çorba öğleden sonra hazırlanır ve akşam yemeğine kadar tandır ocağında yavaş yavaş pişirilir. Alev söndükten sonra tandır fırınında pişirildiğinde dahi sıcaklığını korur (Karaaslan, 2003).

**Patates Çorbası:** Patatesler, önce haşlanıp ardından soğuduktan sonra kabukları soyulur ve doğranır. Aynı bir tencerede salça, su ve tuz kaynatılır. Rendelenmiş patateslere, kaynamakta olan bu karışımdan bir yemek kaşığı eklenip ısıtıldıktan sonra patatesler, çorbanın olduğu tencereye katılır. Çorba, karıştırılarak pişirilir, tamamen alındığında servise sunulmak üzere bekletilir. Aynı bir kaptan nane ve kırmızı toz biber, tereyağında kavrulur; ardından elde edilen karışım, çorbanın üzerine dökülerek bir süre daha pişirilip sonrasında servis edilir. (Güldemir ve Işık, 2012).

**Zelderi Çorbası:** Malzeme olarak yarma, zelder (kayısı), ceviz, kayısı çekirdeği, fıstık içi ve pekmez kullanılarak hazırlanan bu yemek genellikle bakır bir tencerede pişirilir. El değirmeninde öğütülen iki avuç toz buğday, tencereye eklenir. Bir avuç zelderi, az miktarda cevizi, zelderi çekirdeğini, yer fıstığını ve suyu ilave edilerek pişirilir. Pişen malzeme, bir kase pekmezin üzerine dökülür, uygun miktarda su eklenerek çorba kıvamına getirilir ve pişirmeye devam edilir. Piştikten kısa bir süre sonra ocaktan alınarak servise sunulur. Zelderi çorbası tatlı bir karaktere sahip olduğundan dolayı yemekten sonra meze veya tatlı olarak servis edilebilir. (Karaaslan, 2003)

**Pancar Çorbası:** Çorbanın temel bileşenleri pancar, bulgur, süt ve tuzdur. Pancarlar soyulur, yıkanır ve incelikte doğranır. Belirli bir miktar bulgur ve su eklenerek karışım pişirilir. Çorba kaynamaya başladığında, bir miktar süt ve tuz ilave edilir. Sonrasında eklenen süt, çorbanın karakterine farklı bir tat kazandırır. Pancar ekiminin azalmasıyla birlikte bu çorba, bölgede daha az yapılan bir yemek haline almıştır. (Güldemir ve Işık, 2012).

Bölgenin diğer geleneksel çorbalari; Tuzlu ayrıncaya pişmiş kaz buğdayının eklenmesiyle hazırlanan ve soğuk olarak yenen katma çorbası, haşlanmış bulgura veya bulgura süt katılarak pişirilen sütlü çorba ve kurutulmuş tarhanadan kısa hazırlanan tanna çorbasıdır (tarhana) (Güldemir ve Işık, 2012).

## 2.7. Kapadokya Turizmi ile İlgili Literatür Taraması

Doğan N.Ö. (2015) Kapadokya'da faaliyet gösteren balon işletmelerinin etkinliğini ölçmeyi amaçladıkları çalışmada, balon işletmelerinin bölge turizminin vazgeçilmez unsurlarından biri haline geldiğini, bu nedenle önemli rol oynayan bu işletmelerin etkinliğinin ölçülmesinin önemli olduğunu belirtmiştir. Bölge ve ülke turizminde Analiz sonucunda etkin/etkin olmayan işletmeler belirlenir. 22 şirketten 8'i aktif olarak CCR modellerini kullanıyor; 22 firmadan 16'sının BCC modellerini etkin olarak kullandığı tespit edilir. Bu aynı zamanda CCR modeline sahip 14 kuruluşun ve BCC modeline sahip 6 kuruluşun etkin olmadığı anlamına da gelir

Çokal Z. (2015), yaptığı çalışmayla; Amacı, profesyonel bir turist rehberinin, kültür elçisinin, turistlere aktarılan kültürel değerlere ve turistler tarafından algılanmasına katkısını belirlemektir. Araştırma sonucunda profesyonel bir turist rehberinin kültür elçisi olarak kültürel değerlerin korunmasına, tanıtılmasına ve kültürlerarası etkileşime katkı sağladığı tespit edilmiştir. Araştırmanın bir diğer sonucu ise turist algısının esas olarak uyruğa, eğitim düzeyine ve gelir düzeyine bağlı olarak değiştiğidir.

Umur M. (2015) çalışmada, bölgeyi ziyaret eden turistlerin destinasyon imajı ve kişilik algısının ziyaretçi memnuniyeti ile gelecekteki ziyaretçi davranışları üzerindeki etkilerini araştırmayı amaçlamıştır. Araştırma sonuçlarına göre, Kapadokya Bölgesi'ne gelen yabancı turistler arasında destinasyon imajının ve destinasyon kişiliği algısının yüksek ve olumlu olduğu belirlenmiştir. Bunun yanı sıra, destinasyon imajı ile destinasyon kişiliği arasında misafir memnuniyeti ve gelecekteki davranışlar açısından anlamlı bir ilişki olduğu gözlemlenmiştir. Ayrıca, destinasyon imajı ve destinasyon kişiliği algılarının misafir memnuniyetini ve gelecekteki davranışları etkilediği bulunmuştur

Gümüş G. (2019), çalışmada Kapadokya bölgesindeki inanç turizmi kaynaklarının turizm ürünlerinin çeşitlendirilmesi açısından değerlendirilmesini amaçlamıştır. Yapılan testler sonucunda elde edilen bulgulara göre; Kapadokya'yı ziyaret eden çoğunluk kadın, bekar, orta yaşlı, devlet çalışanı veya yetkili pozisyonunda olan, İslam ve Hıristiyan inancına sahip, İstanbul'da yaşayan ve İtalya'dan gelen yabancılardan oluşmaktadır. Ziyaretçilerin genellikle ziyaretlerinden memnun kaldıkları ve döndüklerinde bu deneyimlerini çevrelerine önermeyi amaçladıkları belirlenmiştir. Kurşunlu Camisi ve Karanlık Kilise'nin bölgede en çok ziyaret edilen yerler olduğu gözlemlenmiştir. Ayrıca, bölgenin inanç turizmi açısından zengin bir potansiyeli barındırdığı, inanç turizmi için özel olarak düzenlenmiş alanların tarihi ve kültürel özelliklere sahip olduğu, Kapadokya halkının diğer kültür temsilcilerine karşı olumlu bir tutum sergilediği tespit edilmiştir.

Çanakçı S. ve Birdir K. (2019) tarafından gerçekleştirilen çalışma, Kapadokya'ya gelen yabancı turistler arasındaki yemek çeşitliliği arayışını belirlemeyi ve bu çeşitlilik arayışının turistlerin özelliklerine göre nasıl farklılık gösterdiğini ortaya çıkarmayı amaçlamıştır. Araştırmaya katılan yabancı turistlerin yemekte çeşitlilik arayışının iki temel boyutta gerçekleştiği belirlenmiştir: "merak" ve "deneyim". Çeşitlilik arayışı boyutları ile "yaş grupları" arasında yapılan varyans analizi sonuçları, "merak" ve "deneyim" boyutlarının turistlerin yaş gruplarına göre anlamlı farklılıklar gösterdiğini ortaya koymuştur. Ayrıca, turistlerin "mesleki durumu" ve "eğitim düzeyi"ne göre "deneyim" boyutunda önemli ölçüde farklılık gözlemlendiği belirlenmiştir.

Özgen O. (2000), 300 turist arasında, turistlerin fiziksel motivasyonları, kültürel motivasyonları, kişilerarası ilişki kurma motivasyonları ve prestij/statü motivasyonları dahil olmak üzere genel seyahat motivasyonlarını, memnuniyet düzeylerini ve seyahat arasındaki ilişkiyi araştırmak için bir çalışma yapmıştır. Motivasyon ve memnuniyet düzeyi. Sonuçlar, kültürel seyahat motivasyonlarının yurt içi veya yurt dışı seyahat etme durumuna ve gelir durumuna göre değiştiğini, seyahat memnuniyetinin seyahatin yurt içi veya yurt dışı olmasına göre değiştiğini, memnuniyet ile kültürel seyahate yönelik motivasyonlar arasında ve motivasyonlar arasında bir ilişki olduğunu göstermektedir.

Gök H. N. ve Özkoç A. G. (2020) tarafından yürütülen çalışma, Dünya Kültür Mirası Listesi'nde yer alan ve doğal turistik çekiciliğe sahip olan Kapadokya bölgesinde gerçekleştirilen ekoturizm faaliyetlerini Nevşehir'deki yerel paydaşların bakış açısıyla değerlendirmeyi amaçlamıştır. Yapılan görüşmeler sonucunda, Kapadokya Bölgesi'nin doğal turistik alanlarının ekoturizme uygun olduğu; ancak bu potansiyele sürdürülebilir kalkınma bilinciyle yaklaşmadığı, gerekli ekoturizm plan ve politikalarının yeterince uygulanmadığı belirlenmiştir. Bölgenin ekoturizm potansiyelini en üst düzeye çıkarmak için yerel halkın ve paydaşların ekoturizm konusunda bilinçlendirilmesi ve alternatif turizm arzı oluşturmaya yönelik daha gerçekçi ve akılcı planların hayata geçirilmesi gerektiği vurgulanmıştır. Ayrıca, bölgedeki turist talebinin artırılması ve bölgesel kalkınmanın desteklenmesi amacıyla tüm kurum, kuruluş ve ilgili tarafların katılımını sağlayacak proje ve faaliyetlerin hayata geçirilmesinin önemi vurgulanmıştır. Eren D, Bozkurt İ. (2020) yaptıkları çalışmada, Türkiye'nin önemli bir turizm merkezi olan ve 2019 yılında dört milyona yakın turisti ağırlayan bölgenin mevcut turizm durumunu, bu bölgede

ne gibi önlemler alındığını ve// veya olası turist trafiğine karşı ne gibi önlemler alınmıştır? Sorusu ana konudur. Araştırmada, bölgenin belirli dönemlerde yoğun turist trafiğine maruz kaldığı ve bu yoğun dönemlerde bölgesel kaynakların daha sürdürülebilir hale getirilmesi için herhangi bir önlem alınmadığı, bu durumun devam etmesi durumunda bölgenin çekiciliğini kaybedeceği sonucuna varılır. Araştırma sonuçları dikkate alındığında bölgedeki turist trafiği yoğunluğunun belirli dönemlerde ortaya çıktığı ve prensip olarak yılın geneline yayılması gerektiği yönündeki görüş hakimdir.

Koç D, Eren D. (2020), Kapadokya bölgesindeki destinasyon performansını ölçmek ve ölçülen destinasyon performansının misafir memnuniyeti ve gelecekteki ziyaretçi davranışları üzerindeki etkisini ortaya koymak amacıyla bir çalışma yürütmüştür. Çalışma sonucunda Kapadokya bölgesinin doğal güzellikleri, tarihi yerleri, çeşitli kültürel mirasları ve sıcak hava balonu turlarıyla karakterize olduğu; Bunun ziyaretçi memnuniyetine ve gelecekteki davranışlarına olumlu etki yaptığı gözlemlenir. Ayrıca bölgenin eşsiz doğal güzelliklerinin de turistik destinasyonların performansını olumlu yönde etkilediği tespit edilmiştir.

Keskin, E. ve ark. (2020) tarafından yapılan çalışmada, restoranlarda herkesin yiyeceğe erişebilmesinin, zaman içinde yemek işletmelerine yönelik bakış açısını değiştirdiği ifade edilmiştir. Çalışma, bu işletmelerin sadece tüketicilere yiyecek sunmakla kalmayıp aynı zamanda onların sosyalleşmesine yardımcı olacak sakin bir atmosfer oluşturma gibi önemli bir misyon üstlendiğini belirtmektedir. Çalışmanın temel amacı, restoran atmosferinin müşteri memnuniyeti, sadakati ve hizmet alma isteği üzerindeki etkilerini incelemektir. Yapılan veri analizi sonucunda, atmosfer ile memnuniyet, sadakat ve tekrar ziyaret etme niyeti arasında pozitif ilişkilerin bulunduğu tespit edilmiştir.

Çeti, B, Atay L. (2020) tarafından gerçekleştirilen çalışmada, tatil yerinde edinilen deneyimlerin turistlerin destinasyon imajına olan algıları ve davranışsal niyetleri üzerindeki etkilerini belirlemeyi amaçlanmıştır. Yapılan analizler sonucunda, deneyim ile destinasyon imajının bilişsel ve duygusal boyutları arasında, aynı zamanda davranışsal niyet ile de anlamlı bir ilişkinin bulunduğu tespit edilmiştir. Yerli ve yabancı turistlerin imajında bilişsel ve duygusal farklılıkların mevcut olduğu, bununla birlikte ziyaret sayısının artışına bağlı olarak davranışsal niyetlerin değişim gösterdiği belirlenmiştir.

Eren, F. Sezgin A. (2021), Kapadokya Bölgesi, coğrafi konumu nedeniyle önemli bir turizm destinasyonu olmasına rağmen, yeme-içme konusunda kendine has özellikleri ve kültürel farklılıkları olan bu bölgenin, çeşitliliğin yüksek olduğu ancak sadece gastronomi turizminde kullanılabildiği, hak ettiği değeri almadığı tespit edilmiştir. Çalışmada Kapadokya Bölgesi'nin coğrafi işaret ve tescilli ürünleri belirlenmiş, ürünlerin özellikleri açıklanmaya çalışılmış ve destinasyonlarda coğrafi işaret yerel ürünlerinin turizm ürünü olarak kullanılmasının önemi vurgulanmıştır. Elde edilen sonuçlara bağlı olarak aşağıdaki önerilerde bulunmuşlardır. Kapadokya bölgesinde sürdürülebilir bir gastronomi destinasyonu yapısının oluşturulabilmesi için coğrafi olarak spesifik yerel ürünlere yönelik pazarlama araştırmaları yapılmalı, kültür ve turizm bölge müdürlüğü, üniversiteler ve diğer devlet kurumlarından gerekli desteğin alınması için iş birlikleri yapılmalıdır. Bölgedeki gastronomi işletmelerinin menülerinde coğrafi unsurlara daha fazla yer verilmeli, işaretlenmiş yerel ürünlerden yapılan yemeklere yer verilmeli, ambalajlar bölgedeki coğrafi işaretli yerel ürünleri hatıra eşyası haline getirecek şekilde tasarlanmalıdır. Destinasyona tatma amacıyla gelen turistlere ürün sunulmalı ve satılmalı, firmalar çalışanlarına gastronomi, işletme menüleri ve bölgenin coğrafi işaretli yerel ürünleri konusunda gerekli eğitimleri vermeli ve misafirlere daha fazlasını elde etme fırsatı sağlamalıdır. Yerel ürünler hakkında bilgi verilmesi, coğrafi işaret sisteminin önemine dikkat edilerek coğrafi işaretlerin tescilli konusunda çalışmalar yoğunlaştırılmalıdır. Kapadokya Bölgesi'nin zengin yerel ürünlerinin coğrafi işaretlerle korunması için resmî kurumların gerekli başvuruları yapması gerekmektedir. Bölgenin ekonomik kalkınmasına ve tanıtımına önemli katkı sağlayan coğrafi işaret sistemi konusunda yerel halkın, kamu ve sektörel kuruluşların bilinçlendirilmesi gerekmektedir. Ürünlerin özelliklerini öne çıkaracak ve farkındalık yaratacak şekilde düzenlenmelidir.

Çetin, B. ve Şahin, P. N. (2021) tarafından yürütülen çalışmada, Japon turistlerin Kapadokya bölgesini ziyaret etme motivasyonlarının turist memnuniyeti ve tekrar ziyaret etme niyetleri üzerindeki etkileri incelenmiştir. Araştırma, turist motivasyonlarının "inovasyon" ve "bilgi" boyutlarını vurgulamış ve bu boyutların "dinlenme" alt boyutlarının turistler üzerinde etkili olduğunu belirtmiştir. "Alışveriş" boyutunun ise turist memnuniyeti üzerinde etkisi olmadığı sonucuna ulaşılmıştır. Çalışmanın ana bulgularına dayanarak şu sonuçlar çıkarılmıştır: "İnovasyon" ve "bilgi" boyutları, Japon turistlerin Kapadokya'yı ziyaret etme motivasyonları üzerinde önemli etkiler göstermiştir. "Dinlenme" alt boyutları, turistlerin memnuniyet düzeyini etkilemiştir. "Alışveriş" boyutunun turist memnuniyeti üzerinde belirgin bir etkisi olmamıştır. Seyahat motivasyonunun "bilgi" ve "alışveriş" boyutları, tekrar ziyaret etme niyeti üzerinde etkili olmuştur. "Yenilik" ve "dinlenme" boyutlarının ise tekrar ziyaret etme niyeti üzerinde belirgin bir etkisi olmamıştır. Bu bağlamda, Kapadokya'ya yönelik turist



memnuniyetini artırmak ve tekrar ziyaret etme niyetini güçlendirmek için "inovasyon" ve "bilgi" odaklı motivasyonlara vurgu yapmanın önemli olduğu belirtilmiştir.

### 3. OTEL YÖNETİCİLERİN TURİSTLERLE İLGİLİ GÖRÜŞLERİ

#### 3.1 Araştırmanın Metodolojisi

##### 3.1.1. Araştırmanın Önemi ve Amacı

Kapadokya, bünyesinde barındırdığı turizme konu olabilecek değerler açısından diğer turistik bölgelerimize göre farklı bir yapıya sahip olan bir bölgemizdir. Turizm ürünleri açısından her geçen yıl daha fazla ilgi görmekte ve turist sayısı artış göstermektedir. Turist sayısının artışı sürekli kılmak ve yeni turistleri bölgeye çekmede en önemli faktörlerden biri de turistleri iyi analiz etmek ve onlara istedikleri düzeyde hizmet sunmaktır. Bu kapsamda araştırmanın amacı, turistleri ağırlayan turizm işletmeleri yetkililerinden turistlerin özelliklerini öğrenerek onlara ve bölgeye uygun turizm stratejileri geliştirmektir.

##### 3.1.2. Veri Toplama Yöntemi

Araştırmada veriler, otel yetkililerinden biçimlendirilmiş mülakat (görüşme) tekniğiyle elde edilmiştir. Yetkililerin cevap vermesini kolaylaştırmak için cevabı uzun olmayan, az sayıda soru sorulmuştur. Araştırmada 10 otel yetkilisiyle irtibata geçilmiş ancak araştırmaya katılmayı kabul eden 4 otel yetkilisinden veriler elde edilebilmiştir. Otel yetkililerine yöneltilen sorular şunlardır;

- 1.Dünyanın hangi ülkelerinden turist ağırlıyorsunuz?
- 2.Kapadokya bölgesine dair turistlerin genel yorumları nasıl?
- 3.Kapadokya bölgesinde turistlerin en etkilendikleri şeyler nelerdir?
- 4.Turistler Kapadokya'ya geldiğinde en çok hangi aktiviteleri tercih ediyorlar?

##### 3.1.3. Verilerin Analizi ve Yorumu

Cevaplayıcılara yöneltilen sorular, her bir soru için aşağıdaki şekilde tasnif edilmiştir.

- 1.Dünyanın hangi ülkelerinden turist ağırlıyorsunuz?

Kapadokya'ya dünyanın tüm noktalarından her yıl turistler geldiğini yoğun olarak da Amerika, İspanya, İtalya, Rusya, İngiltere, Almanya, Çin, Güney Kore, İran, Hindistan ve Pakistan'dan geldiğini belirtmişlerdir.

- 2.Kapadokya bölgesine dair turistlerin genel yorumları nasıl?

Cevaplayıcılar, turistlerin, bölgenin tarihi, coğrafi yapısı ve dokusu ile doğal güzelliği, kiliseleri ve panoramik manzarasına hayran olduklarını belirtmişlerdir. Ayrıca yerel ve kültürel özelliklerinden etkilendiklerini, bölge insanının misafirperverliği, güler yüzlülüğü ve mutfağından çok memnun kaldıklarını belirtmişlerdir.

- 3.Kapadokya bölgesinde turistlerin en etkilendikleri şeyler neler?

Turistler, bölgenin coğrafi yapısından, tarihi kalıntılarında, peri bacalarından, sıcak hava balonlarından, kayadan oyma tarihi kiliselerinden, yeraltı kent yerleşimlerinden ve yerel lezzetlerden etkilendiklerini belirtmişlerdir.

- 4.Turistler Kapadokya'ya geldiğinde en çok hangi aktiviteleri tercih ediyorlar?

Turistler bölgede balon turu, at turu, ATV turu, deve turları, Jeep Safari Turu, Yeraltı şehirleri gezintisi, vadilerde yürüyüşler ve Türk gecesi eğlencelerini tercih etmektedirler. Cevaplayıcılar, turistlerin bu aktivitelerden bir tanesini muhakkak yaptıklarını belirtmişlerdir.

### SONUÇ VE ÖNERİLER

Turizm, hizmet sektörünün önemli bir unsuru olarak öne çıkmakta olup tarih boyunca hem gelişmiş hem de gelişmekte olan ülkelerde kritik bir sektör haline gelmiştir. Bu sektörün belirgin bir öneme sahip olmasının

temel nedeni, ülkelerin ekonomik kazançlarını büyük ölçüde artırma potansiyeline sahip olmasıdır. Son yıllarda turizm politikalarında gerçekleşen değişiklikler, küresel turizm endüstrisinin önemli bir ilerleme kaydetmesine olanak tanımıştır. Gelişmiş ülkeler genellikle turizme ekonomik açıdan daha fazla odaklanırken, az gelişmiş ve gelişmekte olan ülkeler, ekonomik boyutun yanı sıra turizm aracılığıyla ülkeye gelen döviz artışını hedeflemektedir. Ayrıca, gelişmekte olan ülkelerde işsizlik, yaygın bir sorun olarak karşımıza çıkmaktadır ve turizm sektörü aracılığıyla sağlanan istihdam, bu sorunun çözümüne katkıda bulunabilir. Turizm, sadece ekonomik büyümeye değil, aynı zamanda yerel istihdamın artırılmasına ve sosyal kalkınmaya yönelik potansiyeli nedeniyle gelişmekte olan ülkeler için stratejik bir öneme sahiptir. Bu bağlamda, turizm sektörünün sürdürülebilir kalkınma ve ekonomik refahın artırılması açısından önemli bir araç olduğunu söylemek mümkündür.

Türkiye gibi turizm potansiyeli yüksek bir ülke için, bu sektörün değeri daha da artmaktadır. Çünkü Türkiye, coğrafi konumu dolayısıyla her mevsimde çeşitli turizm aktivitelerine olanak tanıyan büyük bir avantaja sahiptir. Bu durum, turizmin Türkiye ekonomisindeki temel bir gelir kaynağı olduğunu vurgular. Türkiye, doğal güzellikleri, tarihi zenginlikleri ve kültürel çeşitliliğiyle dikkat çeken bir destinasyon olup, turizm sektörü ülkenin ekonomik çerçevesinde önemli bir role sahiptir. Bu büyük gelir kaynağına yönelik yapılan yatırımlar, son yıllarda belirgin bir şekilde artmıştır. Türkiye, turizm altyapısını güçlendirmek, çeşitli turistik bölgeleri geliştirmek ve turistlere daha iyi hizmet sunabilmek amacıyla çeşitli projelere ve yatırımlara odaklanmıştır. Turizm sektöründeki bu yatırımlar, ülkenin turizm potansiyelini maksimize etme ve sürdürülebilir bir turizm anlayışını benimseme çabalarını yansıtmaktadır. Türkiye'nin turizm sektörü, ekonomik büyümeye katkıda bulunmanın yanı sıra istihdamı destekleyerek sosyoekonomik kalkınmaya da önemli katkılar sağlamaktadır.

Kapadokya bölgesi, turizm yatırımlarından pay alan turizm merkezlerinden biridir. Bölge dünyada eşine az rastlanır doğal güzelliklere ve zengin kültürel kaynaklara sahip olduğundan önemli bir turizm destinasyonudur. Binlerce yerli ve yabancı turist ziyaret ettiği ve her geçen yıl sayının arttığı bir alan haline gelmiştir.

Araştırmamızda, Kapadokya'ya yoğun olarak da Amerika, İspanya, İtalya, Rusya, İngiltere, Almanya, Çin, Güney Kore, İran, Hindistan ve Pakistan'dan olmak üzere dünyanın hemen hemen her noktasından turistler geldiği tespit edilmiştir.

Turistler, bölgenin tarihi, coğrafi yapısı ve dokusu ile doğal güzelliği, kiliseleri ve panoramik manzarasına hayran olduklarını belirtmişlerdir. Ayrıca yerel ve kültürel özelliklerinden etkilendiklerini, bölge insanının misafirperverliği, güler yüzlülüğü ve mutfağından çok memnun kaldıklarını belirtmişlerdir.

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Turistler bölgede balon turu, at turu, atv turu, deve turları, Jeep Safari Turu, Yeraltı şehirleri gezintisi, vadilerde yürüyüşler ve Türk gecesi eğlencelerini tercih etmektedirler ve turistlerin bu aktivitelerden bir tanesini muhakkak yapmaktadırlar.

Bölge, çoğu turistik bölge gibi, istenilen turist sayısına, kişi başına düşen turizm gelirin ve turizm harcamasına ulaşamamaktadır. Bunun için birçok nedeni vardır. Bunun başlıca nedenleri; tanıtım sorunları, yanlış tur yapısı, sezonsallık, alternatif tur çeşitliliğinin olmayışı ve imaj sorunlarıdır. Nevşehir gibi ekonomisinin büyük bir kısmının turizm gelirlerinden geldiği bir bölge için bu sorunların çözülmesi bölgenin sosyo-ekonomik kalkınmasına katkı sağlayacaktır. Bu gelişme aynı zamanda ülke ekonomisine de fayda sağlayacaktır. Turizm hem ekonomik hem de sosyo-kültürel bir hizmet olduğundan bu alanların da geliştirilmesi şarttır.

Sonuç niteliğinde Kapadokya bölgesindeki turizm faaliyetlerinin ekonomik, sosyal ve çevresel boyutları dikkate alındığında bazı somut önerilerde bulunulabilir. Bu öneriler şu şekilde sıralanabilir:

- Kapadokya bölgesi için turistlerin ilk geldikleri gün- hizmet almadan önce ve ayrılmadan önce-hizmetleri satın aldıktan sonra detaylı bir şekilde analiz edilmeleri gerekmektedir. Bu analiz, olumsuzlukların, eksikliklerin, memnuniyetsizliklerin öğrenilmesi ve bunların giderilmesine yönelik çalışmaların yapılmasını gerekli kılarak sonraki yıllarda sürdürülebilirlik açısından önemli katkılar sağlayacaktır. Özellikle bölgeye çok fazla sayıda gelen turistler, ülke bazında analiz edilerek her bir ülke turistleri için farklı pazarlama stratejileri geliştirilebilir.
- Kapadokya turizm alanı eşsiz bir turizm destinasyonu olduğundan turizm faaliyetleri geliştirilirken doğal, tarihi ve kültürel mirasının koruma altına alınması gerekmektedir.

- Bölgenin ulusal ve uluslararası platformlarda daha verimli olarak pazarlanması gerekmektedir.
- Bölgenin geniş turizm coğrafyası nedeniyle ulaşımın zor olabilmesi ve pek çok turistik yere yalnızca özel araçlarla ulaşılabilir olması turistlerin ilgisinin kaybolmasına neden olmaktadır. Bu yüzden yol çalışmaları yapılmalıdır.
- Bölgedeki rehberlik hizmetlerinin kaliteli ve doğru şekilde yapılması gerekmektedir.
- Yerel halka daha misafirperver bir tavır sergilemeleri ve turistleri ekonomik bir güç olarak görmemeleri gerektiğinin anlatılması pozitif sonuçlar doğuracaktır.
- Bölgedeki alternatif turizm açısında çeşitlendirme yapılması olanaklıdır fakat bu çalışmalarla mümkün olacaktır.
- Üstyapı ve Altyapı problemlerine çözümler getirilmelidir.
- Kapadokya için yatırımlar yapılmalı ve bunun için finansal desteklerin çoğalması gerekmektedir.

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## İklim Değişikliğinin Tarıma Etkileri

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**Özet:** Bu çalışmada, iklim değişikliğinin tarım sektörü üzerinde meydana getirdiği etkiler incelenmektedir. İklim değişikliklerine bağlı olarak atmosferin giderek ısınması sonucu, sert ve tahrip edici hava olaylarının sayı ve sıklığının artması tarım üzerinde önemli sıkıntılar yaratabilmektedir. İklim değişikliği ve bunun tarım üzerindeki etkilerine karşı mücadelede, uluslararası iklim çevrelerince birlikte uygulanan azaltım ve uyum politikaları yürütülmektedir.

Bu çalışma Türkiye'deki iklim değişikliklerinin tarım sektörü üzerindeki yarattığı durumları incelemeyi hedeflemektedir. Elde edilen sonuçlara göre tarım verimi ve yağış miktarında görülen değişikliklerin tarımsal GSYİH üzerinde olumlu bir etkisi bulunmaktadır. Karbondioksit emisyonundaki değişikliklerin yaşandığı durumlarda ise tarımsal GSYİH üzerinde olumsuz bir etkide bulunmaktadır.

Bu çalışmada elde edilen sonuçlar, iklim değişikliğinin tarım sektörü üzerindeki etkisinin olumsuz yönde seyrettiğini desteklediğini kanıtlar durumdadır.

### 1. GİRİŞ

Küresel ısınma ve buna bağlı olarak oluşan iklim değişiklikleri, etkileri ve sonuçları açısından dünyanın bütün ülkelerini yakından ilgilendiren önemli bir sorun niteliğindedir. Küresel ısınmanın temel nedeni, ekonomik faaliyetler sonucu atmosferdeki sera gazı yoğunlaşmasının, olması gereken düzeyin üzerine çıkması olarak görülmektedir.

İklim değişikliği, ademoğlunun doğrudan varoluşu ile alakalı olması nedeniyle ülkelerin karşı karşıya kaldığı en önemli krizlerden biri olarak kabul görmektedir. Çünkü iklim değişikliği özellikle doğal afetler, sağlık, su kaynakları ve beslenme yoluyla canlıları ve bu canlıların, kendilerini saran cansız çevreyle karşılıklı ilişkileri neticesinde oluşan ekosistemi doğrudan etkilemektedir. İklim değişikliğinin dünyanın bazı bölgelerindeki ilk etkilerinin pozitif olacağını öngörülmesine karşılık, ilerleyen süreçlerde küresel anlamda sosyal, siyasal ve ekonomik yapılar üzerindeki net etkisinin negatif olacağı kabul edilmektedir.

İklim değişikliği ekonomideki sektörler ve karar birimleri üzerindeki etkilerini farklı şekillerde ve derecelerde hissettirecektir. Bu bağlamda doğrudan doğaya, iklim koşullarına ve hava olaylarına bağlı olarak sürdürülen bir faaliyet olması nedeniyle tarım sektörü, iklim değişikliğinden en çok etkilenecek sektör olarak kabul edilmektedir. Ayrıca tarımsal faaliyetlerin yaşamsal kaynak sağlama fonksiyonu bu sektörün iklim değişikliği karşındaki önemini daha da arttırmaktadır.

### 2. İklim Değişikliği ile Tarım Arasındaki İlişki

Birleşmiş Milletler İklim Değişikliği Çerçeve Sözleşmesi (BMİDÇS)'e göre iklim değişikliği, karşılaştırılabilir bir zaman diliminde gözlenen iklimin doğal değişkenliğine ek olarak, doğrudan ya da dolaylı bir şekilde atmosferin bileşimini değiştiren antropojenik (insan kaynaklı) faaliyetler nedeniyle iklimde meydana gelen değişimler olarak tanımlanmaktadır. BMİDÇS'nin bu tanımlamasına göre iklimin doğal olarak değişebileceği gibi insan hareketleri sonucu da değişebilmektedir.

Bilim çevreleri, günümüzde iklim değişikliğinin yaşandığı ve gelecekte etkilerini artırarak yaşanmaya devam edeceği konusunda büyük oranda fikir birliğine sahiptirler. İklimde süregelen bu değişikliklerin olumsuz etkileri, yaşadıkları bölge ve yaşam koşulları nedeniyle zaten dezavantajlı konumda olan halkları daha çok etkileyebilmektedir. Özellikle tarımla uğraşan ve kırsal bölgelerde yaşayan yoksul halk, iklim değişikliğinin yıkıcı etkilerini çok daha fazla hissetmektedirler. Başta az gelişmiş ve gelişmekte olan Afrika, Asya ve Latin Amerika ülkelerinin tarımsal üretimi ve gıda güvenliği iklim değişikliğinin yıkıcı etkileri nedeniyle tehlikeye girmektedir. Dünyada bir milyardan fazla insanın temel besin kaynaklarına kolay ve istikrarlı bir şekilde ulaşamamaktan dolayı yetersiz beslendikleri (FAO, 2009) düşünüldüğünde, iklim değişikliğinin ilerleyen yıllarda tarım üzerinde daha da etkili olması sürpriz olmayacaktır.

Tarımsal faaliyetler, dünya üzerinde artan sera gazlarının yaklaşık %20'sinden sorumludur (Pathak ve Wassmann, 2007: 807–825). Tarımsal faaliyetler sonucu (enerji tüketimi, üretim, hayvan yetiştirme, gübreleme, ilaç vb) CO<sub>2</sub>, CH<sub>4</sub> ve N<sub>2</sub>O gibi sera gazları açığa çıktığından, tarımsal üretim iklim değişikliğinin sebepleri arasında sayılmaktadır (Houghton, 2003:500-509). Ancak her ne kadar tarımsal üretim ve uygulamalarının, sera

gazi emisyonu üzerinde olumsuz etkileri olsa da, bu faaliyetlerin dünya nüfusunun sağlıklı bir biçimde yaşamanı sürdürebilmesi için de son derece önemli olduğu da unutulmamalıdır.

Tarımsal üretim büyük oranda spesifik iklim koşullarından etkilenmektedir. İklim değişikliği sonucu ortaya çıkan sıcaklık artışları ve artan karbondioksit miktarı bazı bölgelerde tarım ürünlerinin miktarına kısa vadede pozitif bir etki yapıyor gibi görülse de uzun vadede bu bileşenler, ürün kalitesinde ve üretim miktarında azalmalara sebep olabilmektedir. Tarımsal üretimin yükselebilmesi için sıcaklıkların ve karbondioksit miktarının artması tek başına yeterli olamamaktadır. Artan sıcaklık ve karbondioksit miktarının tarımsal üretim üzerinde pozitif etki yapabilmesi için toprak yapısının ve kalitesinin tarım yapmaya elverişli olması gerekmektedir. Ayrıca toprak neminin ideal ve tarım yapılacak alanın suya erişebilir olması ve bu şartların bir araya gelerek tarım yapmaya uygun ortamı oluşturması şarttır.

### 3. İklim Değişikliklerinin Ekonomi Üzerindeki Etkileri

Küresel ısınma ve iklim değişikliklerinin, gelişmiş ve gelişmekte olan ülkelerin ekonomileri üzerinde önemli etkileri söz konusudur ve gerekli emisyon azaltma ve uyum önlemleri alınmadığı takdirde, söz konusu ekonomik etkilerin büyük boyutlara ulaşması kaçınılmaz olarak görülmektedir.

İklim değişikliği nedeniyle sel ve fırtına gibi doğal afetlerin sıklığında ve şiddetinde görülen ve görülebilecek artışlar sermayenin beklenen yaşam süresinden önce kullanım dışı kalmasına neden olabilecektir. Ayrıca etkileri uzun yıllar devam edecek olan küresel ısınma, daha sık sermaye yatırımı ayarlamalarını gündeme getirebilecektir. Böyle bir etki, özellikle milli gelirlerinin önemli bir kısmını sabit sermaye yatırımlarına ayıran gelişmiş ülkelerde sermaye zararlarına neden olup fiziksel sermayenin yıpranmasına yol açabilecektir. Benzer bir şekilde iklim değişikliği nedeniyle deniz seviyesinin yükselmesi, özellikle kıyı şeridinde altyapı tesislerinin zarar görme risklerini arttırarak sermayenin yıpranmasını hızlandıracaktır.

Günümüzde yapılan hesaplamalara göre, küresel ısınmada sadece 10C'lık bir artışın ekonomik maliyetinin 2050 yılında yıllık 2 trilyon dolar olacağı tahmin edilmektedir. AB'de yürütülen bir çalışmaya göre, küresel ısınmanın kümülatif global ekonomik maliyetinin 74 trilyon euro olabileceği ifade edilmektedir.

Küresel ısınmanın 2050 yılından sonra dünyanın GSMH'sinin % 5 ile % 20'si arasında değişen global maliyetinden kaçınmak için 2050 yılına kadar sera gazı emisyonlarının azaltılmasına ilişkin yöntemlere global bir yatırım yapılması gerektiği ifade edilmektedir.

IPCC'ye göre; mevcut teknoloji kullanılarak karbon emisyonları 2020 yılında % 20 ile % 40 arasında azaltılabilir. Bu emisyon azaltımının yarısı ek bir maliyete neden olmadan mümkün iken, diğer yarısı da her yıl bir ton CO2 için yaklaşık 10 euro'luk bir maliyetle gerçekleştirilebileceği düşünülmektedir.

İklim değişikliğinin önemli ekonomik etkilerinden birisi de, sayısı ve şiddeti artan iklimle ilişkili doğal afetlerin maliyetidir. Bu maliyetler şimdiden ekonomiler üzerine önemli bir yük olmaya başlamıştır. Örneğin 2014 yılında, doğal afetlerin tamamının dünya genelindeki maliyeti 110 milyar doları bulmuştur.

Öngörülen iklim değişikliklerini ve bu değişikliklerin olumsuz etkilerini en aza indirmenin temel yolu insan kaynaklı sera gazı salınımlarını azaltmaktır. Sera gazı salınımlarının büyük bir çoğunluğu enerji üretimi ve kullanımıyla ilişkili olduğundan, azaltım politikalarında yararlanılan yeni ve ileri teknolojilerin çoğu, fosil yakıt enerji çevriminin ya da elektrik kullanımının verimliliğini iyileştirme ve düşük ya da sıfır karbonlu enerji kaynaklarının geliştirilmesini hedeflemektedir.

Sera gazı emisyonlarını azaltarak iklim değişikliklerinin etkisini gidermenin diğer bir yolu da, uyum politikalarında kullanılan ve yutak olarak tanımlanan, karbon yakalama ve depolama yeteneği bulunan ormanların, sulak alanların, deniz ve kıyı ekosistemlerinin, çayırların, tarımsal alanların ve turbalıkların mevcut durumlarının korunması ve mevcutların iyileştirilmesi gerekmektedir.

Türkiye başta kalkınma planları olmak üzere çok sayıda ulusal plan, program ve strateji belgesinde iklim değişikliği ile mücadele konusunda özellikle enerji, tarım, ormancılık, ulaştırma, sanayi ve atık sektörlerinde birçok politika ve önlem uygulamaya konulmuştur.

Türkiye, BM İklim Değişikliği Çerçeve Sözleşmesi kapsamında her dört yılda bir, İklim Değişikliği Ulusal Bildirimlerini hazırlamakla yükümlüdür. Buna bağlı olarak 2013 yılında 5. İklim Değişikliği Ulusal Bildirimi Raporu hazırlanmıştır. 5. raporda daha önce hazırlanan dört bildirim raporu tek başlık altında toplanmıştır. İlgili kamu kurum ve kuruluşları, özel sektör temsilcileri ve sivil toplum kuruluşları ile üniversiteler ve akademik çevrelerin etkin katılımı ve işbirliği ile hazırlanan raporlar, Türkiye'de iklim değişikliği ile ilgili konularda genel bilinç ve bilgi

seviyesine katkıda bulunmak ve ulusal planlama ve politika oluşturma sürecine katkı sağlama amacını taşımaktadır.

Türkiye’de iklim değişikliği ile mücadele konusunda sorumlu olan kuruluş olan Gıda, Tarım ve Hayvancılık Bakanlığının tarımla ilgili aşağıda yer alan çok sayıda proje, strateji ve politikaları mevcuttur.

i. Arazi Toplulaştırılması; stratejisi sonucunda, işletmelerin optimum büyüklüğe ulaştırılmasıyla verimliliğin artırılması ve enerji kullanımının azaltılması hedeflenmektedir. Tarım Reformu Genel Müdürlüğü tarafından, 54 il ve 232 ilçede 3932 uygulama alanında çalışmalar yürütülmektedir. 2010–2015 döneminde ülke genelinde yaklaşık 5 milyon hektar alanda arazi toplulaştırma çalışması tamamlanacağı belirtilmektedir.

ii. Organik Tarım Faaliyetleri; toprak verimliliğini uzun dönemde, ekolojik koşulları dikkate alarak doğal yollarla artırmak, toprak ve genetik kaynak erozyonunu önlemek, su miktar ve kalitesini korumak, yenilenebilir enerji kaynaklarını kullanmak ve enerji tasarrufu sağlamada yardımcı olmaktadır. 2013 yılı itibarıyla 769 bin hektar alanda, 213 adet üründe 60000 dolayında üretici organik tarım faaliyeti yapmaktadır.

iii. İyi Tarım Uygulamaları; tarımsal üretimin çevre, insan ve hayvan sağlığına zarar vermeden yapılması, doğal kaynakların korunması, tarımda izlenebilirlik ve sürdürülebilirlik ile güvenilir ürün arzının sağlanması amaçlanmaktadır. Türkiye’de 2013 yılında ve 98 bin hektar alanda, 56 ilde ve 8170 üretici tarafından sertifikalı olarak iyi tarım uygulamaları gerçekleştirilmiştir.

iv. Çevre Amaçlı Tarımsal Arazilerin Korunması Programı (CATAK); aracılığı ile çevre dostu tarım teknikleri ve kültürel uygulamalarını tercih eden çiftçilere alan bazlı destekleme ödemesi yapılmaktadır. 30 ilde ve toplam 400 bin dekar alanda yürütülmekte olan bu projede çiftçiler, 3 yıl süre ile kontrollü olarak desteklenmektedir.

v. Su Tasarrufu Sağlayacak Modern Sulama Yöntemlerini Destekleme Programı; Kırsal Kalkınma Yatırımlarının Desteklenmesi Programı kapsamında, tarla içi sulama sistemlerin kapalı ve basınçlı sistemlere dönüştürülmesi için hibe desteği verilmektedir. Bu kapsamda 2006-2012 yılları arasında 6543 proje için, 61408 üreticiye, 658112 dekar alan için 184,5 Milyon TL. hibe verilmiştir. Ayrıca, 93000 üretici 3 milyon dekar alan için, faizsiz ve 5 yıl vadeli 1,4 Milyar TL’lik krediden yararlandırılmıştır.

vi. Kuraklık Yönetimi; iklim değişimine bağlı olarak daha sık yaşanması beklenen kuraklığı azaltmaya yönelik olarak, 81 ilde Tarımsal Kuraklık İl Kriz Merkezleri oluşturularak, 2013-2017 yılları için il tarımsal kuraklık stratejileri ve eylem planları hazırlanarak yürürlüğe konulmuştur.

vii. Tarım Sigortaları Uygulamaları; iklim değişikliklerine bağlı sayısı giderek artan don, dolu, hortum, sel, kasırga, su baskını vb. meteorolojik felaketlerden kaynaklanan risklerin tazmini amaçlamaktadır. Tarımda Risk Yönetimi stratejisi aracılığı ile, bu tür risklere maruz kalan üreticilerin ürünleri teminat altına alınarak, üretimin sürdürülebilirliğinin sağlanması hedeflenmektedir.

viii. Tarımsal Ar-Ge Çalışmaları; tarımda enerji kullanımının azaltılması, sürdürülebilir kaynak kullanımı, kuraklığa dayanıklı bitkilerin geliştirilmesi ve ıslahı, kurak dönemlerde kısıntılı sulama konularında yöntem ve araçlarının iyileştirilmesi, toprakta karbon tutulumunu sağlayan arazi işleme yöntem ve araçlarının geliştirilmesi hedeflenmektedir.

Ayrıca, üreticilerin eğitimi ve bilinçlendirilmesi amacıyla verimli gübre kullanımı, hayvan besleme, hayvansal gübrenin yönetimi ve anız yakılmasının önlenmesi gibi konularda çeşitli toplantılar yapılmakta, kurs ve seminerler verilmektedir.

#### **4. İklim Değişikliğinin Tarım Üzerindeki Etkileri**

İlerleyen sulama teknikleri ve gelişmiş gıda teknolojilerine rağmen iklim ve yağış-sıcaklık değerleri tarımsal üretim açısından önemli faktörler olmaya devam etmektedir. Bitki fizyolojisinin; ısı, yağış ve toprak nemindeki değişimlerden ne şekilde etkilendiği bilinmekle birlikte tarım zararlılarının ve patojenlerin etki düzeylerinin tarımsal üretimi ne kadar etkileyeceği konusunda net tahminler yapılamamaktadır. İklim dışında tarımsal üretimi şekillendiren birçok etken vardır:

- Piyasadaki dalgalanmalar,
- Sübvansiyonların kapsamı ve büyüklüğü,
- Teşvikler, - Vergi ve gümrük tarifeleri,
- Tarım sigortası ve kredi olanakları gibi ulusal ve uluslararası tarım politikalarındaki değişimler,

- Yönetim uygulamaları,
- Ticaret sınırlılıkları,
- Teknoloji olanakları,
- Arazi kullanım düzenlemeleri, - Su kaynaklarına ulaşım, toprak verimliliği ve kalitesi,
- Taşıma kapasitesi
- Zararlılar ve hastalıklar tarımsal üretimi etkileyen başlıca unsurlardır. (Kurukulasuriya ve Rosenthal, 2003: 3).

Tüm bu sayılan faktörlerin dışında günümüzde sıkça yaşanmaya başlayan seller, fırtınalar, kuraklıklar, don olayları ve sezonluk değişen yağış miktarları; ürün kalitesini ve ürün miktarını büyük ölçüde belirlemektedir. Ayrıca sıcaklıklardaki değişiklikler, yağışlar ve toprakların nem miktarındaki değişim; bitkilerin fizyolojisini değiştirdiğinden, tarım zararlılarının ve patojenlerin çoğalmalarına ve daha uzun süre hayatta kalmalarına sebep olarak gıda kaynaklı hastalıklarda artışların yaşanmasına yol açmaktadır.

Doğal faktörler içerisinde sayılan çevresel faktörler ile insan aktiviteleri de tarımsal üretim miktarındaki azalmanın sebepleri arasında sayılmıştır. Yanlış arazi kullanımı, kuraklık, çorak topraklar, ekstrem kuraklıklar, soğuk havalar, toprak kaymaları ve ekstrem yağışlar dünya gıda arzında düşüşlerin başlıca sebeplerini oluşturmaktadır. Gıda arzındaki bu düşüşler az gelişmiş ve gelişmekte olan ülkelerde yaşayan halkın sağlıklı bir gelişim göstermesini de zorlaştırmaktadır. Özellikle çocukların zihinsel ve bedensel gelişimi bu durumdan olumsuz yönde etkilenmektedir (FAO,1999: 32).

Diğer taraftan, ısınan havalarla birlikte kuzey ülkelerinde oluşan uygun iklim şartları ve artan tarımsal üretim, tropik bölgelerde yer alan gelişmekte olan ülkelerin ekonomilerini olumsuz yönde etkileyecektir. Tropik bölgelerde yer alan ve gelirlerinin büyük bir kısmını tarım ürünlerinin ihracatından kazanan Afrika ve Orta Amerika ülkeleri, küresel ısınmadan olumsuz yönde etkileneceklerdir. Bununla birlikte artan sıcaklıkların yerel tarımsal üretimi sekteye uğratabileceği de gözden kaçırılmaması gereken bir durumdur. Nitekim Filipinler'deki pirinç üretiminin sıcaklık artışından olumsuz etkileneceği öngörülmektedir. Sıcaklık artışının 1°C olduğu bir durumda, Filipinler'de pirinç üretiminin %10 azalması beklenmektedir (Doğan ve Tüzer, 2011: 30).

İklim değişikliği nedeniyle yağışlarda yaşanacak değişimlerin, tarım üzerinde etkilerinin olacağı muhakkaktır. Yağış rejimindeki düzensizliklerden dolayı, gelişmekte olan ülkelerin bulunduğu güney enlemlerinin, kuzey enlemlerine göre daha dezavantajlı konumda olması beklenebilir. Atmosferde biriken karbondioksit konsantrasyonunun ise, belli tarım ürünlerinin yetişmesinde olumlu yönde katkısının olması umulmaktadır. İçinde pirinç ve buğdayın bulunduğu C3 sınıfı olarak nitelenen bitkiler (yüksek karbondioksit konsantrasyonuna ve düşük sıcaklığa ihtiyaç duyan, ışık şiddetini kullanma yeteneği düşük, ılıman bölge bitkileri), artan karbondioksit miktarından olumlu etkileneceklerdir. Bunun yanı sıra, büyük ölçüde Afrika ve Latin Amerika ülkelerinde yetişen mısır, şeker kamışı gibi C4 sınıfı bitkiler (düşük karbondioksit konsantrasyonuna, yüksek sıcaklığa ve daha düşük oranda suya ihtiyaç duyan, mevsimsel kuraklığa dayanıklı, başlangıçta 4 karbon atomu içeren organik molekülleri bağlayan, ışık şiddetini kullanma yetenekleri yüksek bitkiler), artan karbondioksit miktarından olumsuz yönde etkileneceklerdir (Doğan ve Tüzer, 2011:30).

İklim değişikliğinin tarım ve insanların refahı üzerindeki etkilerini; tarımsal ürünler üzerindeki biyolojik etkiler, tarımsal ürünlerin fiyat üretim ve tüketim üzerindeki etkileri, kişi başına tüketilen kalori miktarı ve çocukların yetersiz/ kötü beslenmeleri olarak sıralayabiliriz.

## 5. İklim Değişikliğinin Ürün Fiyatları, Üretim ve Tüketim Üzerindeki Etkileri

İklim değişikliğinin tarım ürünleri üzerindeki biyolojik etkileri doğrudan ve dolaylı etkiler olarak ortaya çıkarken, gıda güvenliği ve sağlık bakımından ürün fiyatları, üretim ve tüketim üzerindeki etkileri göz ardı edilmemelidir.

### a) Fiyatlar

İklim değişikliğinin tarım üzerindeki etkilerinin açıklanabilmesi için ulusal ve uluslararası piyasalardaki tarım ürünlerinin fiyatları önemli bir göstergedir. Tablo 3'de; iklim değişikliği senaryolarına göre dünya gıda fiyatlarının seyri gösterilmektedir. Bu tabloda CO2 fertilizer etkisinin ürünler üzerindeki yansımaları da göz önünde bulundurularak CO2 fertilizer etkili ve CO2 fertilizer etkisiz tarım ürünlerinin fiyatlarına yer verilmiştir. Ayrıca iklim değişikliği senaryolardan bağımsız olarak iklim değişikliğinin olmadığı durumdaki gıda fiyatları da tabloda gösterilmiştir.



## b) Üretim

İklim değişikliğinin tarımsal üretim üzerindeki olumsuz etkileri özellikle Sahra-Altı Afrika'sında ve Güney Asya'da kendini göstermektedir. Güney Asya'da iklim değişikliğinin olduğu varsayılarak oluşturulan senaryolarda, iklim değişikliğinin olmadığından hareketle oluşturulan senaryolara göre pirinç üretiminin %14 daha fazla azalması beklenmektedir. Yine buğday üretiminin iklim değişikliğinin olduğu varsayılarak oluşturulan senaryolarda %49, iklim değişikliğinin olmadığından hareketle oluşturulan senaryolarda %44 azalması, mısır üretiminin ise iklim değişikliğinin olduğu varsayılarak oluşturulan senaryolarda %19, iklim değişikliğinin olmadığından hareketle oluşturulan senaryolarda %9 azalması beklenmektedir.

## c) Gıda tüketimi

İnsanların gıda tüketim miktarlarını; ürünün arz ve talebi arasındaki ilişki sonucu ortaya çıkan fiyatlar, kişisel öncelikler ve gelir düzeyleri belirlemektedir. Tablo 4; tahıl ve et ürünlerinin kişi başına ortalama tüketim miktarlarını, CISRO ve NCAR iklim değişikliği modellerine, CO2 fertilizer etkisinin olup olmadığına ve iklim değişikliğinin olup olmayacağı durumlarına göre göstermiştir. Her iki iklim değişikliği senaryosunda da benzer sonuçlar ortaya çıkmıştır.

## **6. Sonuç ve Öneriler**

İklim değişikliğinin tarımsal üretim ve gıda güvenliği üzerindeki olumsuz etkilerinin iklim değişikliği senaryoları açısından incelendiği ve bu olumsuz durumlara karşı uygulanabilecek uyum ve azaltım stratejilerinin sunulduğu çalışma iki aşamalı olarak tamamlanmıştır.

Çalışmanın birinci aşamasında Dünya Tarım Örgütü'nün (FAO) iklim değişikliği senaryolarından hareketle iklim değişikliğinin;

- Tarımsal ürünler üzerindeki biyolojik etkileri,
- Tarımsal ürünlerin fiyatı, üretimi ve tüketimi üzerindeki etkileri ve
- Kişi başına tüketilen kalori miktarı üzerindeki etkileri incelenmiştir.

Çalışmadan elde edilen veriler ve ulaşılan sonuçlar ışığında yukarıda sayılan iklim değişikliğinin tarım ve gıda güvenliği üzerindeki olumsuz etkilerini en aza indirmeye yönelik olarak sunulan uyum ve azaltım politikalarını ise;

- İklim değişikliğine sebep olan antropojenik sera gazı salınımının azaltılması,
- İklim değişikliğine sebep olan sera gazlarını azaltmak için tüketim kalıplarının gözden geçirilmesi, sınırlı kaynakların ihtiyacı karşılayabilecek düzeyde kullanılması,
- Karbon yutak alanlarının sayısının ve kalitesinin artırılması,
- Karbon emisyonunu tutma ve depolayarak kapasitesi yüksek koruma alanlarının birbirine bağlanması ve daha etkin şekilde sera gazı emisyonunun giderilmesi,
- İklim değişikliğinin tarım sektöründeki sosyo-ekonomik etkilerinin belirlenmesi,
- Tarım alanlarının sürdürülebilir kullanımının sağlanması
- İklim değişikliğinin tarım üzerindeki tahrip edici etkilerini kalkınma, gıda güvenliği, çevre, biyolojik çeşitlilik ve ekosistem hizmetlerinin sürdürülebilirliği ile bir arada değerlendirerek önlemler alınması,
- İklim değişikliğine uyum stratejilerin; Ekosistem hizmetleri, biyolojik çeşitlilik ve ormancılık stratejilerine entegre edilmesi,
- Ekstrem iklim olayları nedeni ile meydana gelen doğal afetler öncesinde, erken uyarı sistemlerini etkin bir şekilde devreye sokulması.
- Tarımsal kuraklıklar için afet analizlerinin daha güvenilir veriler elde edilebilecek şekilde yapılması,
- Toprağın fiziksel, kimyasal ve biyolojik verimliliğinin iklim değişikliğinin etkilerine karşı korunması,
- Tarımda kullanılacak olan su kaynaklarının sürdürülebilir bir şekilde planlanması,
- Tarımda su yönetiminin etkinleştirilerek verimli sulama teknolojilerinin geliştirmesi,

- Kuraklığa dayanıklı tohum çeşitlerinin geliştirilmesi ve sayılarının artırılması
- Tarımsal verimliliğin artırılması amacıyla küçük ölçekli tarım arazilerini birleştirilmesinin sağlanması, · Organik tarım ve iyi tarım uygulamalarının yaygınlaştırılması,
- Tarımsal faaliyetlerden kaynaklanan çevre kirliliğinin izlenmesi
- Niteliği bozulmuş olmakla birlikte yeniden kazanılabilecek tarım ve mera arazilerini geliştirilerek yeniden kullanıma sunulması şeklinde sıralayabiliriz.

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## Optimising an Ecological Farming Plan Using Linear and Goal Programming Methods

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**Abstract:** This paper explores how linear programming and goal programming may be used in farm planning in order to determine the optimal yearly farming plan. For this purpose, a linear programming model was developed with an objective function to maximise production and a goal programming model to minimise the deviations of five farm goals such as: maximising production and profit, while minimising the capital invested and the number of human and machine working hours. A comparative analysis of optimal linear and goal programming solutions showed both methods enable the farm planning problem to be solved successfully, depending on the farm owner's requirements. In addition, the constrained optimisation and implementation of the Lagrangian function was used to analyse the objective function's sensitivity to changes in the constraints. While taking into the account the farm owner's strict limitations concerning the land parcel sizes used for growing crops, optimal linear and goal programming solutions were found that enable the farm owner to achieve his vision. This work contributes to research by making it easier to decide which method provides greatest benefits and is thus more suitable for a certain type of farm.

**Keywords:** Linear programming; Goal programming; Constrained optimization; Farm planning; Ecological farm

### 1. INTRODUCTION

This paper describes the use of linear programming (LP) and goal programming (GP) methods for computing an optimal yearly farming plan, while also carrying out a comparative analysis of the solutions provided by the two methods. The data used in this work were obtained from a well-known and medium-sized ecological farm located in Slovenia.

The purpose of applying optimization methods to ecological farming is to support the production of healthy food compared to conventional food, which relies on a significant amount of pesticides and other chemicals.

To achieve the above, we try to solve several problems facing ecological farming in comparison to conventional farming, such as lower production, a bigger amount of waste, higher product prices, lower profit, and other problems. Using the mentioned methods may be of great assistance in resolving these problems by identifying the optimal solution that ensures the balanced achievement of various important goals determined by a farm's management.

This paper has seven sections. Section 2 presents a literature review of the implementing of the LP and GP methods. In Section 3, we explore the complex farm planning problem and related difficulties. Section 4 briefly presents the LP and GP methods formulation in addition to developing LP and GP models for an ecological farm case study. The Lagrangian function was also used to analyse the objective function's sensitivity to changes in the constraints. Section 5 describes two optimal solutions arising from the two methods. Section 6 comparatively analyses the LP and GP solutions. In this section, the LP solution is also compared against the constrained solutions which were obtained. Section 7 provides some conclusions, remarks and summarises the research contribution of the work.

## 2. LITERATURE REVIEW

They were, however, first used in agriculture in the early 1950s, particularly, it was Waugh (1951) who first proposed the use of linear programming to establish least-cost combinations of feeding stuff and livestock rations.

Agricultural economics deals with scientific planning for agricultural development and has become an important area of specialisation within agriculture. The optimal crop pattern and production of food crops with maximum profit is important information for agricultural planning using optimisation methods (Sofi et al. 2015).

As applied to farm planning, linear programming is a systematic method for mathematically determining the optimum plan for the choice and combination of farm enterprises as to maximise income or minimise costs within the limits of available farm resources (Yang 1980).

Generally, mathematical programming tools have been used to cover a wide range of activities like crop farming, mixed farming, horticultural crops, livestock alone, various breeds and varieties, and all sorts of combinations of different activities (Mehta 1992).

Igben and Branwo (1982) applied the Linear Goal Programming technique to model the farm-family crop enterprise with a view to developing an optimal crop enterprise combination to enable a small holder farmer to meet their most important goals of providing food to the family throughout the year, accumulating an income and ensuring minimum use of paid labour.

The extent of GP research varies in different fields. Romero (1986) studied natural resource planning in agro forestry management problems using GP techniques for multiple objectives.

## 3. FARM PLANNING

Farm planning is complex because several constraints exist in this area. These constraints make it difficult to develop a farm planning model task due to the group of limitations that must be considered and defined in the model (Blackburn and Scudder 2009; Bourlakis et al. 2014). These constraints usually include land, labour and capital (Chopra et al. 2003).

Land is an essential resource because there are different types of land that need to be wisely partitioned in order to plant different crops. Labour is another important constraint impacting many farming expenses. Capital is a crucial limit in farm planning. Any farmer must invest a certain amount of capital in order to implement the developed farming plan (Rai et al. 2006).

Table 1 shows basic data provided by the owner of the farm. The rows in Table 1 introduce information in relation to the eight main crops: Spelt, Rye, Wheat, Barley, Buckwheat, Potato, Maize and Meadow. The columns in the table below provide key data about human and machine working hours, land restrictions, crop production, expenses, and profit.

Table 1. Data about the crops

Crops	Labour human (h/ha)	Labour machine (h/ha)	Land restriction (ha)	Production (t/ha)	Expenses (€/ha)	Profit (€/ha)
1. Spelt	8	3	$\geq 4$	4	265	270
2. Rye	8	3	$\geq 4$	4	265	270
3. Wheat	8	3	$\geq 3$	3	265	270
4. Barley	8	3	$\geq 1$	2	265	270
5. Buckwheat	8	3	$\geq 3$	1	300	200
6. Potato	88	8	$\geq 1$	40	2920	9080
7. Maize	150	3	$\geq 1$	7	420	380
8. Meadow	20	20	$\leq 20$	30	800	400

## 4. OPTIMIZATION METHODS

It is understandable that solving the complex farm planning problem is very difficult without the use of optimization methods. The role of mathematical programming models may be crucial in the analysis of

decision-making at the farm level. Namely, mathematical modelling captures very good agriculture production theory and modelling (Dent et al. 1986).

#### 4.1. Linear Programming Method

Different methods can be applied to ensure a whole-farm planning approach. The simplest and most often applied is the common deterministic linear programming approach. This method's main assumption is the linearity of all relations (Shukla and Jharkharia 2013).

##### 4.1.1. Linear Programming Formulation

LP is a well-known and perhaps the most commonly used method to solve different optimisation problems. An LP problem with  $n$  decision variables and  $m$  constraints modelled by many authors such as (Taha 1975; Zeleny 1982; Winston 1995).

The simplex algorithm developed by Dantzig (1963) starts with a primal feasible basis and uses pivot operations to preserve the feasibility of the basis and guarantee monotonicity of the objective value (Sofi et al. 2015).

An LP problem may be considered in the following standard form (Arsham et al. 2005):

$$\begin{aligned} &\text{Maximise} && Z = \sum_{j=1}^n c_j x_j \\ &\text{subject to:} && \\ &&& \sum_{j=1}^n a_{ij} x_j = b_i, \quad i = 1, \dots, m \end{aligned}$$

$\geq$   
 $\leq$

where  $x_j \geq 0, j = 1, \dots, n$

- $Z$  = the objective function to be maximised
- $x_j$  = input variables
- $c_j$  = cost coefficients of objective function  $Z$
- $b_i$  = maximum limit of the constraints
- $a_{ij}$  = coefficients of the functional constraint equations

##### 4.1.2. Linear Programming Model

The following LP model for the ecological farm was developed based on the information shown in Table 1. Variables  $x_1$  to  $x_8$  represent the eight crops above listed where, for example, variable  $x_1$  is Spelt,  $x_2$  is Rye etc.

The LP model of the farm shown above consists of 13 constraints. The first five constraints determine: Profit, Expenses, Human labour, Machine labour, land available, whereas the last eight constraints define the land size for each crop: Spelt, Rye, Wheat, Barley, Buckwheat, Potato, Maize, and Meadow.

Objective function: Maximise production ( $Z$ ):

$$Z = 4x_1 + 4x_2 + 3x_3 + 2x_4 + 1x_5 + 40x_6 + 7x_7 + 30x_8$$

Constraints:

$$\begin{aligned} 270x_1 + 270x_2 + 270x_3 + 270x_4 + 200x_5 + 9080x_6 + 380x_7 + 400x_8 &\geq 22000 \\ 265x_1 + 265x_2 + 265x_3 + 265x_4 + 300x_5 + 2920x_6 + 420x_7 + 800x_8 &\leq 25000 \\ 8x_1 + 8x_2 + 8x_3 + 8x_4 + 8x_5 + 88x_6 + 150x_7 + 20x_8 &\leq 800 \\ 3x_1 + 3x_2 + 3x_3 + 3x_4 + 3x_5 + 8x_6 + 3x_7 + 20x_8 &\leq 500 \\ x_1 + x_2 + x_3 + x_4 + x_5 + x_6 + x_7 + x_8 &\leq 40 \\ x_1 &\geq 4 \\ &x_2 &\geq 4 \\ &&x_3 &\geq 3 \\ &&&x_4 &\geq 1 \\ &&&&x_5 &\geq 3 \\ &&&&&x_6 &\geq 1 \\ &&&&&&x_7 &\geq 1 \end{aligned}$$

## 4.2. Goal Programming Method

The GP method was developed by Charnes and Cooper (1961) and advanced by (Ijiri 1965; Jääskeläinen 1969; Lee 1972; Ignizio 1976; Zeleny 1982). Other researchers like (Gass 1986; Romero 1986; Zimmermann 1983; Slowinski 1986) extended the method in different ways: pre-emptive, integer, and zero-one goal programming etc.

Since the adaptation of multiple GL in decision-making brings many advantages, Ijiri (1965) presented multiple GL as an extension of break-even analysis, which is widely used in business practice.

In many situations farmers are often faced with several objectives simultaneously and no easy single choice. Examples of such objectives are maximisation of net revenue; minimisation of capital borrowing and hired labour; and minimisation of the risk associated with yield and field day variability (Vashistha 2011).

Goal programming is a technique capable of handling decision problems dealing with a single goal with multiple sub-goals, as well as a problem with multiple goals with multiple sub-goals (Lee 1972).

Goal programming is similar in structure to linear programming but offers a more flexible approach to planning problems by allowing a number of goals which are not necessarily compatible to be simultaneously taken into account (Wheeler and Russell 1977).

Rifai and Pecenka (1986) stated that a set of goals which are in conflict with each other are managed by minimising the deviations between the goals and the outcomes. The distance of the desired value is given in terms of underachievements and overachievements, also called deviations.

Goal programming extends the linear programming formulation to accommodate mathematical programming with multiple objectives (Charnes and Cooper 1961). Ijiri (1965) extended the method by using an explicit representation of the decision-maker's goals and their priorities.

### 4.2.1. Goal Programming Formulation

The GP objective function is always minimized and must only be composed of deviational variables. Two types of variable are used in the GP model formulation: decision and deviational. There are also two categories of constraints: functional or system (strict as in LP) and goal constraints, which are expressions of the original functions with the target goals, set priorities, and positive and negative deviational variables (Glen 1987).

The general GP model introduced by Charnes and Cooper (1961) is expressed as follows:

$$\begin{aligned} &\text{Minimise } Z = \sum_{i=1}^m (d_i^- + d_i^+) \\ &\text{subject to} \\ &\text{Goal constraints:} \\ &\quad \sum_{j=1}^n a_{ij} x_j + d_i^- - d_i^+ = b_i \\ &\text{Functional constraints:} \\ &\quad \sum_{j=1}^n a_{ij} x_j \begin{matrix} \geq \\ = \\ \leq \end{matrix} b_i \\ &\text{where } d_i^-, d_i^+, x_j \geq 0, i = 1, \dots, m \text{ and } j = 1, \dots, n \end{aligned}$$

The goals in the GP model are prioritised such that highest priority is given to the goal whose achievement is most important, while lower priorities are assigned to other goals with respect to their importance, as determined by the decision-maker.

Iserman (1982), Schniederjans and Hoffman (1992) and Ignizio (1983) stated that pre-emptive GP should be employed when a clear priority in the order of goals to be achieved exists. The pre-emptive GP model can be stated as follows:

$$\begin{aligned} &\text{Minimise } Z = \sum_{i=1}^m P_i (d_i^- + d_i^+) \\ &\text{subject to} \\ &\text{Goal constraints:} \end{aligned}$$

$$\sum_{j=1}^n a_{ij} x_j + d_i^- - d_i^+ = b_i$$

Functional constraints:

$$\sum_{j=1}^n a_{ij} x_j \begin{matrix} \geq \\ = \\ \leq \end{matrix} b_i$$

where  $d_i^-, d_i^+, x_j \geq 0$ ,  $i = 1, \dots, m$ ,  $j = 1, \dots, n$ , and  $P_i$  is the priority of goal( $i$ ),  
 $d_i^-$  is a deviation variable from goal( $i$ ), which shows goal( $i$ ) is underachieved and  
 $d_i^+$  is a deviation variable from goal( $i$ ), which shows goal( $i$ ) is overachieved.

#### 4.2.2. Goal Programming Model

For the ecological farm being studied, five important goals were defined in the following order of priority: maximize production and profit, minimize capital, human, and machine labour.

Based on the data shown in Table 1, the GP model below was developed, consisting of an objective function for minimizing deviations from the goals defined, five goal constraints, and nine system or functional constraints. The GP model developed is in line with the farm owner's wishes.

Objective Function: Minimise

$$P_1^- d_1^- + P_1^+ d_1^+ + P_2^- d_2^- + P_2^+ d_2^+ + P_3^- d_3^- + P_3^+ d_3^+ + P_4^- d_4^- + P_4^+ d_4^+ + P_5^- d_5^- + P_5^+ d_5^+$$

Goal Constraints:

$$\begin{aligned} 4x_1 + 4x_2 + 3x_3 + 2x_4 + 1x_5 + 40x_6 + 7x_7 + 30x_8 + d_1^- - d_1^+ &= 700 \\ 270x_1 + 270x_2 + 270x_3 + 270x_4 + 200x_5 + 9080x_6 + 380x_7 + 400x_8 + d_2^- - d_2^+ &= 22000 \\ 265x_1 + 265x_2 + 265x_3 + 265x_4 + 300x_5 + 2920x_6 + 420x_7 + 800x_8 + d_3^- - d_3^+ &= 25000 \\ 8x_1 + 8x_2 + 8x_3 + 8x_4 + 8x_5 + 88x_6 + 150x_7 + 20x_8 + d_4^- - d_4^+ &= 800 \\ 3x_1 + 3x_2 + 3x_3 + 3x_4 + 3x_5 + 8x_6 + 3x_7 + 20x_8 + d_5^- - d_5^+ &= 500 \end{aligned}$$

Functional Constraints:

$$\begin{array}{cccccccc} x_1 + & x_2 + & x_3 + & x_4 + & x_5 + & x_6 + & x_7 + & x_8 & \leq & 40 \\ x_1 & & & & & & & & \geq & 4 \\ & x_2 & & & & & & & \geq & 4 \\ & & x_3 & & & & & & \geq & 3 \\ & & & x_4 & & & & & \geq & 1 \\ & & & & x_5 & & & & \geq & 3 \\ & & & & & x_6 & & & \geq & 1 \\ & & & & & & x_7 & & \geq & 1 \\ & & & & & & & x_8 & \leq & 20 \end{array}$$

The first five constraints represent the farm owner's goals in the GP model, as follows: production  $\geq 700$  t, profit  $\geq 22000$  €, capital  $\leq 25000$  €, human labour  $\leq 800$  h, and machine labour  $\leq 500$  h.

The last nine constraints in the GP model are functional and indicate land limitations, expressed as follows:

- constraint 6 defines the size of the overall land available; namely 40 ha; and
- the last eight constraints indicate the defined land partitioning for the different crops.

#### 4.3. Constrained Optimization

The central mathematical problem is maximizing a function with several variables, where some variables are bound by certain constraining equations. In our case, the farm problem (defined in section 4.1.2) can be written as:

$$\text{Maximize } Z = \sum_{j=1}^n c_j x_j$$

subject to:

$$g_i(x_1, \dots, x_n) \leq b_i$$

$$\text{where } g_i(x_1, \dots, x_n) = \sum_{j=1}^n a_{ij} x_j, \quad i = 1, 2, \dots, m.$$

If the constraint is written as  $g_k(x_1, \dots, x_n) \geq b_k$  instead of  $g_k(x_1, \dots, x_n) \leq b_k$ , we simply multiply it by  $(-1)$ .

Functions  $(g_1, g_2, \dots, g_m)$  satisfy the nondegenerate constraint qualification (NDCQ) at  $x^*$  if the rank of the Jacobian matrix  $Dg(x^*)$  at  $x^*$  is  $m$  (Simon and Blume 1994).

Given that the functions  $Z, g_1, \dots, g_m$  are continuously differentiable on  $\mathbb{R}^n$  and that  $x^* \in \mathbb{R}^n$  is a local maximiser of  $Z$  on the constraint set, the following NDCQ is satisfied at  $x^*$ : the rank at  $x^*$  of the Jacobian matrix of the binding (active) constraints

$$\begin{bmatrix} \frac{\partial g_{k_1}}{\partial x_1}(x^*) & \dots & \frac{\partial g_{k_1}}{\partial x_n}(x^*) \\ \vdots & \ddots & \vdots \\ \frac{\partial g_{k_n}}{\partial x_1}(x^*) & \dots & \frac{\partial g_{k_n}}{\partial x_n}(x^*) \end{bmatrix}$$

is  $n$  (as large as it can be).

This then allows us to form the Lagrangian (Simon and Blume 1994):

$$L(x, \lambda) \equiv f(x) - \lambda_1 \cdot [g_1(x) - b_1] - \dots - \lambda_k \cdot [g_k(x) - b_k]$$

and there are multipliers  $\lambda_1^*, \dots, \lambda_k^*$  such that:

- (a)  $\frac{\partial L}{\partial x_1}(x^*, \lambda^*) = 0, \dots, \frac{\partial L}{\partial x_n}(x^*, \lambda^*) = 0$
- (b)  $\lambda_1^* [g_1(x^*) - b_1] = 0, \dots, \lambda_k^* [g_k(x^*) - b_k] = 0$
- (c)  $\lambda_1^* \geq 0, \dots, \lambda_k^* \geq 0$
- (d)  $g_1(x^*) \leq b_1, \dots, g_k(x^*) \leq b_k$

Considering that variables  $x_1$  and  $x_2$  are interchangeable and we can replace them with  $x_1' = x_1 + x_2$  to reduce the problem, we obtain the following Lagrangian function for Ecological farm:

$$\begin{aligned} L = & 4x_1' + 3x_3 + 2x_4 + 1x_5 + 40x_6 + 7x_7 + 30x_8 - \\ & -\lambda_1(-270x_1' - 270x_3 - 270x_4 - 200x_5 - 9080x_6 - 380x_7 - 400x_8 + 22000) - \\ & -\lambda_2(265x_1' + 265x_3 + 265x_4 + 300x_5 + 2920x_6 + 420x_7 + 800x_8 - 25000) - \\ & -\lambda_3(8x_1' + 8x_3 + 8x_4 + 8x_5 + 88x_6 + 150x_7 + 20x_8 - 800) - \\ & -\lambda_4(3x_1' + 3x_3 + 3x_4 + 3x_5 + 8x_6 + 3x_7 + 20x_8 - 500) - \\ & -\lambda_5(x_1' + x_3 + x_4 + x_5 + x_6 + x_7 + x_8 - 40) - \\ & -\lambda_6(-x_1' + 8) - \lambda_7(-x_3 + 3) - \lambda_8(-x_4 + 1) - \lambda_9(-x_5 + 3) - \\ & -\lambda_{10}(-x_6 + 1) - \lambda_{11}(-x_7 + 1) - \lambda_{12}(x_8 - 20) \end{aligned}$$

and the Jacobian matrix of constraints:

$$\begin{bmatrix} -270 & -270 & -270 & -200 & -9080 & -380 & -400 \\ 265 & 265 & 265 & 300 & 2920 & 420 & 800 \\ 8 & 8 & 8 & 8 & 88 & 150 & 20 \\ 3 & 3 & 3 & 3 & 3 & 3 & 20 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ -1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & -1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & -1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & -1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & -1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{bmatrix}$$

The rank of the matrix is 7 (the active constraint: 3, 5, 7, 8, 9, 11 and 12) and the NDCQ is satisfied.

## 5. RESULTS

The LP and GP models described in the previous section were tested using the Simplex Approach in the Excel Solver software. While taking into the account the farm owner's strict limitations concerning the land parcel



sizes used for growing crops, optimal solutions were found that enable the farm owner to achieve his vision as closely as possible.

### 5.1. Linear Programming Solution

Table 2 shows the constraints used in the "Constraints" column, while the objective function in row 1 of the "Results" column, and other results are presented in the next rows of the same column.

Table 2. LP Optimal Solution

	Constraints		Results
Max Production (t)			713.1
Profit (€)	≥	22,000	24,092.25
Capital (€)	≤	25,000	24,812.38
H. Labour (h)	≤	800	800
M. Labour (h)	≤	500	466.12
Land (ha)	≤	40	40
Spelt (ha)	≥	4	6.775
Rye (ha)	≥	4	4
Wheat (ha)	≥	3	3
Barley (ha)	≥	1	1
Buckwheat (ha)	≥	3	3
Potato (ha)	≥	1	1.225
Maize (ha)	≥	1	1
Meadow (ha)	≤	20	20

The decision variables listed in the final eight rows of the last column introduce the optimal yearly farming plan and show the land size determined for each crop.

The solution presented in Table 2 enables a maximum production of 713.1 t and a profit of €24,092.25. Achieving this result requires that the whole land available (40 ha) be used, that capital of €24,812.38 be invested on top of 800 h of human and 460.12 h of machine labour.

### 5.2. Goal Programming Solution

Table 3 shows the optimal GP solution, namely, the optimal yearly farming plan. The first five rows in the table show the goal constraints in the "Constraints" column, goal achievements in column "Results", and negative deviations from these goals in column " $d_i^-$ ".

The solution indicates achievement of the following goals:

- production is the most important goal, and reveals a minor underachievement of 7 t, which is just 1% of the production stated in the production goal constraint;
- profit is the second goal and also shows a minor underachievement of €700, meaning only 3.18% of the profit specified in the profit goal constraint;
- the capital goal is achieved since the capital needed to implement this solution is less than the amount of money the farm owner was prepared to invest; and
- the human labour and machine labour goals are also satisfied because the solution needs fewer human and machine working hours than the farmer expected.

Table 3. GL Optimal Solution (Min. Deviation)

	Constraints		Results	$d_i^-$
Production (t)	≥	700	693	7

Profit (€)	≥	22,000.00	21,300.00	700.00
Capital (€)	≤	25,000.00	23,420.00	1,580.00
H. Labour (h)	≤	800	758	42
M. Labour (h)	≤	500	456	44
Land (ha)	≤	40	37	
Spelt (ha)	≥	4	4	
Rye (ha)	≥	4	4	
Wheat (ha)	≥	3	3	
Barley (ha)	≥	1	1	
Buckwheat (ha)	≥	3	3	
Potato (ha)	≥	1	1	
Maize (ha)	≥	1	1	
Meadow (ha)	≤	20	20	

In the "Results" column of the table, row six shows the land size needed to implement this solution is only 37 ha. Meanwhile, the decision variables of the solution, presented in the final eight rows of the same column, satisfy the land size constraints given in the GP model.

### 5.3. Sensitivity Analysis

The optimal solution of the Constrained Optimisation coincides with the optimal solution of the LP (Table 2), where  $x_1' = x_1 + x_2 = 10.775$ ,  $x_1 \geq 4$  (Spelt),  $x_2 \geq 4$  (Rye) and

$$\lambda_1 = \lambda_2 = \lambda_4 = \lambda_6 = \lambda_{10} = 0$$

$$\lambda_3 = 0.45, \lambda_5 = 0.4, \lambda_7 = 1, \lambda_8 = 2, \lambda_9 = 3, \lambda_{11} = 60.9, \lambda_{12} = 20.6.$$

Given that  $x_1^*(\mathbf{a}^*), \dots, x_n^*(\mathbf{a}^*)$  denote the solution to the Ecological farm problem and that  $\lambda_1^*(\mathbf{a}^*), \dots, \lambda_k^*(\mathbf{a}^*)$  are the corresponding Lagrange multipliers, then the expression:

$$\lambda_j^*(\mathbf{a}) = \frac{\partial}{\partial a_j} Z(x_1^*(\mathbf{a}), \dots, x_n^*(\mathbf{a}))$$

represents the change in the optimal production that occurs when one more (less) unit of input  $j$  is available (Simon and Blume, 1994). Thus, the  $j$ th multiplier  $\lambda_j^*(\mathbf{a})$  represents this infinitesimal change, and shows how valuable another unit of input  $j$  would be to the farm's objective function. If parameter  $a_j$  increases by  $\Delta a_j$ , the objective function will increase by:

$$\Delta Z = \frac{\partial Z}{\partial a_j} \cdot \Delta a_j = \lambda_j \cdot \Delta a_j \quad \Rightarrow \quad Z' \cong Z + \Delta Z$$

If constraint 3 (Human Labour) is altered, the objective function will change to:

$$\Delta Z = \lambda_3 \cdot \Delta a_3 = 0.45 \cdot \Delta a_3$$

If we add 1 hour of human labour, production rises by 0.45 t (see Table 5).

If constraint 5 (Land) increases/decreases, the objective function increases/decreases by:

$$\Delta Z = \lambda_5 \cdot \Delta a_5 = 0.4 \cdot \Delta a_5$$

If we increased/decreased the land size by 1 ha, production would increase/decrease by 0.4 t. (see Table 5).

If constraint 7 (Wheat) is increased/decreased, the objective function increases/decreases by:

$$\Delta Z = \lambda_7 \cdot \Delta a_7 = 1 \cdot \Delta a_7$$

If we increase/decrease the wheat land size by 1 ha, production would increase/decrease by 1 t. (see Table 5).

If constraint 8 (Barley) is increased/decreased, the objective function increases/decreases by:

$$\Delta Z = \lambda_8 \cdot \Delta a_8 = 2 \cdot \Delta a_8$$

If we increase/decrease the Barley land size by 1 ha, production would increase/decrease by 2 t. (see Table 5).

If constraint 9 (Buckwheat) is increased/decreased, the objective function increases/decreases by:

$$\Delta Z = \lambda_9 \cdot \Delta a_9 = 3 \cdot \Delta a_9$$

If we increase/decrease the Buckwheat land size by 1 ha, production would increase/decrease by 3 t. (see Table 5).

If constraint 11 (Maize) is increased/decreased, the objective function increases/decreases by:

$$\Delta Z = \lambda_{11} \cdot \Delta a_{11} = 60.9 \cdot \Delta a_{11}$$

If we increase/decrease the Maize land size by 0.01 ha, production would increase/decrease by 0.609 t. (see Table 5).

If constraint 12 (Meadow) is increased/decreased, the objective function increases/decreases by:

$$\Delta Z = \lambda_{12} \cdot \Delta a_{12} = 20.6 \cdot \Delta a_{12}$$

If we increase/decrease the Meadow's land size by 1 ha, production would increase/decrease by 20.6 t. (see Table 5).

If we change other constraints (Profit, Capital, Machine Labour, Spelt + Rye, and Potato), the object function will not change because:

$$\lambda_1 = \lambda_2 = \lambda_4 = \lambda_6 = \lambda_{10} = 0$$

## 6. Comparative Analysis

In this analysis we seek to compare constraints like production, profit, expenses (including human and machine labour), and land size achieved in both solutions, presented in Table 4.

Table 4 shows the LP and GP solutions in the second and third columns along with the differences between them in the last column. We highlight the following findings:

- production in the LP solution is 20.1 t larger than in the GP solution;
- profit in the LP solution is €2,792.25 higher than in the GP solution;
- the LP solution requires more resources: €1,392.38 in money, as well as 42 human and 10.12 machine working hours.

Table 4. Comparison of the solutions

	LP	GP	Difference (LP-GP)
Production (t)	713.1	693	20.1
Profit (€)	24,092.25	21,300.00	2,792.25
Capital (€)	24,812.38	23,420.00	1,392.38
H. Labour (h)	800	758	42
M. Labour (h)	466.12	456	10.12
Land (ha)	40	37	3
Spelt (ha)	6.775	4	2.775
Rye (ha)	4	4	0
Wheat (ha)	3	3	0
Barley (ha)	1	1	0
Buckwheat (ha)	3	3	0
Potato (ha)	1.225	1	0.225

Maize (ha)	1	1	0
Meadow (ha)	20	20	0

Table 5 shows the results of the sensitivity analysis of the LP model, which was performed by changing the RHS of a constraint indicated in the first column starting from the second row on.

The first row of the table shows the basic LP solution, which may be compared with the changes shown in each row of the changed constraint. In row 7 of the table, a very interesting solution was obtained by changing the Maize constraint by only 0.01. This solution creates 155€ more in profit than the basic LP one.

Constraints of the variables Wheat, Barley, Buckwheat, and Maize were multiplied by -1, thus, for example, a change from -3 to -2 means an increase.

Table 5. Sensitivity analysis

	Spelt	Potato	Maize	Profit	Capital	Machine labour	Production
Basic LP Solution	6.775	1.225	1	24,092.25	24,812.38	466.125	713.10
+1 Human L ( $\leq 01$ )	-0.0125	0.0125	0	110.125	33.188	0.063	0.45
+1 ha Land ( $\leq 41$ )	1.1	-0.1	0	-611	-0.5	2.5	0.4
+1 ha Wheat ( $\leq -2$ )	1	0	0	0	0	0	1
+1 ha Barley ( $\leq 0$ )	1	0	0	0	0	0	2
+1 ha Buckwheat ( $\leq -2$ )	1	0	0	70	-35	0	3
+0.01 ha Maize ( $\leq -0.99$ )	-0.0078	0.0178	-0.01	155.28	45.58	0.0888	0.609
+1 ha Meadow ( $\leq 21$ )	-0.85	-0.15	0	-1191.5	136.75	16.25	20.6

## 7. CONCLUSIONS

As mentioned, ecological farming faces several problems. Thus, LP and GP methods were applied to determine the yearly farming plan that best provides a solution to these problems.

For this purpose, LP and GP models were developed based on requirements stated by the ecological farm's owner. The results of testing the models shown in Section 5 were presented to the owner who received them with great satisfaction.

The comparative analysis performed in Section 6 enabled us to compare both optimal solutions based on four constraints: production, profit, expenses, and land size. Results in Table 4 led us to several conclusions:

- 1) Production in LP solution is 20.1 t bigger than the production achieved by the GP solution.
- 2) The LP solution makes €2,792.25 higher profit than the GP solution.
- 3) The LP solution needs €1,392.38 more capital than the GP solution. Despite this, we may conclude the LP solution benefits the ecological farm under study because the profit brought (€2,792.25) is still higher than the more capital needed.
- 4) The whole land available (40 ha) is needed to be used in the LP solution, whereas implementing the GP solution requires only 37 ha, giving the farmer an additional 3 ha for planting vegetables or other plants.
- 5) The sensitivity analysis of the LP model performed by changing the RHS of a constraint showed that the changes in the obtained objective functions are minor. These changes may lead to a new very good solution such as the solution created by changing the Maize constraint by just 0.01, which offered a greater profit than the basic LP solution (see Table 5).

We may summarise that the research contribution of this work is concerned with the use of LP or GP methods in the area of farm planning and that it depends on the farm type and its environment.

Therefore, building on the specified farming problems and solutions obtained, the comparative analysis, and above listed conclusions, we may say that this work makes deciding on which method is most beneficial for a certain farming type easier.

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## Pazarlamada Yapay Zekâ

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**Özet:** Pazarlama dünyasında hızla büyüyen bir alan olan yapay zekâ (YZ), pazarlama stratejilerini optimize etme, müşteri deneyimini kişiselleştirme ve gerçek zamanlı analiz yetenekleri ile pazarlamacılara önemli avantajlar sunmaktadır. Pazarlamacılar, yapay zekâ teknolojisinin sunduğu çeşitli araçları ve teknikleri kullanarak daha etkili ve verimli pazarlama kampanyaları oluşturma, müşterilerini daha iyi anlama ve onlarla daha etkili ve başarılı iletişim ve etkileşim çabaları geliştirme konusunda önemli avantajlar sunmaktadır. Yapay zekâ, sunduğu yenilikler sayesinde giderek yaygınlaşan bir teknoloji olmakla birlikte henüz pazarlama bilimi açısından üzerinde yeterli çalışma olmadığı görülmektedir. Bu çalışma, yapay zekânın pazarlama stratejilerindeki rolünü anlamak ve gelecekteki olası etkilerini değerlendirmek için temel bir çerçeve sunmayı planlamaktadır. Çalışma kapsamında yapay zekâ kavramı ve gelişimi, pazarlama stratejilerinde yapay zekânın kullanımı ve pazarlamada yapay zekâ uygulamaları ve örnekleri sunulmaktadır.

**Anahtar Kelimeler:** Yapay zekâ, pazarlama, pazarlama karması

## Artificial Intelligence in Marketing

**Abstract:** Artificial intelligence (AI), a rapidly expanding area in the marketing world, provides marketers with significant advantages by optimizing marketing strategies, personalizing the customer experience, and providing real-time analytics. Utilizing artificial intelligence technology, marketers can create more effective and efficient marketing campaigns, better understand their customers, and develop successful communication and engagement efforts. Although artificial intelligence is a widely used technology due to its innovative capabilities, there is still a lack of research in the field of marketing science. This study aims to establish a fundamental framework for comprehending the role of artificial intelligence in marketing strategies and evaluating its potential future implications. The study presents the concept and development of artificial intelligence, its use in marketing strategies, and various applications and examples of artificial intelligence in marketing.

**Key Words:** Artificial Intelligence, Marketing, Marketing Mix

### 1. GİRİŞ

İnsanoğlu var oluşunun başından beri hayatını kolaylaştıracak icatlar ve ürünler geliştirmiştir. Her inovasyon hayatı daha verimli yaşamak adına yapılmıştır. Tekerleğin icadından, yazının bulunmasına kadar akla gelen her bir icat insanlığa yeni kapılar aralamıştır. Gelişen teknoloji ve değişen dünya düzeni ortamında makineler, bu gelişme adımlarının vazgeçilmez bir parçası haline gelmiştir. Makineler ve yapay zekâ bugün birçok alanda insanların hayatını etkilemekte ve kolaylaştırmaktadır. İşletmeler için bu durum; rekabet avantajı sağlamak, verimliliği ve kârı maksimum hale getirmek, prosesleri hatasız ve sürekli hale getirmek, yüksek kalite elde etmek, iç ve dış müşteri memnuniyeti sağlamak adınadır. Kullanıcılar, müşteriler veya tüketiciler için ise; ürünleri, hizmetleri ya da deneyimleri kendi istek ve ihtiyaçlarını en doğru şekilde karşılamak, pratik bir yaşam sağlamak ve de zamanlarını verimli yönetmek içindir.

### 2. ZEKÂ VE YAPAY ZEKÂ

İnsanoğlu varlığının en başından beri beyin gizemini merak etmiştir. Beyne ait ilk yazılı belgeler MÖ 4000'lerde kil tabletlere yazılmış reçeteler şeklinde Sümer Devleti'nde görülmektedir (Özbabalık Adapınar, 2022). MÖ 3000'lerde Antik Mısır'da, bilinen en eski beyin cerrahisi işlemlerini içeren Osiris Miti beyne olan merakın birçok mitolojik efsanede yer aldığı ilk kanıtlarındandır. Antik Yunan'da Ammon, şu an hipokampüs olarak tanımlanan; duyguları bastırma, hafıza ve mekânsal öğrenme gibi işlemlerden sorumlu bölgeyi beyindeki boynuz olarak isimlendirmiştir (Yıldız & Korkmaz, 2022).

İlerleyen zamanlarda MÖ 7.yy'da İyonya'da doğan felsefe bilimi içinde zekâ, beyin, bilinç ve akıl kavramları çok ilgi görmektedir (Özgöçer, 2019). MÖ 4'lerde Hipokrat'ın yazmış olduğu "Kutsal Hastalık Hakkında" eseri beyin işlevlerini ve beyin tanımını içermektedir (Özbabalık Adapınar, 2022). Aristoteles de akıl üzerine çalışmıştır. Aristoteles; edilgen aklın sunduklarını, duyarlar etkin akıl ile yorumlar ve biçimlendirir şeklinde açıklamıştır. Fakat tarihte zekâ kavramının mihenk taşı Descartes tarafından atılmıştır. Descartes Rönesans'ın buhranlı döneminde zekâ üzerine çalışmış olup o dönem yaptığı çalışmalarında zekâyı bölümlere ayırmıştır. Descartes'in tanımları bugün hala kullanılan zekâ tanımlarını oluşturmuştur (Yeşilkaya, 2022). Bunlar; sosyal zekâ, duygusal zekâ, müzik zekâsı, yaratıcı zekâ, sözel zekâ, algısal zekâ, pratik zekâ gibi birçok zekâ türüdür. Günümüzde zekânın bilinen ve kullanılan ortak tanımlarının arasında bilgiyi saklama, öğrenme, muhakeme, hafıza, tüme varım, tümden gelim, bilgileri bağlama, hayal gücü, sonuca varma, problemleri ve sorunları çözme, yeni bilgiler ile geçmiş bilgileri birbirine bağlama yer almaktadır (Bayık, 2019). Özetle zekâ duyarlarla aldığı bilgileri sinir ağları ile işleyen, analiz eden bir kavramdır. Bugün beyin hala gizemini koruyan ve tam anlaşılammış bir organdır. Beyne ait özellikler de aynı şekilde hala gizemini koruyan, insanoğlu için çekici, merak uyandıran ve daha tam kavranammış olgulardır.

İkinci Dünya Savaşı sırasında gelişen elektromanyetik cihazlar, kodlama ve şifreleme sanatı yapay zekâ için atılan ilk adımları oluşturmaktadır. Bu makineler aynı zamanda yapay zekâ kavramını yaratmaya başlamıştır. Bunların başında Enigma gibi karmaşık algoritmalar üreten bir makine bulunmaktadır. 1950'de Alan Mathison Turing, Enigma'nın ürettiği algoritmaları ve güçlü paradigmaları fark ederek, "makineler düşünebilir mi?" sorusunu "Computing Machinery and Intelligence" makalesi ile ileri sürmüştür. Kendisi bunun üzerine ilerleyen süreçte "Imitation Game" yani "Taklit Oyunu"nu kurgulamıştır (Turing, 1950). Bu oyun farklı üç bölüme konulmuş bir erkek, bir kadın, bir de kadın ya da erkek gibi davranabilen bir bilgisayardan meydana gelen ve sadece yazı ekranı ile iletişim sağlayan üç unsur içermektedir. Bu oyun nezdinde, beş dakikalık görüşmenin ardından sorgulayıcı konumundaki bilgisayarın, elde ettiği sonuçlardan kesin emin olamaması durumunda bile bilgisayar testi geçmiş kabul edilecektir (Dore, 2012). Burada aslında bilgisayarın katılımcı insanların zekâsını tanıyıp taklit edip edemeyeceği görülmek istenmiştir. Bilgisayarın katılımcı insanları kendisinin insan olduğuna ikna edip edemeyeceği merak edilmiştir. Turing, bilgisayarın sonsuz veri saklama kapasitesinden ötürü gelecek dönemlerde sorulan sorular vasıtasıyla insanı tanıma oranının %70 olacağını savunmuştur (Yıldırım, 2018).

Şekil 1. Turing Testi



Kaynak: (Ertem Orhan, 2021)

1950 yılında Turing gibi başkaları da makinelerin düşünmesi üzerine kafa yormuştur. Bunların başında ünlü yazar Isaac Asimov gelmektedir. Asimov 1950 yılında "Ben Robot" kitabını yayınlamıştır. Ben Robot, robot-insan etkileşimi ve makine öğrenmesi hakkında mihenk taşı konumuna gelmiştir (Erdoğan, 2017).

Yapay zekâ kavramındaki yapay ve zekâ kelimeleri ilk olarak 1955 yılında John McCarthy tarafından, yapay zekâ üzerine tanımların ve beyin fırtınalarının yapıldığı Dartmouth Konferansı için yazdığı bir mektupta yan yana kullanılmıştır. Bu konferans sonrasında birçok çalışmada yapay zekâ; zeki ve akıllı makineler yapma mühendisliği olarak tanımlanmıştır. İnsan beynindeki nöron bağlantıları, sinir ağlarının işleyişi ve insan zekâsı yapay zekâ kavramına ilham vermiştir. Çünkü yapay zekâ karmaşık problemleri çözmekte insan tecrübesine ve deneyimlerine ihtiyaç duymaktadır (Çakmak, 2018).



## 2.1. Makine Öğrenmesi

Yapay zekâ denilince en çok duyduğumuz kavramlardan biri makine öğrenmesidir. Genel ifadeyle makinelerin akıl yürütüyor, öğreniyor ve tanımlanan sorunlara çözümler sunuyor olabilmesi temelinden ortaya çıkmıştır (Tafralı, 2022). Burada önemli nokta her bir işlem için tekrar tekrar kod yazılmamasıdır. Bunun yerine belli başlı bir algoritma oluşturulur ve bu algoritmaya devamlı veriler gönderilmektedir. Algoritmanın kendine ait mantığını inşa etmesi sağlanmaktadır (Tosunoğlu vd., 2021). Makine öğrenmesi, hayatımızın büyük kısmında yer almaktadır. Savunma sanayisinde füzelerin hareketli hedeflerine kitlenmesinde kullanılmaktadır. Aynı zamanda parmak izi teknolojilerinde, sanal asistan uygulamalarında, trafik yoğunluğunun belirlenmesinde kullanılmaktadır. Pazarlamacılar için önemli olan web sitesi çerezlerinde de makine öğrenmesi kullanılmaktadır. Tüketicilere ait bilgiler bir sonraki satın alma ya da web sitesi ziyareti için saklanabilmektedir. YouTube, Netflix ve Spotify gibi programların da daha önce izlediğimiz şarkı, video, film veya diziye benzer örnekleri tüketicilere sunabilmesi esasında bu programların makine öğrenmesini kullanıyor olmalarının bir sonucudur. Dünyada Amazon, IBM, Microsoft ve Oracle gibi firmalar makine öğrenmesine en çok yatırım yapan şirketlerin başında gelmektedir (Tafralı, 2022).

## 2.2. Uzman Sistemler

Yapay zekânın ilişkili olduğu bir diğer alt dal ise uzman sistemlerdir. Uzman sistemler bir ya da birden fazla uzmana ait tecrübe, deneyim ve bilgiyi alarak makine tarafından taklit edilmesini sağlamaktadır ve aynı zamanda problemlerin çözümünde kullanılmaktadır. Tıp alanında teşhis konmasında, finans ve sigorta alanında risklerin hesaplanmasında, endüstri mühendisliği ve işletme mühendisliğinde iş proseslerinin optimizasyonunda, makine ve sistem arızası tespiti gibi alanlarda kullanılmaktadır. Uzman sistemler kullanıldıkları alanlara verimli, esnek, tutarlı, kapsamlı, kaliteli ve karar verme süresi minimize edilmiş süreçler sunmaktadır (Öztürk ve Sönmez, 2006).

## 2.3. Bulanık Mantık

1960'lara kadar mantık araştırmalarında Aristo'nun sayısal mantığı hüküm sürmekte olup 1960 yılında Japonya'da sözel mantık temelli olan bulanık mantık kavramı doğmaya başlamıştır. Klasik mantık sadece 1'ler ve 0'lardan oluşmaktadır. Fakat bulanık mantık için böyle kesin bir ayırmadan söz edilememektedir (Yılmaz & Şahin, 2023). Bulanık mantık netliğe sahip olmayan bilgilerin belirginleştirilmesi için belirsiz bilgileri işleyebilmektedir (İlgin, 2022). Bulanık mantık kesin olmayan seçeneklerin belirli bir sistematik ve kurallar içinde derecelendirilmesi olarak tanımlanabilir (Yılmaz & Şahin, 2023).

Bugün bulanık mantık örneklerine gündelik hayatın her noktasında karşılaşmamız mümkün olmaktadır. Bulaşık makineleri, çamaşır makineleri, fotokopi makineleri, tost makineleri, televizyonlar, klimalar, asansörler, akıllı süpürgeler, dronelar bulanık mantık sistemlerine örnek olarak verilebilir. Bankacılık, e-posta ve sosyal medya yüz tanıma sistemlerinde de bulanık mantık karşımıza çıkmaktadır. Facebook'un yüz tanıma sisteminin olması ve eklenen fotoğraflarda otomatik olarak arkadaşlarımızı etiketleme yapması bulanık mantık sayesinde. Aynı zamanda bulanık mantık NASA'nın gezegen fotoğraflarının kusursuzlaştırılmasında, genetik algoritmalarda ve askeri savaş teknolojilerinde kullanılmaktadır (İlgin, 2022).

## 2.4. Yapay Sinir Ağları

Yapay zekâ, insanoğlunun beyne olan merakıyla filizlenmeye başlamış, "beynin yerine getirdiği fonksiyonları da bir makine yapabilir mi?" sorusuyla ilerlemiş ve gelişmiştir. Yapay sinir ağları, insan beyninde bulunan sinaptik sinir ağlarının yaptığı işlemleri makinelerle yaptırma çabası olarak ifade edilebilir. Sinaptik bir sinir etrafındaki sinirlerle temas kurarak birden fazla parametre sunmaktadır. Çalışmalar, beyindeki sinaptik bağlantılarını makinelerle yaptırmaktadır. Bu şekilde makineler verileri; tahmin edebilir, sınıflayabilir, filtreleyebilir, yorumlayabilir ve ilişkilendirebilir hale getirebilmektedir. Borsa ve döviz tahminlerinde kullanılmaktadır (Arda & Küçükkocaoğlu, 2021).

## 2.5. Yapay Zekâ Türleri

Zayıf yapay zekâ, insana ait tüm becerileri makinelerin de yapabilmesidir. Bu bir ressam gibi resim çizmek, sürücüsüz araba sürmek, cerrahi bir operasyon yapmak ya da siber güvenlik olabilir. Kısaca tek bir komutu

yerine getirmek için kullanılan robotlar, makineler ve araçlar zayıf ya da dar yapay zekâ olarak tanımlanabilir (Kaplan, 2016).

Günümüzde yapay zekânın günlük yaşantının her noktasında yer aldığı söylenebilir. Kullanılan ürünler, cihazlar ve hizmetler ile hayatın tam ortasında olan bir kavramdır. Bulut sistemine ve büyük veriye kayıtlı yapılan tüm işlemlerin, kayıtlı fotoğrafların, bulunulan konumların, ziyaret edilen sitelerin, indirilen uygulamaların ve alışkanlıkların göz önünde bulundurularak kullanıcıya ait verilerin analiz edilmesini sağlamaktadır. Aynı zamanda bu analizlere özel öneriler sunmaktadır. Instagram uygulamasında gezerken Amazon sitesinde daha önce sepete atılmış ya da daha önce incelenmiş ürünlere ait reklamların kullanıcının karşısına gelmesi veya Netflix’de izlenen film ve dizilerin verileri analiz edilerek bu süreçte yine benzer içerikli yapımların kullanıcıya sunulması bir zayıf yapay zekâ örnekleridir (Binbir, 2021). Apple firmasına ait cihazların haftalık rutinlerinize göre o saatte bulunmanız gereken noktanın konumu için yol tarifi göstermesi ise bir başka zayıf yapay zekâ örneğidir (Sterne, 2017).

Genel yapay zekâ insanların yapabileceği her türlü işlemi yapabilecek olan yapay zekâ türü olarak tanımlanan, kendine ait kaygıları olan yapay zekâ türüdür. Ancak imkânsız olmayan mühendislik problemlerini çözebilecek olan sistemlerdir (Pennachin & Goertzel, 2007). Kısacası zayıf yapay zekâdan biraz daha karmaşık bir yapay zekâ türüdür.

Güçlü yapay zekâ ise insana ait olan kabiliyetlerin çok üzerinde yeteneklere sahip olan makineler için kullanılan tanımdır (Kaplan, 2016). Daha tahmin edilebilir ya da öngörülebilir bir süreç olmadığı için çalışmalarında çekinceler barındırmaktadır.

### 3. YAPAY ZEKÂ VE PAZARLAMA

Gelişen teknoloji ile dünyada rekabet ortamı giderek artmaktadır. İşletmeler de pazarlama ihtiyaçlarına en uygun, verimli ve optimize edilmiş seçenekleri yapay zekâ ile bulmaya çalışmaktadır. Çünkü pazarlamacılar yapay zekâ imkânlarından faydalanarak müşterilerini daha yakından tanıyarak, onların istek ve ihtiyaçlarına hitap ederken onlara kendilerini özel hissettirebilme imkânı yakalamaktadır (Kotler, 2020). Makine sistemine ait olan bu zekâ pazarlama alanında bize bilgiyi elde etme, bu bilgiyi kullanılabilir hale getirme ve kararın sonucuna göre davranma avantajı sağlar. Günümüzde satın alma niyetindeki hemen hemen tüm müşteriler internet aracılığı ile bilgisayar, akıllı telefon veya tablet kullanmaktadır. Kullandıkları internet sayesinde SMS, e-posta, sosyal medya, internet bankacılığı gibi kendisine ait bilgiler büyük veri adı verilen sisteme kaydolmaktadır (Gür, 2022). Böylece yapay zekâ pazarlamanın en önemli alanlarından biri olan tüketici davranışları için sınırsız bilgiler sunmaktadır. Örneğin büyük veri sayesinde pazarlamacılar hedef pazarlarındaki tüketicilerinin bir önceki alışverişinden gelecekteki satın alımlarını tahmin edebilmektedir (Zuboff, 2021). Veya büyük veri sayesinde makine öğrenmesi ile çevrimiçi reklamları ve mobil reklamları şekillendirilebilmektedir. Müşterilerin satın alma süreçlerinin planlanması ve analiz edilmesi ile müşterilere daha kişisel avantajlar, indirimler ve kampanyalar sunulmaktadır. Bu avantajlar ile müşteri kendisini daha özel hissetmektedir. Yapay zekâ bir anlamda pazarlamacıların istediği marka sadakati ve otomatik satın alma davranışının temellerini atmaktadır (Şahin, 2021).

#### 3.1. Yapay Zekâ ve Pazarlama Karması İlişkisi

Pazarlamacılar, günümüz teknolojisinde tüketicilerin ilgisini çekmek ve bu ilgiyi bünyesinde tutmak istemektedir. Bunu yaparken ürün, fiyat, dağıtım ve tutundurma gibi klasik pazarlama karması elemanlarını çağın gerektirdiği şekillerde kullanması gerekmektedir (Forrest & Hoanca, 2015). Pazarlamacılar, dijital pazarlama ve yapay zekâ kullanımı ile veri optimizasyonu sağlayarak hedefledikleri tüketici kitlelerini daraltabilmektedir (Johnson, 2006). Pazarlama karmasının yapay zekâ temelli tüm uygulamaları tutarlı ve güvenli olmakla birlikte, standardizasyon ve kişiselleştirme avantajları sunmaktadır (Huang & Rust, 2020).

Yapay zekâ varlığının temelinde insanı örnek almaktadır yani makinelerin hissetmesi ve düşünmesi temeli esaslıdır. Pazarlama açısından yapay zekâ temelli uygulamaların düşünmesi, pazar analizi gerçekleştirilmesi için önem taşımaktadır. Aynı şekilde yapay zekâ temelli uygulamaların hissetmesi de tüketicinin anlaşılması açısından önem arz etmektedir (Huang & Rust, 2020). Ürün için müşteriye tanımak, kişiselleştirme imkânı sunmak ve hedef pazarı ilişkilendirmektir (Verma vd., 2021). Bununla birlikte büyük veride kayıtlı olan bilgiler analiz edilerek, firmalar kendileri için potansiyel müşterileri pazarlar içinde bulabilmektedir (Sterne, 2017). Pazarlamacılar makine öğrenmesi temelli uygulamalar ile analiz edilen verileri kullanarak tüketicilere kişisel

tercihlerine göre tavsiyeler sunularak, yeni ve kendine özgü tasarımlara imkân sağlayabilmektedir (Kumar vd., 2019). Nike spor ayakkabıları tüketicilerine kişiselleştirme ve tasarlama imkânı sunmaktadır.

Fiyatlandırma stratejilerinde kullanılan yapay zekâ uygulamaları büyük veriden aldığı bilgiler ile fiyatlandırma, satış ve fiyat tahminlerinde bulunabilmektedir. Müşteri ihtiyaçlarını bularak pazara ait eğilimler ile fırsatlar sunmaktadır (Gupta & Pathak, 2014). Fiyatlandırma için yapay zekâ işletmelere çeşitli avantajlar sağlamaktadır. Örneğin; belirli bir günde iyi satmayan bir ürün veya bir süpermarketteki herhangi bir ürün kategorisi yapay zekâ tarafından satışa sunulabilir, satış hacimlerini izlenebilir ve fiyat promosyonları gerçekleştirebilmektedir (Forrest & Hoanca, 2015). Müşterilerin site bağlantıları, çerez ve kullanıcı bilgileri ile fiyatlar, teklifler, indirimler ve kampanyalar düzenlenebilmektedir (Johnson, 2006). Örneğin Amazon giriş yapan müşteri kimliğine bağlı olarak canlı fiyatlandırma imkanları sunmaktayken, Koh'l mağazalarında ise elektronik fiyat etiketleri mevcuttur. Bu etiketler sanal site bağlantılı olarak fiyat dalgalanmalarının, tahminlerinin kolaylıkla incelenmesine ve ürün popülerliğinin izlenebilirliğine imkân sağlamaktadır (Gupta & Pathak, 2014).

Yapay zekâ, yer seçimi için lojistik ve tedarik zinciri optimizasyonu sağlamaktadır; drone ve cobot yardımlarıyla paket ve teslimat süreçleri insan hatalarından arındırılmış ve daha kısa sürede gerçekleştirilmektedir (Gülşen, 2019). Google ve WalMart gibi dünyanın önde gelen firmaları dağıtım ayağında yapay zekâ teknolojisini kullanmaktadır. Bu süreç tüketicilerin hızlı teslim, yüksek güvenlik, düşük maliyet ve esneklik açısından beklentilerini karşılamaktadır. Tüketicilere daha kısa sürede teslimat sunan drone dağıtımları; tüketiciler için fosil yakıtlardan uzak çevre dostu olarak algılanmaktadır (Yoo vd., 2018). Bunlar, dağıtım yanında hizmet alanlarında da kullanılmaktadır. Münih Havaalanı'nda kullanılan bagaj taşıma robotları otonom taşıma sistemi ile saatte 450 valiz taşımaktadır (Harley, 2024).

Tutundurma faaliyetleri arama motoru optimizasyonu, reklam kampanyaları sosyal medya ve dijital pazarlama yönetimi gibi başlıkları içermektedir. Yapay zekânın gelişmesi ile tutundurma faaliyetleri yepyeni bir boyut kazanmıştır (Forrest & Hoanca, 2015). Tutundurma yapay zekâ ile milyarlarca tüketici bilgisine büyük veri ve bulut sistemlerinden ulaşarak müşterilerine onlara özel reklamlar optimize etmek ve karşılına çıkarmak için kullanılmaktadır (Zuboff, 2019). Makine öğrenmesine sahip uygulamalar müşteriye üst düzey ürün kişiselleştirme imkânı sağlamaktadır (Draper, 2022), bu kişiselleştirmeler ile tüketiciye tercihleri doğrultusunda reklamları karşısına çıkarmaktadır (Sunikka & Bragge, 2009). Yapay zekâ sayesinde tüketiciler günde 5000 kadar dijital reklama maruz kalmaktadır (Johnson, 2006).

### 3.2. Yapay Zekâ Kullanım Alanları ve Örnekleri

Dünyada yapılan icatlar ve ilerleyen teknoloji ile sanayi devrimleri basamak atlamıştır. 1784 yılında buharlı makinelerin icadından 1870 yılında iş bölümü ve seri üretime geçişin gerçekleşmesi buna örnek olarak verilebilmektedir (Smith, 2020). Devamında 1870'teki seri üretimden 1970 yılında internet temelli dijital makinelerin üretimine geçilmiştir. 2010 yılına gelindiğinde dünya siber altyapılı, otomasyona sahip fabrikalara ve iş yerlerine evrilmiştir. Endüstri Devrimleri arasındaki süreç, teknoloji geliştikçe kısalmaktadır. Bu devrimlerin tüm bilimleri ve sektörleri etkilediği açıkça görülmüştür.

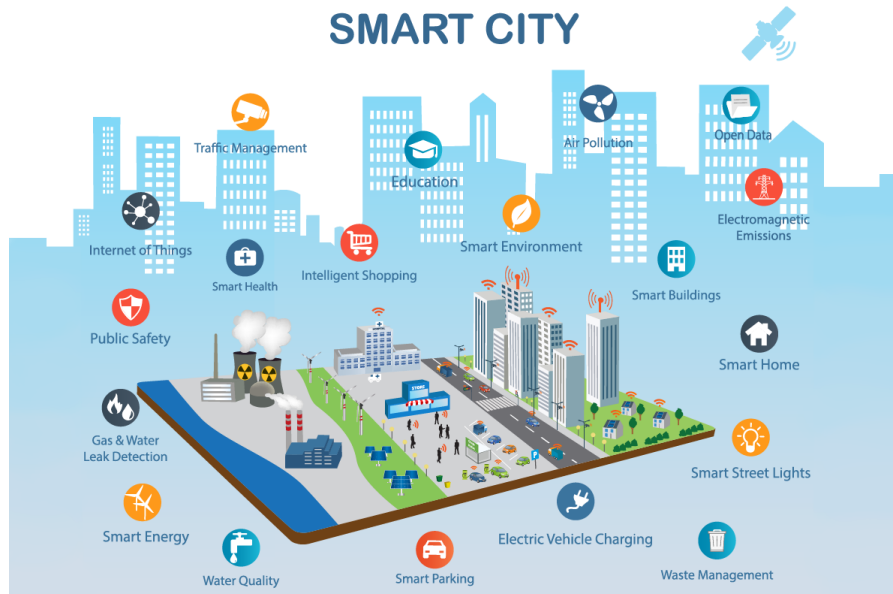
Bu gelişmelere paralel olarak seri üretimin ve dolayısıyla Fordizm temelli üretim anlayışının hâkim olduğu pazarlama anlayışında temel nokta ihtiyaçları (Womack vd., 1990). Müşteri ihtiyaçları evrildikçe arz talep dengesi değişmiştir. Bu süreç müşteri istekleri ön planda olan ürün temelli anlayışı getirmiştir. Akabinde çeşitlilik artmış ve rekabet ortamı güçlenmiştir. Müşteriler artık arzuları ile satın alma kararı vermeye başlamıştır. İşletmeler için endişe ortamı oluşmuş ve pazarlama da satış anlayışına evrilmiştir. Endüstrinin son devrimi Endüstri 4.0 gibi pazarlama da süreçlerine değer yaratarak, karlı ve sağlam adımlarla sürdürmek adına Pazarlama 4.0 kavramına dönüşmüştür. Bu iki kavram da ciddileşen rekabet ortamında işletmelerin hem ürünlerini hem proseslerini hem de yapacakları hamleleri verimli şekilde optimize etmelerini sağlamıştır. Bu optimizasyonun temelinde bulut teknoloji, büyük veri ve yapay zekâ kavramı yer almaktadır (Şekkeli & Bakan, 2018).

Üretim kavramını pazarlama kavramından ayrı düşünmemiz pek mümkün değildir (Hawkins & Mothersbaugh, 2010). İşletmeler sundukları ürün ve hizmetleri müşterileri için yapmaktadır (Kotler, 2009). Aynı zamanda bu süreçlerinden kar elde etmek ve pazara hâkim olmak istemektedirler. Gelişen teknoloji sayesinde üretimde kullanılan prosesler yapay zekâyı entegre edilmeye çalışılmaktadır. Büyük veri, sanal gerçeklik, nesnelerin interneti, nanoteknolojiler, öğrenen robotlar, RFID, 3D yazıcılar, sensörler de bu amaçlara hizmet etmek üzere geliştirilmektedir (Mikalef vd., 2021; Sharma, 2021).

- Uçak imalat sektöründe üretilen uçağın yüzlerce farklı noktasına yerleştirilen sensör ile hava şartları, uçuş planlama, makine- parça arızaları ve rötar gibi sorunların hem yer ekibine hem pilotlara hem de yolculara bildirilmesini sağlayarak yardımcı olmaktadır. Bunun sonucunda sensörlerden alınan verilerin rötar kaynaklı müşteri memnuniyetsizliklerinin kısa sürede sonuçlanması sağlanmaktadır. Hem marka imajının zedelenmemesi amaçlanmaktadır hem de arızalanan yedek parça temini için beklenen süre kaybı olmaksızın hemen aksiyon planları yapılmaktadır (Çankaya, 2020).
- Atık yönetimi için akıllı konteynerler kullanılmaktadır (Özcan, 2022).
- Fabrika depolama süreçlerinde RFID kullanılarak prosesler düzenlenebilmektedir. Yine RFID sistemi ile izlenebilen, yönetilebilen ve optimize edilebilen tedarik zinciri süreçleri mevcuttur (Bozkurt & Durdu, 2017).
- Fabrikalarda makineleri kullanıma hazırlama süreleri ve boşa bekleme sürelerinin azaltılması adına sensör sistemleri kurulmaktadır. Makineler kullanıma hazır olduğunda makine operatörlerine ve üst yönetime bildirim gitmektedir. Üretim için sürekli akış sağlanması çok önemlidir (Rother & Harris, 2001). Bu şekilde makinelerin boşuna beklemesi, makine ısınmaları, iş gücü ve enerji kaybının önüne geçilmektedir.
- Uçak imalat sektöründe montaj hattında monte edilen binlerce parçanın insan hatası kaynaklı eksiklerinin azaltılması adına sıkma torkunu makineler yapması ile hata oranları minimuma indirilmiştir (Çelikmih, 2020).
- Sensörler sayesinde makine arızaları oluşmadan önlenmektedir. FMEA-Hata Türü ve Etkileri Analizi adına hata türleri asgariye indirilmektedir (Akın, 1998).
- Otomotiv sektöründe kendi kendine giden araç üretilmiştir (Taştan & Kaymaz, 2021).
- CNC ve torna tezgâhlarına ait parça üretiminde 3D yazıcılardan faydalanılmaktadır (Kökhan & Özcan, 2018).

Dünyada artan nüfus yüzünden şehir planlaması ve şehir düzenlemeleri kritik önem taşıyor hale gelmiştir. Yapay zekânın gelişmesiyle akıllı şehirler kavramı doğmuştur. Bu kavram şehir düzeninin optimize edilmesi için kullanılmaktadır. Yapay zekânın yüz tanıma yeteneği, nesnelerin interneti ve sensörler temelli sistemleri kullanılarak tasarlanmaktadır. Şehirlere; şehir kameralarının yüz tanıma sistemi ile suç-suçlu tespiti imkânı sağlanmıştır. Akıllı şehirler atık yönetimi, aydınlatma- enerji yönetimi, yangın uyarı sistemi, su baskınları uyarı sistemi, trafik düzenleme ve alt yapı düzenleme gibi imkânlar sunmaktadır (Öztuna, 2017).

Şekil 2 Akıllı Şehirler



Kaynak: (aliga)

Tarım sektörü de yapay zekânın avantajlarından faydalanan diğer bir sektördür. Araziye kurulan sensörler ile internet üzerinden veriler alınır. Sensörler gerekli gördüğü süreçlerde arazi için otomatik sulama sistemini

açmaktadır. Gereksiz yere su tüketimi engellenmektedir. Sistem aynı zamanda toprak nem oranı, mineral oranı, Ph oranı, toprak sıcaklığı, hava durumu, ekin ve hasat zamanı gibi verileri analiz ederek bir plan oluşturmakta ve kullanıcıya bunları sunmaktadır (Öztuna, 2017).

Hizmet sektörü de yapay zekâyı sıklıkla kullanılmaktadır. Örneğin akıllı otellerde işletmeciler konfor, internet, enerji gibi değişkenleri kontrol edip verimlilik sağlamaktadır (Ercan, 2020). Aynı zamanda büyük veride depolanan müşteri bilgileri ışığında kişiselleştirilmiş hizmet, eğlence ve deneyim sunulabilmektedir.

Havacılık sektörü için yapay zekâ önemli bir yer tutmaktadır. Akıllı havaalanları sayesinde gidiş salonlarındaki kameralar ile şüpheli durumların ve şahısların tespit edilmesi sağlanmaktadır. Akıllı sınırlar kullanan Dubai'de ülkeye giriş kontrollerinde insan yerine biyometrik kameralar bulunmaktadır. Bu kameraların yüz tarama ve veri işleme sistemi sayesinde ülkeye giriş yapmak isteyen kişileri ya anında onaylamakta ya da anında reddetmektedir. Londra Havaalanı'nda sürücüsü olmayan terminal araçları da ışık algılama sistemiyle yol almaktadır (Harley, 2024).

### 3.3. Yapay Zekâ Pazarlama Örnekleri

Yapay zekânın hayatımıza girmesiyle yaşamımızı kolaylaştıran birçok ürün ve hizmet, çeşitli pazarlara sunulmuştur.

Nest termostat yüksek oranda geri dönüştürülebilir, çevreci ve 4. nesil bir akıllı ev cihazı olarak karşımıza çıkmaktadır. Nest termostat akıllı telefon ile entegre edilebilmektedir. Kullanıcı evde bulunmadığı süreçlerde kullanıcıya evin sıcaklık kontrollerini yapabileceği imkânı sunmaktadır. Eğer ayarlanan sıcaklık- nem oranı daha çok enerji kaybı ve yüksek faturaya sebep olarsa sistem ortamın sıcaklık-nem oranı için kendisi ayarlamalar yapabilmektedir.

Şekil 3 Nest Termostat



Kaynak: (ware house)

Kolibree diş fırçası, yapay zekâ kullanılarak oluşturulmuş bir üründür. Ürünün telefona kurulan bir ara yüzü mevcuttur. Kolibree diş fırçası, kullanıcının diş fırçalama alışkanlıklarına göre hatırlatmalar ve düzenlemeler sunmaktadır. Bu diş fırçası aynı zamanda sisteminden kullanıcının verilerini diş doktoru ile paylaşabilmektedir. Ürün aynı zamanda yetişkin kullanıcı ve çocuk kullanıcı olarak farklı alışkanlık kazandırma yöntemleri sunmaktadır. Kullanıcı çocuk ise fırçalama süresinin eğlenceli hale gelmesi adına oyunlar sunmaktadır. Diş fırçasına ait uygulama içerisindeki oyunlarda fırçalama süresi ile bağlantılı olarak oyunlarda puan biriktirilmesi imkânı sağlanmıştır. Çocuk kullanıcılar için diş fırçalamaya teşvik edici unsurlar oluşturulmuştur.

Şekil 4 Kolibree Diş Fırçası



Kaynak: (Amazon.com)

MimoBaby, bir anneye bebeğinin birçok fonksiyonunu yakından takip etme imkânı sağlayan bir yapay zekâ ürünüdür. Ürüne ait uygulama akıllı telefona indirilip kurulduktan sonra bebek hakkında birçok veri anneye sunulmaktadır. Bunlar bebeğin kalp atışları, uyku düzeni, kaçta uyuduğu ve bir daha kaçta uyuması gerektiği, vücut sıcaklığı, vücudunda herhangi bir anormallik durumu olup olmayışı, yemek yediği son saat ve yemesi gereken saat gibi bebeğe ait birçok bilgiyi ebeveynine sunmaktadır.

Şekil 5 MimoBaby Akıllı Giysi



Kaynak: (The Index Project)

Akıllı şehirler için kurulmuş çöp kovası IOT teknolojisi ile doluluk oranına göre alınması gerektiği zamanı sistemle paylaşmaktadır. Sistemin veri paylaşımları dolduğu zaman bekleme ile kokan ve taşan çöplerden şehri arındırmayı amaçlamaktadır. Bu ürünün hem sağlık ve hijyen açısından hem de temiz ve düzenli şehir için önemli bir ürün olduğunu ifade edebiliriz.



Şekil 6 BigBelly Akıllı Çöp Kovası



Kaynak: (Bigbelly)

SmartFeeder, evcil hayvanı olan müşterilerin hayatını kolaylaştıran yapay zekâ temelli bir ürünü temsil etmektedir. Bu ürün evde olunmayan sürelerde evcil hayvanların beslenmesi için tasarlanmıştır. Kullanıcı akıllı telefonuna indirdiği uygulama ile evcil hayvanının ne zaman beslenmesi gerektiğini bilmekte ve besleyebilmektedir. Sistemin verdiği komut ile ürün haznesi mama dolu olarak çıkmaktadır. Böylece evcil hayvan sahipleri beslenme sürecini ve porsiyonları yakından takip edebilmektedir. Ürünün diğer bir özelliği de mamanın bitmesine yakın kullanıcı yerine internet sitesinden mama siparişi vermesidir.

Şekil 7 SmartFeeder Akıllı Mama Kabı



Kaynak: (Junoo Toys & Gadgets)

#### 4. SONUÇ

Gelişmekte olan teknoloji insanlar için birçok fayda sağlamakta ve yaşam kalitesini artırmaktadır. Teknoloji ve yapay zekâ bir yandan her şeyi daha efektif kullanmamıza yardımcı olurken diğer yandan da dünya üzerinde sürdürülebilir imkanları artırmaktadır. Bu noktada önemli olan bize sunulan fırsatları ne kadar doğru ve faydalı kullanabileceğimizdir. Yapay zekâ; her yeni buluş, icat ve keşif gibi şüpheler barındırsa da bilinçli şekillerde kullanıldığında insanlığa sağlayacağı faydaların sonu olmayacak gibi durmaktadır.

Günümüzde, yapay zekâ uygulamaları birçok marka ve kurumun gündemini meşgul etmektedir; hatta bazıları bu uygulamaları iş süreçlerine başarıyla entegre etmiş durumdadır. Yapay zekâ, birçok yönetim sürecinde insan bağımlılığını azaltarak hata riskini en aza indirmekte, süreçleri otomatikleştirmekte ve işlem süresini kısaltmaktadır.

Pazarlama bilimi açısından bakıldığında da yapay zekânın kapsamlı kullanımının yakın gelecekte yaygınlaşacağı öngörülmektedir. Yapay zekâ, pazarlama araştırmasının gerçekleştirilmesi, pazar analizi çalışmaları, müşteri ihtiyaç, istek ve taleplerinin belirlenmesi ve gelecek trendlere ilişkin tahminlerin yapılması, reklam stratejileri ve iletişim çabalarının planlanması ve yürütülmesi, fiyatlandırma kararları ve stratejilerinin belirlenmesi, yeni ürün bulma/geliştirme süreçleri, ürün optimizasyonu ve simülasyonları gibi önemli işlemlerde pazarlama alanında fayda sağlamaktadır. Bu çalışma yapay zekânın, pazarlama bilimi açısından getirdiği yenilikleri, pazarlama stratejilerinin planlanması ve uygulanması aşamasında sunduğu avantajları, pazarlama faaliyetlerinde kullanılan teknikleri incelemekte ve konuya ilişkin bazı örnek uygulamaları vererek pazarlama alanında yapay zekâ kullanımına ilişkin temel bir çerçeve sunmaktadır.

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## An Overview Of Public Accounting and Auditing In Albania

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**Abstract:** This study examines Albania's accounting standards, financial reporting regulations, audit reporting, and international best practices. Public accounting provides financial services, ensuring accuracy and compliance with standards. It also offers advice services for clients, such as financial management and tax planning. Further investigation is needed into managerial incentives to prevent accounting fraud. Audits gather data, evaluate potential fraud, and establish necessary procedures. They objectively collect and evaluate economic information, verifying its accuracy and notifying relevant parties.

The provision of financial services, which includes independent assessments and verifications of financial data, systems, procedures, and controls to guarantee correctness, dependability, and conformity with relevant standards and laws, is a crucial role of public accounting. Assurance services give dependable information about an organization's financial performance and health to stakeholders, including creditors, investors, and regulators, enabling them to make well-informed decisions.

To assist citizens in enhancing their operations and accomplishing their goals, public accountants can also offer advice services, such as consultation on financial management, tax planning, risk assessment, and company strategy. Further investigation is still needed in Albania about the structure of managerial incentives designed to prevent accounting fraud. An audit gathers data on the financial statements, evaluates the likelihood of substantial fraud or falsification associated with the inaccuracy, and establishes the necessary audit procedures. The auditor takes internal control into consideration when preparing financial statements but does not assess it. It evaluates management estimates as well as accounting policies. An audit is a systematic process that collects and evaluates information on economic activities and events objectively, verifies that the information satisfies predefined criteria, and notifies relevant parties of the results.

**Keywords:** Public accounting, public audit, financial reports, financial management, government.

### Introduction

Public accounting is a key of tools for evaluating policies, programs, and strategies on a global scale. It ensures transparency and accountability by providing accurate financial reports, allowing stakeholders to assess the effectiveness of these policies. Public accountants also analyze the financial implications of these policies, identifying areas for improvement and informing future decisions. They also incorporate environmental considerations, assessing the financial impact of policies and initiatives. They ensure compliance with relevant laws and regulations, fostering stakeholder engagement and accountability. Public accounting operates within a global framework, utilizing international standards and technological advancements to enhance reporting and environmental performance metrics.

Public accounting and auditing in Albania, provide clear and consistent guidelines for identifying, estimating, and reporting income from various transactions, compiling a financial report reporting income over time and using appropriate valuation methods. This ensures that entities report their income accurately, consistently, and transparently. The objective is essential to the management of an entity's financial reporting, creating a clear basis for applying this standard and understanding what should be contained in the income statement. Identifying transactions that can generate revenue and evaluating them against established criteria is a key component. Income reporting involves identifying transactions as sources of income and evaluating them in an

entity's finances. IAS 18 provides guidance on the treatment of revenue from the sale of goods or products, ensuring transparency and accuracy. Interpretation 31 helps entities understand and implement IAS 18 requirements for reporting income in special transaction situations, such as barter transactions with advertising services. This ensures accurate and clear reporting of income in an entity's financials, in accordance with the rules set out in IAS 18.

Public accounting and auditing are essential for businesses to accurately identify, estimate, and report income from transactions, compile financial reports, and use appropriate valuation methods. They help businesses categorize transactions in accordance with IFRS (international financial reporting standards), verify the accuracy of income reported, and prepare accurate financial reports. They employ appropriate valuation methods, such as discounted cash flow analysis, market comparable, and historical cost methods, to determine the fair value of assets and liabilities. They adhere to regulatory requirements and professional standards, providing a framework for transparent financial reporting. Auditors ensure the accuracy and reliability of financial information through independent examinations, fostering trust among stakeholders.

The public entity demonstrates commitment to integrity and ethical values through the design and implementation of elements and mechanisms necessary for the continuous improvement of internal control systems. The authorizing officer must demonstrate independence and accountability in the exercise of responsibility for supervision. The Head of Institution creates organizational structures, reporting lines, authorities, and responsibilities, focusing on the clear definition of functional duties and responsibilities of each level of authority.

## **Methodology**

This research methodology is based in an overview to explain that continuous and special evaluations of public accounting and auditing in Albania are necessary, and deficiencies can be identified at the component level or in the internal control process.

## **Materials and methods**

The article discusses the reform of public accounting in Albania based on International Public Accounting Standards (IPSAS) and the process of public auditing in Albania. Public accounting is traditionally based on the budget and is aimed at strengthening public governance for more effective decision-making. The Albanian government is committed to adapting the IPSAS through a qualitative process with relevant institutions. Similar reforms in developed countries have seen the implementation of accounting of established rights and obligations, which is considered more productive in terms of information and transparency. The Western Balkans countries are taking concrete steps in the reform of public accounting to meet IFRS requirements by 2030. Albania's public accounting reform focuses on improving national accounts information and systems, implementing new technologies for transparency, reforming internal audit functions, implementing International Financial Reporting Standards, debt consolidation for long-term financial sustainability, and implementing arrears management systems. The public sector in Albania is implementing a reform in financial reporting, which is based on a modified basis. The changes are based on instructions from the Ministry of Economy and Finance, which outline procedures for preparing, presenting, and reporting annual financial statements in general government units. However, there are significant differences between the guide and two international accounting standards in the public sector, such as IFRS standards for financial reporting in the public sector.

According in (CIPFA report 2021) The number of jurisdictions reporting on accrual forecasts for 2025 is expected to increase, with 73% anticipating reporting by 2030. However, the longer the planned reform period, the greater uncertainties impacting progress. Factors such as lack of support, technical challenges, insufficient funding, and reform fatigue can cause slowdowns. Despite these uncertainties, there is a strong upward trend in accrual adoption globally.

The public entity demonstrates commitment to the realization of competencies, acting in accordance with managerial responsibility. They specify objectives as a basis for the identification and results of risks related to these objectives. In order to evaluate objectives and identify and analyze other significant changes resulting from the evaluation of certain aspects of the efficacy of control systems established at intermediate levels, the public unit identifies and analyzes risks.

The public entity selects and conducts control activities, including general technology control activities, and establishes activities based on policies and procedures. The public entity obtains, generates, and uses relevant qualitative information to support the functioning of internal control. Internal communication is essential for obtaining and distributing information, and separate reporting lines are necessary for whistleblowers. External communication evaluates the public unit's communication procedures with third parties regarding issues affecting internal control functioning. In the accounting of the public sector, the institutions in illustrating their financial situation rely on the determination of information on the status of properties, intangible assets, financial instruments, and other elements. Achieving a reliable determination considers current accounting practices for using the replacement cost valuation method, monitoring changes in its adoption.

In the public sector, with accountability and transparency being crucial for the presentation of reliable financial reports. Financial Reporting by Public Sector Entities in Albania, aims to examine the market values, identify the relevant elements in selecting a measurement basis for assets and liabilities in specific circumstances and reflects the operate capacity and cost of services.

## CONCLUSIONS and DISCUSSION

The success of a public accounting and auditing reform program depends on several factors, such as public financial management reform, local circumstances, government structure, centralization of accounting functions, geographic issues, IT infrastructure and entity reporting. Delays in financial reporting can occur due to complex change processes, where as a fact we can mention the impact of the pandemic on public programs which was an unforeseen factor in public finance reporting. The economic concepts indicates that the methodological issues involve difficulty in finding market-derived inputs or financial benefits. Public sector accounting and auditing identifies and provides insights on public finance role, through crucial analysis for government instruments. The development of financial reporting quality in the public sector shows the relation between relevance and reliability, particularly with the introduction of fair value as a measurement basis. Also, Public institutions in Albania have a low level of awareness about the role of contemporary internal audit services and the employees of internal audit.

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## Consumer Perception Toward Trust in Food Value Chain

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**Abstract:** The agro-food industry has led to a complex market that offers consumers many choices. Consumers in the multitude of information and alternatives seek to build trusting relationships with other actors in food value chain. The consumer must trust the producer and the farmer, but also the authorities that certify the production of actors in relation to food production. Lack of confidence can damage not only the image of actors in the market but also affect their performance. Consumer trust is one of the drivers of consumer food choice. Trust as a social concept is more complex, and it is viewed with two pillars as cognitive and emotional component. Trust is considering as a predictor for collaboration as well as a factor that boost collaboration and as a product of value chain cooperation. This paper is a research in literature with aim to identify terms related to consumer trust, to explore the key attributes that consumers look for and rely on when purchasing food items to ensure that the food is safe and of high quality. The focus of the analysis is food products, which for consumers is often equated with healthy living, more attention is paid to creating trust among market actors. Some of the determinants that connect consumer trust in suppliers and retailers are confidence, openness, preference, care, loyalty, risk taking, satisfaction, cooperation and commitment.

**Keywords:** Trust, food, value chain, consumer perception

### 1. INTRODUCTION

The consumer decision-making process is a complex process. Building relationships of trust between actors along the supply chain is especially important for consumers. Nowadays, food systems often consist of long supply chains. This has resulted in a large divide between consumers and growers, making the knowledge of consumers and their role in food production fade (Eden, S., 2011; Kjærnes, U.2012). Where the focus of the analysis is food products, which for consumers is often equated with healthy living, more attention is paid to creating trust among market actors (Truong, V.A., et al., 2021). Consumers are often concerned about food products regarding their health, durability, authenticity and safety. More and more, the consumer is faced with terms like organic products, sustainably produced products, functional products, etc. The consumer cannot assess whether a product has been manufactured respecting the production rules or whether it contains the elements mentioned in the packaging. The nature of food products is such that their quality is characterized by tangible sensory aspects such as taste, aroma, freshness, juiciness and appearance (Yu, H. et al 2018). On the other hand, the perception of food is also related to less tangible attributes of reliability, such as food value, or ethical and environmental considerations (Wu, W., et al 2021). Therefore, the consumer must trust the producer and the farmer regarding food production. Also, he must be protected by the authorities regarding the implementation of the regulations on their part (Macreadya, A.L., et al 2020). For suppliers in the supply chain, it is of particular interest to know the signals and information that consumers trust and rely on to navigate the food system. (Wu, W., et al 2021).

### 2. CONCEPT OF CONSUMER TRUST IN FOOD VALUE CHAIN

One of the most cited definitions defines trust as a "psychological state involving the intention to accept based on vulnerability over positive expectations of intentions or behavior of another." (Rousseau et al. 1998, p. 395). The assessment of reliability attributes in relation to the fact that food meets consumer expectations has become increasingly difficult with the complexity of the food supply chain (Lassoued and Hobbs, 2014).

According to Donovan value chains have been viewed in three ways as a set of actors connected along the chain; a network of value chain actors cooperating within a wider institutional environment and support services; a set of value adding activities (Donovan et al., 2015)

Therefore, in value chains interaction is required, cooperation and coordination of value chain practices to create more value and avoid the risk of opportunism behavior by individual value chain actors seeking to capture more value for themselves (Provan et al., 2007) as such the overall performance of the value chain can be increased (Trienekens, 2011). Actors of the value chain are aware that building trust with consumers is not an easy task. They should pay attention to build trust, maintaining trust, and strengthening trust with

consumers. Therefore, in the agro-food sector, managers can specifically address the importance of food safety and quality in order not to lose consumer confidence.

So the presence of consumer trust can be evaluated as input and output of the relations between consumers and suppliers. Consumers are faced not only with uncertainty about the quality of the product but also with the reliability of a seller (Karpik. L., 2010). In this line trust is seen as a predictor for collaboration (Flanigan and Sutherland, 2016; Mankad et al., 2017) as well as a factor that fosters collaboration (Ayari and Zaibet, 2019) and as a product of value chain collaboration (Mankad et al., 2017).

Increasing consumer perceptions of the dimensions of trust seems to be the most effective way to build consumer trust (De Jonge, J., et al., 2006)

According to Grohmann P., the trust of the actors in the supply chain appears in different forms such as procedural trust, rational trust, affinitive trust, dispositional trust (Grohmann P., et al., 2023). Dispositional trust as the tendency of individuals to trust institutions and organizations. Affinitive trust is based on shared experiences, values, identities or networks. Rational trust is built on the established relationship that is also influenced by previous experiences. Procedural trust refers to the perceived legitimacy, transparency and fairness of procedures and processes.

### 3. STUDY APPROACHES OF CONSUMER TRUST IN FOOD VALUE CHAIN

The role of trust can be studied directly asking actors in food value chain through concepts that are linked to trust. In this approach, gathering information about trust is done by asking direct questions to consumers about the amount of trust they have in food suppliers (De Vriesia, J. R., 2023).

Another away is to study the concept of trust indirectly as commitment (Micheels and Gow, 2011), transparency (Gerdocci et al., 2015), compliance (Van der Valk and De Vos, 2016), and power (Leonidou et al., 2008).

Furthermore, an indirect way to measure trust is to evaluate it as part of broader concepts such as relational contracting, cost economy, social capital and collective action for value chain cooperation (De Vriesia, J. R., 2023).

In this paper we will use the second approach since consumers can create trust through trustworthiness such as ... for which they develop trust and from here can create trust in supplier chain. We also need to determine the types of food channel actors

Consumer beliefs about trustworthiness of food chain actors have been found to be the main factors influencing trust in food chain actors (Macready et al., 2020). According to Li, S., the literature does not offer a unique agreement regarding the types of beliefs that determine trustworthiness. (Li, S., et al., 2021). The ones that are considered most prominent are competence, care and openness. Ye et al. (2005) detailed competence, trustworthiness, integrity, benevolence and provision of information as consumer beliefs influencing actors' trustworthiness. It also found that providing information and integrity to consumers can increase trust among farmers.

According to Macreadya, A.L., et al we distinguish the concept of trust and confidence in others actors in the food value chain (Macreadya, A.L., et al 2020). The trust is viewed by Siegrist, M., 2003 as the willingness to make oneself vulnerable to another, based on a judgment of similarity of intentions or values and confidence related to a record of past performance.

This underlines the concept that one side of the equation, such as food providers in the market, tries to play its role, but on the other hand, consumers act as individual actors but also as a product of a social structure.

Analyzing trust on food chain is shift form an individual process of risk assessment, in a complex social process.

According to Uzzi 'trust is personal and disposes one to interpret favorably another's intentions and actions' (Uzzi, B.1997). In the same line is Fligstein and Dauter that have emphasized the role of social networks play in generating trust between buyers and sellers (Fligstein and Dauter, 2007)

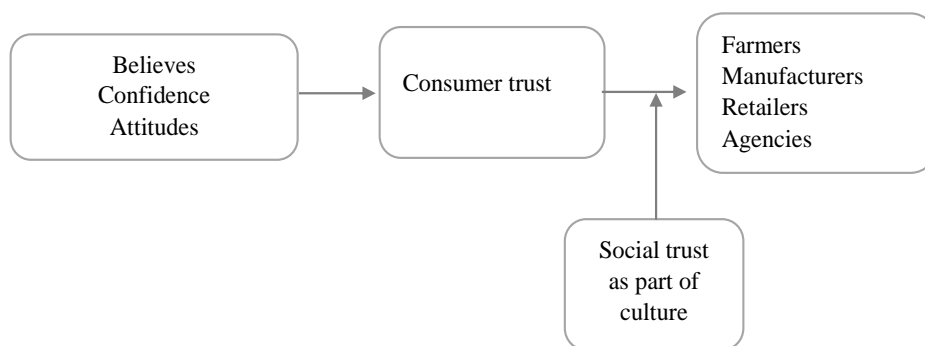
It seems to be less studied the effect of social structures in creating consumer trust towards other actors of the food channel, especially retailers. From the perspective of economic sociology, higher levels of market embeddedness positively influence trust between consumers and sellers. Eventually consumers experience market transactions quite differently throughout different countries. Among European countries, consumer

trust towards other actors in the chain varies in countries with more trust and countries with very little trust in the actors in the chain (Nessel, S., 2021). Countries with high consumer trust have in common significantly higher levels of effectiveness of public authorities in enforcing consumer law and, consequently, high trust in such institutions, and they have strong consumer associations. This is in line with De Jonge, J., et al., who states that the more consumers trust institutions and organizations, the more confident they are about food and the easier it is to build trust (De Jonge, J., et al., 2006)

Among actors it seems interesting that when it comes to food safety, consumers expect to build trust from producers and the government more than from farmers and retailers, as they see them as responsible for this activity (De Jonge, J., et al., 2006)

Another element that affects the consumer confidence of the market actors is the authenticity of the food supply. The reality offers the appearance of a temporal and physical distance between the consumer and these actors, separating the consumers from the rest of the supply. Belief could affect the compensation of knowledge related to the cultivation and production of products (Macreadya, A.L., et al 2020).

Figure 1. Consumer Trust



Source: Authors

The creation of the trust of the actors of the value chain is a complex concept which is created by taking into consideration the beliefs and confidence of the actors as prerequisites for the creation of trust. This confidence measured indirectly through competence, care and openness is not the same for all actors. We assume that this process is mediated by a more powerful construct such as social trust. This is also supported by the fact that this index is presented differently in different countries.

#### 4. CONCLUSION

Consumer trust can be evaluated as input and output of the relations between consumers and suppliers. The consumer cannot assess whether a product has been manufactured respecting the production rules or whether it contains the elements mentioned in the packaging. The nature of food products is such that their quality is characterized by tangible sensory aspects such as taste, aroma, freshness, juiciness and appearance. In value chains interaction is required, cooperation and coordination of value chain practices to create more value and avoid the risk of opportunism behavior by individual value chain actors seeking to capture more value for themselves as such the overall performance of the value chain can be increased. Actors of the value chain are aware that building trust with consumers is not an easy task. They should pay attention to build trust, maintaining trust, and strengthening trust with consumers. Therefore, in the agro-food sector, managers can specifically address the importance of food safety and quality in order not to lose consumer confidence. the concept of trust indirectly as commitment, transparency, compliance and power. It seems to be less studied the effect of social structures in creating consumer trust towards other actors of the food channel, especially retailers. Among European countries, consumer trust towards other actors in the chain varies in countries with more trust and countries with very little trust in the actors in the chain. Countries with high consumer trust have in common significantly higher levels of effectiveness of public authorities in enforcing consumer law and, consequently, high trust in such institutions, and they have strong consumer associations. Consumers trust institutions and organizations, the more confident they are about food and the easier it is to build trust. Trust for actors in the supply chain is created by attitudes, beliefs and confidence and is mediated by social trust as a product of a country's culture.



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## A Sustainable Environment for Sustainable Development

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**Abstract:** Growth efforts in the world economy, based on the increase in world population, have brought environmental problems along with them. This situation has caused imbalances between the economy and the environment. As a result of unconscious use of natural resources in the world, developments in technology, industrialization and rapid population growth, resources have begun to decrease rapidly. Environmental disasters, especially those that emerged after the 1970s, forced the countries of the world to implement development strategies that would enable the protection of the environment. The increase in environmental pollution has led Western societies to protect the global environment since the 1980s. Increasing interest in the environment has led to the desire to produce solutions that eliminate the negativities between economic growth and environmental balance. Environmental sustainability, which emerges at this point, reflects a series of measures to reduce the impact of humans on nature. These measures include measures taken to protect nature and leave a livable world to future generations. Education and awareness activities for environmental sustainability should also be supported. Only in this way can environmental sustainability goals be achieved more effectively and nature can be protected. Therefore, participation in environmental protection activities should be encouraged and research on environmental sustainability should be supported. In this context, this study examines sustainability in development, sustainable development in developed and developing countries, sustainable environment and the benefits of sustainable environmental awareness in a general framework in order to protect the future of the world.

**Key Words:** Sustainability, Sustainable Environment, Environment

### Sürdürülebilir Kalkınma İçin Sürdürülebilir Bir Çevre

**Özet:** Dünya nüfusundaki artışa dayalı olarak, dünya ekonomisindeki büyüme çabaları, çevre sorunlarını da beraberinde getirmiştir. Bu durum ekonomi ile çevre arasında dengesizliklerin meydana gelmesine neden olmuştur. Dünyada bulunan doğal kaynakların bilinçsiz bir şekilde kullanılması, teknolojideki gelişmeler, endüstrileşme ve hızlı nüfus artışı sonucunda kaynaklar hızla azalmaya başlamıştır. Özellikle 1970'li yıllardan sonra ortaya çıkan çevresel felaketler, dünya ülkelerini çevrenin de korunmasını mümkün kılacak kalkınma stratejilerini uygulamaya zorlamıştır. Çevre kirliliğindeki artış, Batılı toplumları 1980'lerden itibaren küresel çevreyi korumaya yöneltmiştir. Çevreye ilginin artması, ekonomik büyüme - çevre dengesi arasındaki olumsuzlukları giderici çözüm üretmek isteğine sebep olmuştur. Bu noktada ortaya çıkan çevresel sürdürülebilirlik, insanların doğa üzerindeki etkilerini azaltmak için bir dizi önlemi yansıtmaktadır. Bu önlemler ise doğayı korumak ve gelecek nesillere yaşanabilir bir dünya bırakmak amacıyla alınan tedbirleri içermektedir. Çevresel sürdürülebilirlik için eğitim ve farkındalık çalışmaları da desteklenmelidir. Ancak bu sayede çevresel sürdürülebilirlik hedefleri daha etkili olarak gerçekleştirilebilir ve doğanın korunması sağlanabilir. Bu nedenle, çevre koruma faaliyetlerine katılımın teşvik edilmesi ve çevresel sürdürülebilirlik üzerine yapılan araştırmaların desteklenmesi sağlanmalıdır. Bu kapsamda bu çalışma ile dünyanın geleceğini korumak amacıyla kalkınmada sürdürülebilirlik, gelişmiş ve gelişmekte olan ülkelerde sürdürülebilir kalkınma, sürdürülebilir çevre ve sürdürülebilir çevre bilincinin yararları genel bir çerçeve içerisinde ele alınarak incelenmiştir.

**Anahtar Kelimeler:** Sürdürülebilirlik, Sürdürülebilir Çevre, Çevre

### 1. INTRODUCTION

Human beings have to engage in production and consumption throughout their lives in order to continue their existence. Improvement in living standards, population growth and globalization have led to the emergence of many problems. Recently, people have consumed to satisfy their wants rather than their needs (Daly and Townsend, 1996; Can and Ayvaz, 2017). Due to globalization, human beings have become consuming faster and producing more, working more than necessary, and this increase has become a threat to the future of the world. This situation has led to the rapid depletion of existing natural resources (Lee, 2010; Özmen et al., 2017; Yücel and Tiber, 2018). These emerging problems negatively affect the lives of other living creatures in the world and show that precautions must be taken for the future of the world (Sencar, 2007). Many philosophical movements or approaches have emerged in order to solve the problems that pose threats to the future of the world and humanity. The concept of sustainability can be considered the most important and fundamental of these movements (Can and Ayvaz, 2017; Yücel and Tiber, 2018).

Sustainability, which means continuing or maintaining something, is a concept that includes present and future time. When associated with the economy, unlike traditional development theories whose ultimate goal is to

make profits, the goal of sustainability is to protect the world's existing resources and ensure their transfer to future generations (Karabiçak and Özdemir, 2015; Olcay, 2015).

Environmental problems that increased following the Industrial Revolution resulted in the inclusion of environmental concerns into classical development approaches. Arguments that the current resources of the planet will not be sufficient for the future have been proven by many scientific studies (Karabiçak and Özdemir, 2015).

One of the constructive steps taken towards solving the problem is the sustainable development approach. Although the foundations of the idea of sustainable development can be traced back to the 19th century, the concept became known worldwide with "Our Common Future", also known as the Brundtland Report, published in 1987 (Gedik, 2020; Kılıç, 2012; Seydioğulları, 2013).

### **1.1. Sustainable Development**

The fact that the concept has a multidimensional and dynamic structure causes it to be discussed a lot. These discussions, which are generally carried out through sustainable development, contribute to environmental awareness. In addition, the basis of sustainability concerns lies in the insufficient resources in the face of increasing needs (Şen et al., 2018).

Sustainable development, as the name suggests, means that development is sustainable and continuous, not instantaneous. It means programming the life and development of today and the future in a way that will enable the needs and development of future generations to be met and developed without consuming natural resources by establishing a balance between humans and nature (Türkiye Çevre Vakfı, 1991; Kaypak, 2011; Keleş et al., 2005; Tietenberg, 1992).

The first step in terms of sustainable development was taken by Rachel Carson in 1962. Carson drew attention to the destructive aspects of agricultural pesticides in her research titled 'Silent Spring' on toxicology, ecology and common diseases. Although subject-based studies continued throughout the 70s, it can be said that the publication titled 'Limits to Growth', published by the Club of Rome in 1972, and added a different dimension to achieving the desired balance between economy, society and environment (Seydioğulları, 2013).

Although different authors express sustainable development approaches at different points, the most well-known definition today is the definition in the report titled "Our Common Future" published by the World Commission on Environment and Development in 1987 (Türkiye Çevre Vakfı, 1991). In the said report, the following definition was made in accordance with the framework explained at the beginning of this section:

*"Sustainable development is a form of development that meets today's needs while not preventing future generations from meeting their own needs."*

Sustainable development covers sustainability in three dimensions: economic, environmental and social, and expresses the relationship between different dimensions that complement each other and the necessity of establishing a balance between them (Gürlük, 2010). One of the most important arguments in ensuring sustainable development is the necessity of a holistic approach to problems with economic, social and environmental dimensions. Ensuring sustainable development; In order to improve living standards and carry out production-oriented activities, it has made it necessary to meet the increasing energy needs due to population growth and economic growth and is accepted as the basic input of development (Seydioğulları, 2013).

The concept of sustainability is defined with a different representation by Hart (1999). According to Hart, the economy is located within society. Society, on the other hand, exists within the environment along with the economy (Figure 1). After all, the common point in all definitions is that the way to achieve sustainability is possible with solutions that consider the environment, society and economy as a whole (Özmehmet, 2010).

Environmental problems, which were seen as local and ignored at the beginning of the development process and were seen as solvable anyway, have ceased to be local and have spread beyond the borders of the countries, and the resulting damages have reached regional and international dimensions. As a reflection of the understanding that prioritizes the economy, since environmental technologies did not develop as much as production technologies until the 1970s, the increase in environmental problems could not be prevented and the destruction on the natural environment continued to increase (Kaypak, 2011; Özer, 1995). These problems, which were initially excused in the name of development, ceased to be local and gradually became regional

and then global. Therefore, it has brought about the search for balance between development and nature. The phenomenon of sustainable development emerges as a product of this search.

Figure 1: Definition of Sustainability according to Hart (1999).



The idea of sustainable development is important for the protection of natural resources. This appears as the level of welfare per capita that does not decrease in the future period. Since the future per capita welfare is related to the level of production that will provide this welfare, and the production level depends on the size of the total capital stock, the guarantee of not decreasing the welfare of future generations is the absence of a decrease in the total capital stock. Since the self-renewal possibility of the natural resources stock has been eliminated by human intervention today, a decrease in the natural resources stock is inevitable. The basic philosophy of sustainable development is to stop this decrease in the stock of natural resources. In other words, it is to help nature renew itself (Ergün and Çobanoğlu, 2012).

The basic rule of sustainable development is to secure the foundations of natural life for a long time, to eliminate the resulting ecological damages and to ensure the protection of nature in its own dynamics. Controlling resource consumption is an indispensable condition of ecological responsibility. In this context, the consumption of renewable resources should be kept below the renewable capacity, and the consumption of non-renewable resources should be lower than the development potential of renewable resources. In ecological responsibility, care should be taken to protect the cultural environment as well as the natural environment. As a requirement of the ecological component, pollution should not exceed the assimilation power of the ecosystem (Mengi and Algan, 2003).

One of the most important elements of sustainable development is a sustainable environment. A sustainable environment is a debt of the present generation to future generations. As a matter of fact, this situation can also be seen in the meetings and projects organized by the United Nations for sustainable development. There are many environmental goals in both the Millennium Development Goals and the Sustainable Development Goals (Belli and Çelik, 2022).

### 1.2. What is a Sustainable Environment?

Sustainable environment is the process of recovering and redesigning natural resources and protecting natural areas. In this process, sustainability also includes environmental, social and economic factors. A sustainable environment includes reducing waste, choosing environmentally friendly products, protecting natural areas, economical use of energy and recycling resources. Creating a sustainable environment is vital for preserving the balance of nature and leaving a livable world to future generations. Reducing and recycling waste, sustainable use of natural resources and protecting natural areas are important steps in achieving this goal. At the same time, choosing energy saving and environmentally friendly products is also a part of sustainability. A sustainable environment ensures the healthy and balanced functioning of ecosystems. This ensures that biodiversity is preserved and natural resources are available for future generations. In addition, a sustainable environment also has positive effects on human health. Clean air, clean water and healthy food sources are important for people to live a quality life. Therefore, every individual needs to be aware of sustainability and take action. We can all contribute to a sustainable environment by starting with small steps, making environmentally friendly choices in daily life and using resources economically. For example, we can take steps such as gaining recycling habits, using energy-saving lighting, choosing public transportation and choosing environmentally friendly products. In this way, we can protect natural resources, reduce environmental pollution and live a life in harmony with nature. We must work together as a society for a sustainable environment. We can increase people's awareness of the environment through education and awareness-

raising efforts. It is also important to encourage businesses that adopt sustainability strategies and to take sustainability measures at the policy level. Let's not forget that a sustainable environment affects the quality of life of future generations. Therefore, we all have a responsibility and each of us can contribute to building a sustainable future by being environmentally responsible (URL, 3).

### 1.3. Environment and Sustainability

Environmental sustainability is the responsibility of preparing a cleaner and healthier environment for future generations and protecting natural resources in the long term. In this context, all of the systematic studies we carry out on an individual, institutional, national or international scale, the understandings we adopt and the goals we set to protect our environment can be evaluated under the title of environmental sustainability. All of the global environmental problems we are exposed to today are the result of wrong and irresponsible steps we took as a whole world in the past. If these problems are not tackled today and are passed on to future generations in the same way, the world may turn into an uninhabitable place in the very near future. Unfortunately, many problems that endanger the environment and natural life, such as global warming, climate change, decrease in biodiversity, destruction of forests, disruption of aquatic and terrestrial life and food chains, are becoming unmanageable day by day (URL, 1).

Environmental sustainability is of critical importance, especially for businesses with high corporate sustainability awareness. Although the efforts that each company can take to harmonize its activities with the environment are different, there are many globally accepted standards, signed agreements, contracts, rules or procedures. For example, there are international standards for calculating and reporting corporate carbon footprint and water footprint. Greenhouse gas emissions; Institutions that calculate how much water their products, services and processes consume throughout their life cycle in accordance with these standards can then take appropriate measures to reduce them sustainably. Auditing and managing the environmental performance of its suppliers, building green products, services and processes, working with responsible investors, and increasing the environmental awareness of its employees are also very valuable steps to protect the environment within corporate sustainability. Establishing an effective environmental and waste management system, implementing energy management system standards and implementing other practices that will contribute to environmental sustainability are also part of corporate environmental responsibility (Figure 2) (URL, 1).

Figure 2: The Environment is the Common Stakeholder of Every Individual, Institution or Country Living in the World.



Resource: URL, 1.

The environment is the common stakeholder of every individual, institution or country living in the world. Every action taken, every product and service produced, every process operated, every practice implemented has a positive or negative impact on the environment. In this context, we can say that there are many steps to be taken for environmental sustainability in all sectors such as transportation, energy, automotive, chemistry, food, agriculture, fashion, clothing, etc. For example, using public transportation or switching to electric vehicles instead of internal combustion engine vehicles will reduce carbon emissions. Investing in renewable

energy plants instead of thermal power plants, reducing chemical waste and even adopting a zero waste policy, and creating the food chain with sustainable and responsible agricultural practices will also be activities that reduce the negative effects on the environment (Figure 2) (URL, 1).

#### **1.4. What are the Benefits of Sustainable Environmental Awareness?**

Increased awareness of nature conservation provides many benefits. Reducing waste, recovering resources and protecting natural areas not only saves energy and resources, but can also provide economic gains. This situation is of great importance in terms of sustainability. Waste reduction, recycling and recovery activities enable more efficient use of natural resources. At the same time, protecting natural areas contributes to the preservation of biodiversity and maintains the balance of ecosystems. Adopting environmentally friendly production techniques can increase consumers' demand for environmentally friendly products, as well as providing environmentally sound products. This is an important step for environmental sustainability. Environmentally friendly production techniques save energy and water while also reducing waste and emissions. In this way, natural resources are used more efficiently and less harm is caused to the environment. As consumers' demands for environmentally friendly products increase, the rate of adoption of environmentally friendly production methods also increases. This is beneficial both environmentally and economically. Protecting nature ensures that future generations have a healthy and sustainable world heritage. Therefore, as a society, we must increase awareness about the protection of nature and make more efforts in this regard. In particular, more comprehensive steps should be taken on issues such as protecting forests, sustainable use of water resources and combating climate change. In addition, protecting natural habitats and supporting biodiversity is of great importance. For this purpose, research and conservation projects in natural areas should be supported and environmental education activities should be disseminated. We must all act together to leave a clean environment to future generations (URL, 3).

#### **1.5. Social and Economic Sustainability**

50 years ago, the Club of Rome published its research 'Limits to Growth' (Meadows et al., 1972). In the study, attention was drawn to the contradiction between the limitation of the earth's natural resources and the rapid increase in economic activities due to the exponential increase of the human population. The consequences of the interaction between human systems and the earth; It was examined with a computer simulation by Jay Forrester, who in the following years applied the system dynamics approach to various fields such as World Systems, Urban Systems and Economic Systems. The simulation predicted that, absent fundamental changes in resource consumption, there would be sudden and uncontrollable declines in both human population and industrial capacity. Thirty and forty years later, in the 2000s and 2010s, the predictions were repeated, but it was determined that sufficient precautions could not be taken to affect this trend. J. Randers, one of the researchers of the first report, states that there will be slow growth in population and productivity until the 2050s, and that the slowly growing economy will use less resources. Accordingly, he predicts that there will be time for technology to develop resource-efficient solutions and as a result, the ecological footprint will be lighter (Ragnarsdóttir et al., 2012; URL, 2).

The '2030 Sustainable Development Agenda', published in 2015, is for humanity and the entire universe today and in the future; It is a call to all countries to establish a global partnership to ensure peace and prosperity. At the center of the agenda approved by the United Nations (UN) member states are 17 Sustainable Development Goals and 169 Targets to achieve these goals. The New Urban Agenda, which was prepared through a well-designed process with broad participation from various countries of the world in order to implement sustainable development goals, was accepted at the HABITAT III meeting held in Kito in 2016. With the slogan 'Leave no one and no place behind', it was aimed to eliminate hunger by 2030, to fight for equality and justice, and to work towards the solution of climate change issues (URL, 2).

"The Sustainable Development Goals (SDGs) and the 2030 Agenda envisage addressing ecosystem services in the city and humans as an important element of the ecosystem and the impact of human economic activities as a whole."

#### **1.6. Developed and Developing Countries and Sustainable Development**

The ways of perceiving and implementing sustainable development are different in developed and developing countries. Developed countries have continuously carried out their economic activities without allowing nature to renew itself. Environmental pollution concentrations have thus reached very high levels. Developing countries do not yet have industries with high polluting capacities. However, as economic development progresses, it is inevitable to reach these pollution concentrations. If developing countries can maintain their

current pollution levels and ensure efficiency in energy consumption in industry and agriculture, they can overcome the development process without following the experiences of developed countries (Fisunoğlu, 1997; Gürlük and Karaer, 2003). Environmental policies implemented or attempted to be implemented in developed countries today can be followed by developing countries. Thus, the principle of sustainability will be fulfilled by leaving a less polluted environment and less consumed natural resources to future generations (Ertürk, 1998).

However, it is an inevitable fact that sustainability brings with it some environmental problems (Bernardini and Gali, 1993). However, the economy of developed countries does not always emit negative externalities to the environment. Developed economies have advanced technologies and can access environmental protection systems more economically and more quickly. Since the socio-economic structure is higher, establishing a legal structure for environmental protection is less costly. Behavior and attitudes are also more developed.

## 2. DISCUSSION AND CONCLUSION

The problem of poverty in developing countries has kept the interest in protecting the natural environment in the background. Since food and shelter opportunities are primarily important for people with low income levels, the environment is less of a priority. Increasing income levels in these countries will make people more sensitive to the environment. Since pursuing a sustainable development policy in harmony with nature requires quite expensive investments; it does not seem possible to make these investments without the support of developed countries (Kaypak, 2011).

It does not seem to be a very feasible policy for developing countries to take the necessary precautions on their own, without the support of developed countries, which are seen as the main actors of the damage to the natural environment, to developing countries. Degraded soils, destroyed forests, and lost biodiversity are not consistent with sustainable development in the long term. The combination of the financial crisis with the oil, food and water crisis further deepens the problem, and it is predicted that many people will fall into hunger and poverty. In order for development to be sustainable in the next 50 years, the main issues that developing countries should take into account when creating their development strategies are; eradicating poverty, reducing income distribution injustices, air pollution that has reached unhealthy levels in many cities, and scarcity of drinking water. In this regard, as in the solution of many global problems, global cooperation is a necessary condition (Kaypak, 2011; URL, 3).

Developed countries consume excessive amounts of natural resources and release more waste into nature. They are also responsible for cleaning up the damage they have caused to the environment and natural resources in the past. Developing countries have an advantage at this point. While determining the strategies they will follow to ensure sustainable development, they have the chance not to follow the development processes carried out by developed economies without taking the environment into consideration. However, they have to share exhaustible fossil fuels with developed countries. Because all countries in the world have to bear the cost of global price fluctuations that may occur in fossil fuels. In other words, the policies followed by developed countries will contribute greatly to the sustainable development of developing countries (Gürlük, 2010).

While technology creates alternatives, it also reduces the amount of natural resources. It is a necessity to increase investments in protecting these resources and finding substitutes. Poverty in underdeveloped countries forces people to use the environment faster than it can regenerate. As the populations of developing countries are constantly increasing, their dependence on their resources is also increasing day by day. In this context, renewable energy sources constitute an alternative in response to the increasing energy consumption in the world (Seydioğulları, 2013).

Individuals also have some responsibilities to ensure environmental sustainability. Changing our consumption habits to consume fewer resources can reduce our negative impact on the environment. Of course, we cannot ensure that every product is produced in an environmentally responsible manner, but if we take care to use products that are proven, reliable and have reputable eco labels, we will be displaying a responsible behavior in this regard. As consumers begin to prefer eco-labelled products more, manufacturers will change their production approaches and methods accordingly over time (URL, 1).

The 'Our Common Future' report presented to the United Nations General Assembly in August 2021; He drew attention to the need for humanity, which is experiencing its 'greatest common test' since the Second World War, to make an urgent choice. Humanity can achieve common goals, prosperity and even its future through solidarity and working together. UN member states have agreed that the challenges to be addressed are

interconnected across borders and all distinctions. The Common Agenda is an action agenda designed to accelerate the implementation of the Sustainable Development Goals and other agreements. There needs to be ways of working together for 'mutual benefits' with global solidarity (URL, 2).

As a result, it can be said that; An industrial structure that goes hand in hand with the natural environment is unquestionably necessary for all developed or developing countries. While developing economically, it is necessary to develop serious awareness about the environmental dangers that await the world and future generations.

In this sense, the concept of sustainable development has a strategic role in creating and spreading this awareness. The concept of sustainable development, which we can evaluate in a wide range from reducing the environmental costs caused by the use of natural resources to human development in geographies affected by poverty, has a guiding quality for today's and future economies (Karabıçak and Özdemir, 2015).

Finally, it should not be forgotten that the world is not the inheritance of our parents, but the trust of our children. It is our responsibility to take good care of it and deliver it to future generations in a better condition. In order to fulfill this responsibility, it is necessary to understand the content and importance of sustainability and the concept of sustainable development.

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## Assessing Trade Relations Between Turkey and Russia

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**Abstract:** This study investigates trade relations between Turkey and Russia. When analyzing the volume of Turkey's exports to Russia and its imports from Russia, it becomes evident that both Turkey's exports and imports vary depending on political developments. This fluctuation underscores the intricate relationship between economic activities and geopolitical factors. For instance, periods of diplomatic tension or political instability between Turkey and Russia often coincide with declines in export and import volumes, as trade may be disrupted or subjected to sanctions. Conversely, periods of diplomatic thaw or improved bilateral relations can stimulate trade and lead to an increase in export and import volumes. Therefore, the dynamics of Turkey's exports to Russia serve as a barometer of the broader geopolitical landscape, reflecting the interplay of diplomatic maneuvers, regional conflicts, and global power dynamics. Understanding these complexities is crucial for policymakers and businesses seeking to navigate the intricacies of international trade relationships and anticipate potential challenges or opportunities in the market.

**Keywords:** Import, Export, Trade Volume, Turkey, Russia

### 1. INTRODUCTION

Trade relations between Russia and Turkey have historically been dynamic, reflecting the interplay of economic interests, geopolitical considerations, and cultural ties. Situated at the crossroads of Europe and Asia, these two nations have forged a complex relationship characterized by periods of cooperation, competition, and geopolitical tensions.

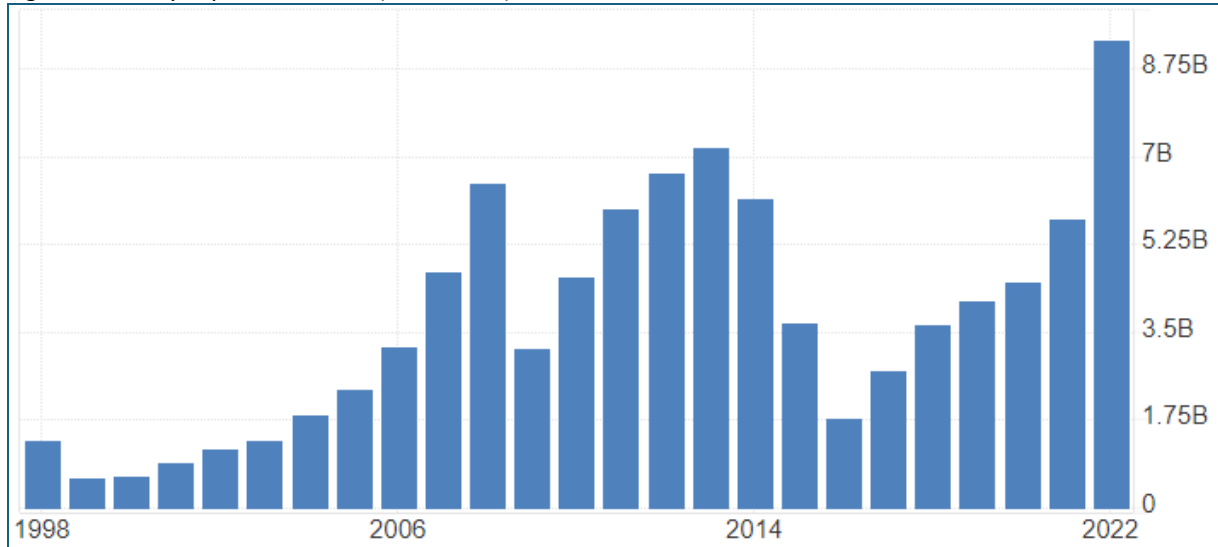
The historical roots of trade between Russia and Turkey trace back centuries, with the Silk Road serving as a vital conduit for commerce and cultural exchange. However, modern trade relations began to take shape in the aftermath of the Cold War, as both countries sought to diversify their economic partnerships. The dissolution of the Soviet Union opened new opportunities for trade, leading to the establishment of formal diplomatic ties and the signing of bilateral agreements.

Over the years, trade between Russia and Turkey has experienced fluctuations influenced by various factors such as global economic trends, commodity prices, and geopolitical developments. Turkey primarily exports textiles, agricultural products, and machinery to Russia, while importing energy resources, minerals, and manufactured goods. The trade balance has traditionally been in Russia's favor due to its vast reserves of natural resources, particularly oil and gas.

### 2. TURKEY'S TRADE RELATIONS WITH RUSSIA

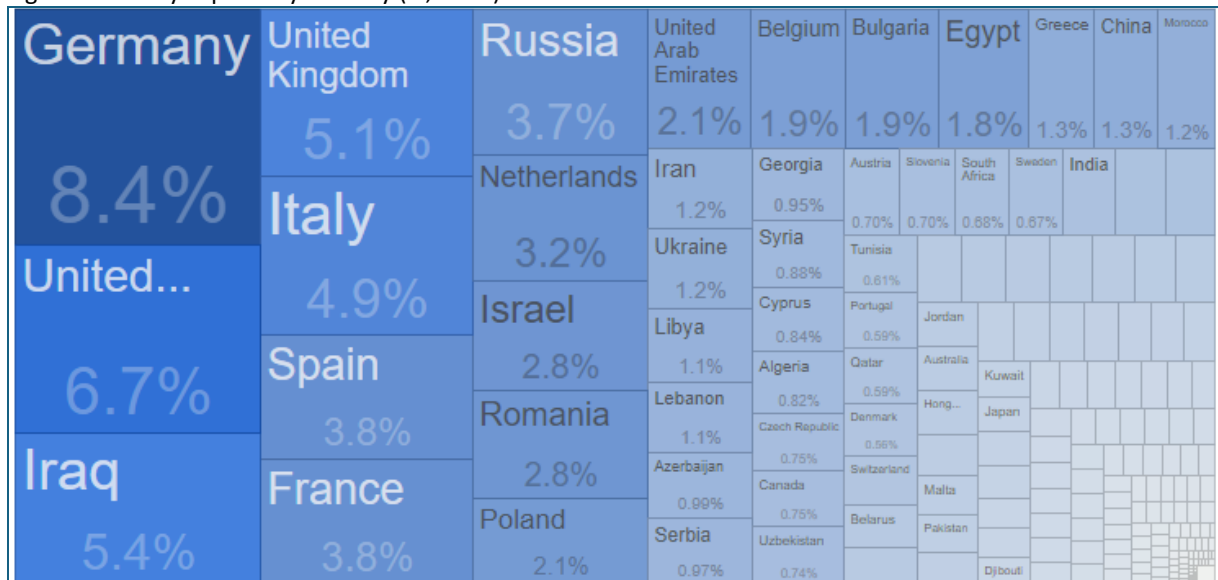
When analyzing the volume of Turkey's exports to Russia, it becomes evident that Turkey's exports vary depending on political developments. During the period from 1999 to 2008, Turkey's exports to Russia displayed a steady increase. Following a decline in 2009 due to the onset of the global crisis in 2008, exports resumed their upward trend from 2010 to 2013. In 2013, reaching the level of 7 billion USD, exports to Russia experienced a decrease from 2014 to 2016 due to the political crisis between the two countries (Russia's annexation of Crimea in 2014 and the jet crisis in 2015), dropping to the level of 1.7 billion USD in 2016 (the level seen in 2004). Turkey's exports to Russia entered a new period of growth from 2016 to 2022. Exports, which reached the level of 5.7 billion USD in 2021, exhibited a significant leap in 2022 with the Russian invasion of Ukraine, reaching the level of 9.3 billion USD (see Figure 1). As a result of this increase, Russia's share of Turkey's total exports rose to 3.7%, elevating Russia to the 8th position among the countries to which Turkey exports the most (see Figure 2).

Figure 1: Turkey Exports to Russia (Billion USD)



Source: <https://tradingeconomics.com/turkey>

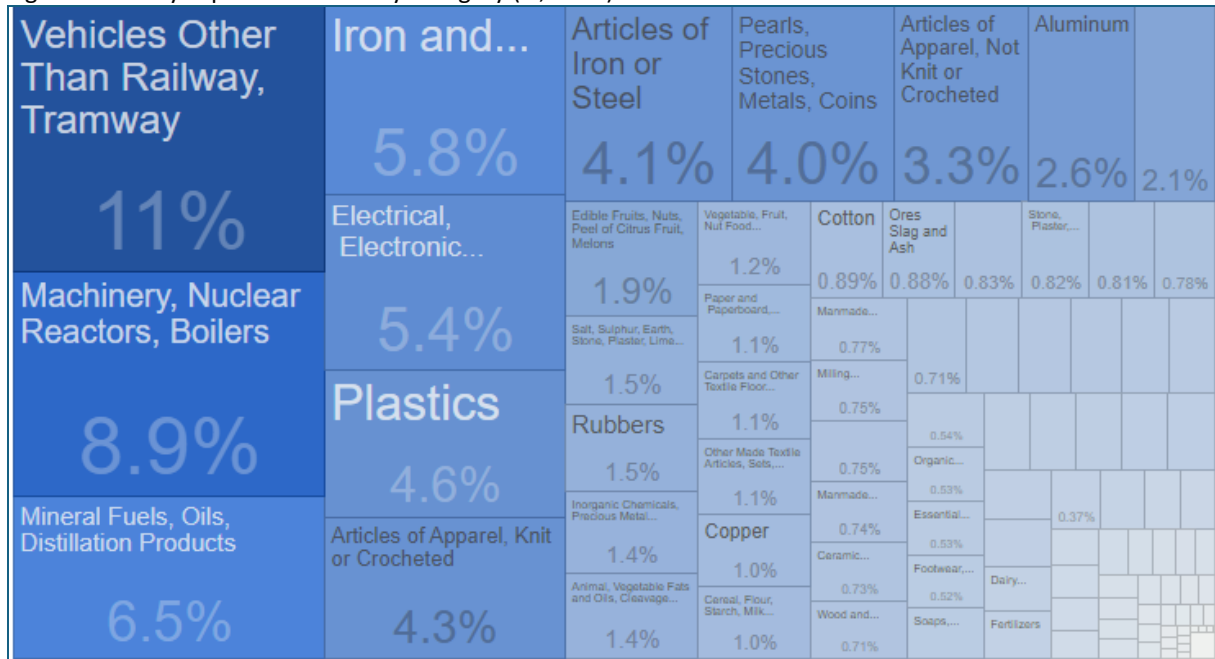
Figure 2: Turkey Exports by Country (% , 2022)



Source: <https://tradingeconomics.com/turkey>

The main products that Turkey exported to Russia in 2022 are as follows: Vehicles other than railway, tramway (11%), Machinery, nuclear reactors, boilers (8.9%), and Mineral fuels, oils, distillation products (6.5%). In recent years, it has been observed that machinery and mechanical parts, automotive, plastic, and plastic products have replaced fruits and nuts, which have been Turkey's primary export products to Russia.

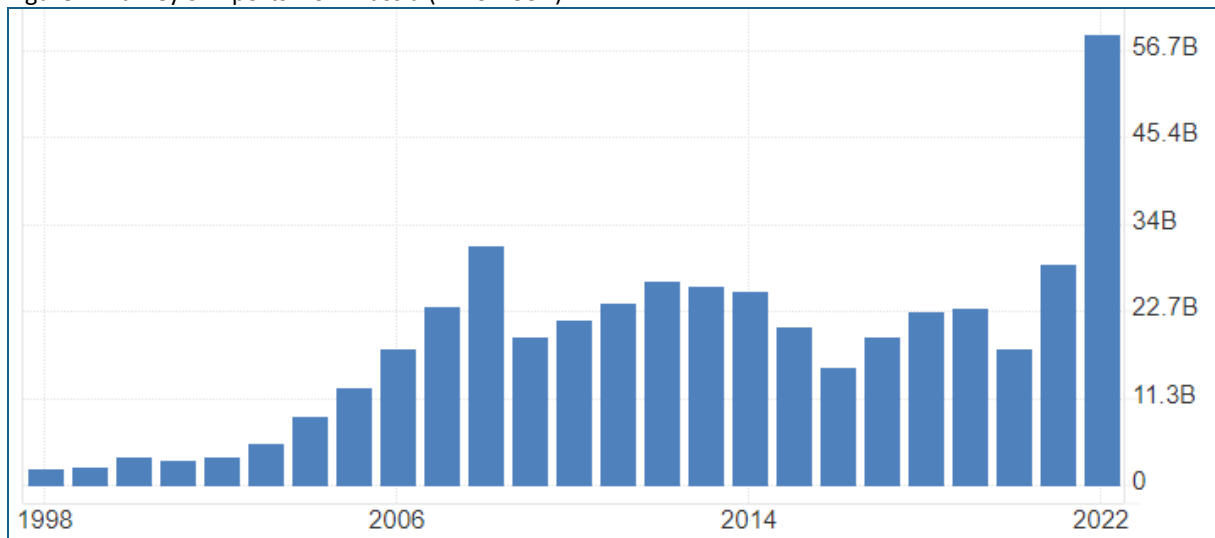
Figure 3: Turkey Exports to Russia by Category (% , 2022)



Source: <https://tradingeconomics.com/turkey>

When analyzing the volume of Turkey’s imports to Russia, it's apparent that these imports also fluctuate, though to a lesser extent than exports, in response to political developments. Turkey's imports from Russia increased between 1998 and 2008, reaching the level of 32 billion USD. After a decline in 2009 due to the onset of the global crisis in 2008, it rose until 2012, followed by a decrease from 2013 to 2016 (due to the political crisis between the two countries (Russia's annexation of Crimea in 2014 and the jet crisis in 2015). However, from 2017 to 2022, with the exception of 2020, it showed an increase. Turkey's imports from Russia experienced a surge from 28.9 billion USD in 2021 to 58.8 billion USD in 2022 with the Russian invasion of Ukraine (see Figure 4).

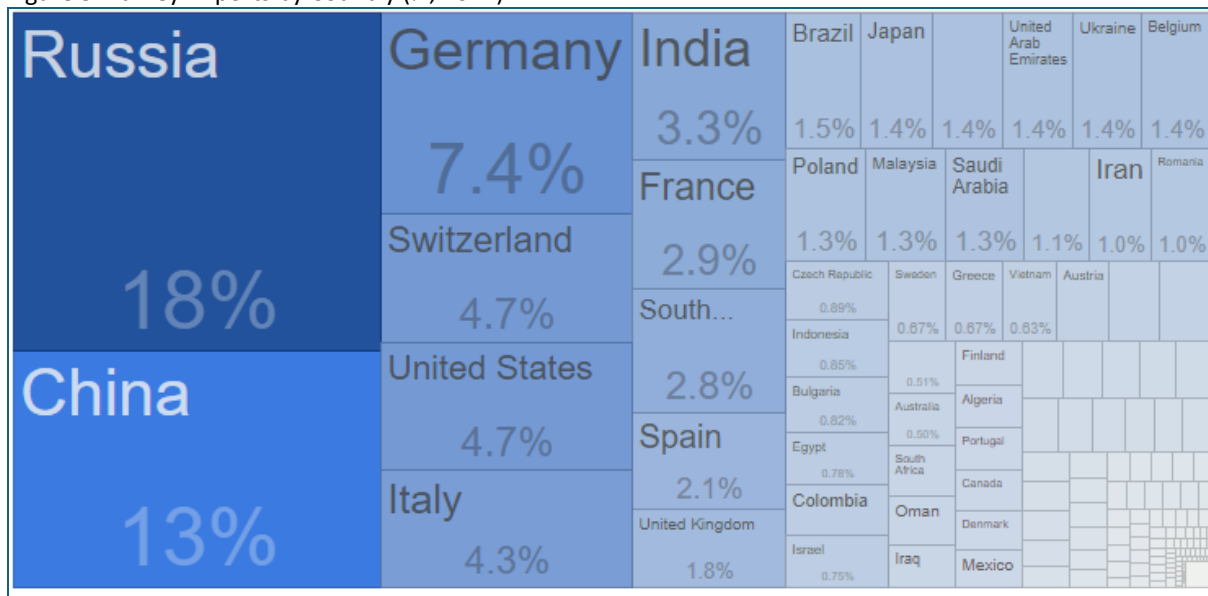
Figure 4: Turkey’s Imports from Russia (Billion USD)



Source: <https://tradingeconomics.com/turkey>

In 2021, Russia ranked as Turkey's second-largest import partner, following China. However, in 2022, Russia had ascended to the position of the primary source of imports for the Turkish economy, constituting approximately 18% of the total imports (see Figure 5).

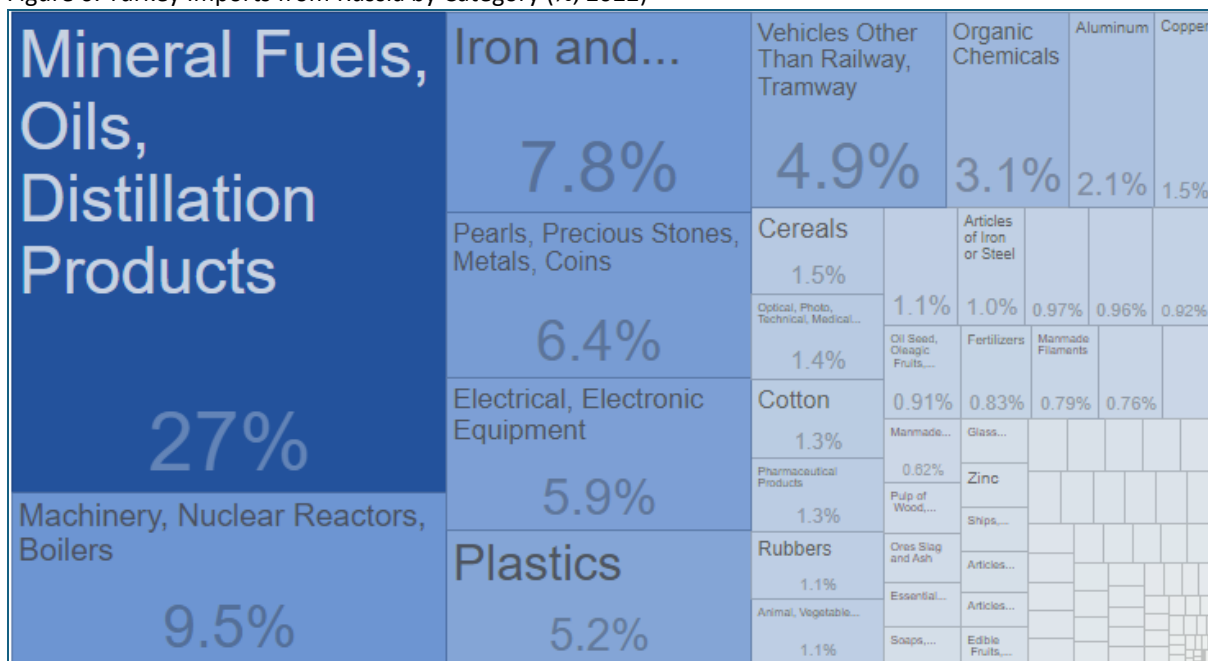
Figure 5: Turkey Imports by Country (% , 2022)



Source: <https://tradingeconomics.com/turkey>

The main products that Turkey imported from Russia in 2022 are as follows: Mineral fuels, oils, distillation products (27%), Machinery, nuclear reactors, boilers (9.5%), Iron and steel (7.8%) (see Figure 6). After the Russian invasion of Ukraine and most European countries halted their imports of Russian oil and natural gas, Turkey became one of the largest importers of Russian energy in the West.

Figure 6: Turkey Imports from Russia by Category (% , 2022)



Source: <https://tradingeconomics.com/turkey>

In 2023, Turkey's exports to Russia continued to increase, reaching the all-time highest level of 10.9 billion USD, representing a 16.9% increase compared to the previous year. As a result of this increase, Russia's share of Turkey's total exports rose to 4.3%, elevating Russia to the 6th position among the countries to which Turkey exports the most. In 2023, there was a decrease in Turkey's imports from Russia compared to 2022. It is observed that Turkey's imports from Russia decreased by 22.5% in 2023, reaching a level of 45.6 billion dollars compared to 2022 (Moskova Büyükelçiliği Ticaret Müşavirliği, 2024).

### 3. TRADE DYNAMICS AND GLOBAL POWER DYNAMICS

In the wake of the Russian invasion of Ukraine, Turkey backed Ukraine's territorial integrity and provided substantial military aid, while simultaneously seeking to maintain its ties with Russia. Turkey abstained from joining Western sanctions against Russia, contending that such measures would adversely affect the Turkish economy. It insisted on refraining from sanctions unless they were sanctioned by the United Nations. This has provided Turkey with an opportunity not only to act as a mediator in the Russo-Ukrainian conflict but also to reap benefits from facilitating trade with sanctioned Russia.

The rise in trade volumes between Turkey and Russia in both 2022 and 2023 has captured the attention of both the United States and the European Union. The United States has expressed concerns that specific commercial connections between Turkey and Russia are believed to contribute to Russia's military activities in Ukraine. In the initial nine months of 2023, Turkey recorded a significant increase in exports, totaling \$158 million, of 45 high-priority goods subject to export controls to Russia and former Soviet countries, surpassing the previous year's exports by over threefold. Despite this surge in exports, statistical agencies in these countries, including Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, and Uzbekistan, have not reported a corresponding rise in imports, implying that goods destined for these intermediary nations may ultimately end up in Russia. These high-priority goods encompass microchips, communications equipment, and telescopic sights, which are purportedly utilized by Russia in cruise missiles, drones, and helicopters. Concurrently, Turkey's imports of these goods from G7 countries have also increased, indicating a 60% rise during the first nine months of 2023 compared to the 2015-2021 period (Buyuk, 2023; Goodrich, 2023).

Turkey's imports of Russian oil, natural gas, and coal notably increased in 2022 due to Russia redirecting its energy exports away from the EU market amidst Western sanctions, often accepting lower prices. Capitalizing on discounted prices and the EU energy ban effective December 5, 2022, Turkey doubled its oil exports from Russia in 2022 compared to the previous year. Turkey has been engaging in significant purchases of inexpensive Russian diesel, utilizing it for domestic purposes while exporting its own production to the EU, which banned Russian-refined products from February 5, 2023. This practice, known as "origin swap," exploits a loophole as Russian diesel does not directly reach the European Union market. It underscores Turkey's role as an intermediary between sanctioned Russia and the West, showcasing its profit potential for refiners (Konarzewska, 2023).

The threat of the USA officials to impose sanctions on financial institutions in Turkey conducting business with Russia has had a cooling effect on Turkish-Russian trade (Salcı, 2022; Financial Times, 2023), causing disruptions and delays in payments for both imported oil and Turkish exports. Consequently, Turkey experienced a 33% year-on-year decline in exports to Russia in February 2024, dropping from \$1.1 billion to \$670 million compared to February 2023. Similarly, imports from Russia in February 2024 plummeted by 36.65% to \$1.3 billion from \$2 billion in the previous year (Euronews, 2024; Reuters, 2024).

### 4. CONCLUSION

When analyzing the volume of Turkey's exports to Russia and its imports from Russia, it becomes evident that both Turkey's exports and imports vary depending on political developments. This fluctuation underscores the intricate relationship between economic activities and geopolitical factors. For instance, periods of diplomatic tension or political instability between Turkey and Russia often coincide with declines in export and import volumes, as trade may be disrupted or subjected to sanctions. Conversely, periods of diplomatic thaw or improved bilateral relations can stimulate trade and lead to an increase in export and import volumes.

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The rise in trade volumes between Turkey and Russia in both 2022 and 2023 has captured the attention of both the United States and the European Union. The United States has expressed concerns that specific commercial connections between Turkey and Russia are believed to contribute to Russia's military activities in Ukraine. The EU has also expressed concerns regarding origin swap, which involves Turkey engaging in significant purchases of inexpensive Russian diesel, utilizing it for domestic purposes while exporting its own production to the EU,

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## The Rate of E-waste Recycling within the European Union

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**Abstract:** Among the world's waste streams, electronic waste is experiencing the fastest growth, with a rapid annual increase of 3%–5%. The rapid advancement of technologies, increasing consumer demand for electronics, and shorter product life cycles, coupled with limited repair options, have propelled e-waste to become one of the fastest-growing waste streams globally. Proper collection and recycling of e-waste are crucial due to its composition of both hazardous and valuable materials. However, the global rate of electronic waste collected and appropriately recycled stood at only 17.4 percent in 2019. This study scrutinizes the rate of e-waste recycling in the EU and efforts of the Union to tackle the issue.

**Keywords:** E-waste recycling, Waste Management, Circular Economy, European Union

### 1. INTRODUCTION

Among the world's waste streams, electronic waste is experiencing the fastest growth, with a rapid annual increase of 3%–5% (Liu et al., 2023). This category of waste is commonly known as e-waste or Waste Electrical and Electronic Equipment (WEEE).

E-waste can be defined as electrical or electronic devices and appliances, that are no longer in use or have reached the end of their lifespan. The WEEE Directive, implemented by the European Union, delineates the categories and specific products of e-waste into six main categories, which encompass temperature exchange equipment, screens and monitors, lamps, large equipment, small equipment, and small IT and telecom equipment (The European Parliament, 2012).

1) Temperature exchange equipment (TEE): Refrigerators, Freezers, Equipment which automatically deliver cold products, Air-conditioning equipment, Dehumidifying equipment, Heat pumps, Radiators containing oil and other temperature exchange equipment using fluids other than water for the temperature exchange.

2) Displays, monitors, and any display device that is bigger than 100 cm<sup>2</sup>: laptops Screens, Televisions, LCD photo frames, Monitors, Laptops, Notebooks, Tablets, eBook-/e-Readers.

3) Lamps: Straight fluorescent lamps, Compact fluorescent lamps, Fluorescent lamps, High intensity discharge lamps - including pressure sodium lamps and metal halide lamps, Low pressure sodium lamps, LED retrofit lamps.

4) Large equipment (any external dimension more than 50 cm): Washing machines, Clothes dryers, Dish washing machines, Cookers, Electric stoves, Electric hot plates, Luminaires, Equipment reproducing sound or images, Musical equipment (excluding pipe organs installed in churches), Appliances for knitting and weaving, Large computer-mainframes, Large printing machines, Copying equipment, Large coin slot machines, Large medical devices, Large monitoring and control instruments, Large appliances which automatically deliver products and money, Photovoltaic panels. Household appliances; IT and telecommunication equipment; consumer equipment; luminaires; equipment reproducing sound or images, musical equipment; electrical and electronic tools; toys, leisure and sports equipment; medical devices; monitoring and control instruments; automatic dispensers; equipment for the generation of electric currents.

5) Small equipment (no external dimension more than 50 cm): Vacuum cleaners, Carpet sweepers, Appliances for sewing, Luminaires, Microwaves, Ventilation equipment, Irons, Toasters, Electric knives, Electric kettles, Clocks and Watches, Electric shavers, Scales, Appliances for hair and body care, Radio sets, Digital cameras, Video cameras, Video recorders, Hi-fi equipment, Musical instruments, Equipment reproducing sound or images, Electrical and electronic toys, Sports equipment, Computers for biking, diving, running, rowing, etc., Smoke detectors, Heating regulators, Thermostats, Small Electrical and electronic tools, Small medical devices, Small Monitoring and control instruments, Small Appliances which automatically deliver products, Small equipment with integrated photovoltaic panels. Household appliances; consumer equipment; luminaires; equipment reproducing sound or images, musical equipment; electrical and electronic tools; toys, leisure and



sports equipment; medical devices; monitoring and control instruments; automatic dispensers; equipment for the generation of electric currents.

6) Small IT and telecommunication equipment (no external dimension more than 50 cm): Mobile phones (smartphones, phablets etc.), GPS and navigation equipment, pocket calculators, routers, personal computers, printers, telephones.

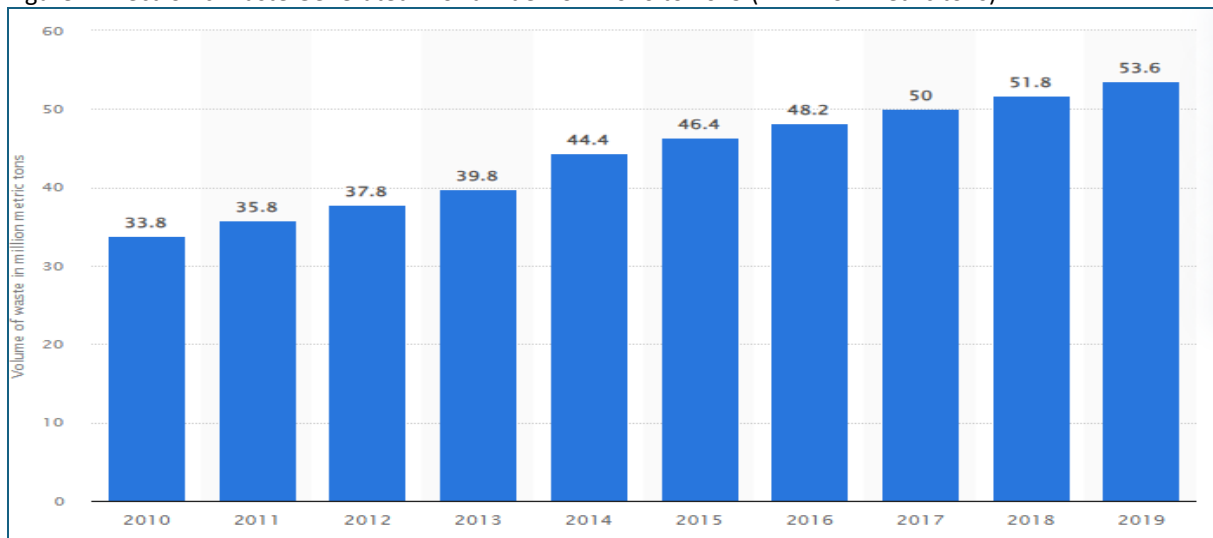
The rapid advancement of technologies, increasing consumer demand for electronics, and shorter product life cycles, coupled with limited repair options, have propelled e-waste to become one of the fastest-growing waste streams globally (Tiseo, 2023; Alves, 2023; Liu et al., 2023). Empirical studies demonstrate that the global volume of e-waste is on the rise alongside expanding economies (Neves et al., 2024).

Proper collection and recycling of e-waste are crucial due to its composition of both hazardous and valuable materials. On the one hand, e-waste harbors up to 60 diverse types of valuable metals, including copper, gold, silver, palladium, aluminum, and iron, with billions of dollars' worth discarded annually, resulting in a total economic value of recyclable resources as high as 57 billion USD, surpassing the gross domestic product of many countries worldwide (Forti et al., 2020; Liu et al. 2023). In addition to valuable metals, e-waste encompasses potentially hazardous substances like lead, mercury, and cadmium, as well as persistent organic pollutants such as polychlorinated biphenyls and brominated flame retardants, posing environmental pollution and heightened risks to individuals engaged in e-waste recycling (The European Parliament, 2020; Liu et al. 2023).

## 2. ELECTRONIC WASTE GENERATION

In 2019, the world produced an estimated 54 million metric tons of electronic waste, a figure projected to surge in the future. Since 2010, the global volume of e-waste has exhibited a consistent upward trend, starting at 33.8 million metric tons in 2010, escalating to 44.4 million metric tons in 2014, and soaring to 53.6 million metric tons by 2019 (see Figure 1).

Figure 1: Electronic Waste Generated Worldwide from 2010 to 2019 (in million metric tons)

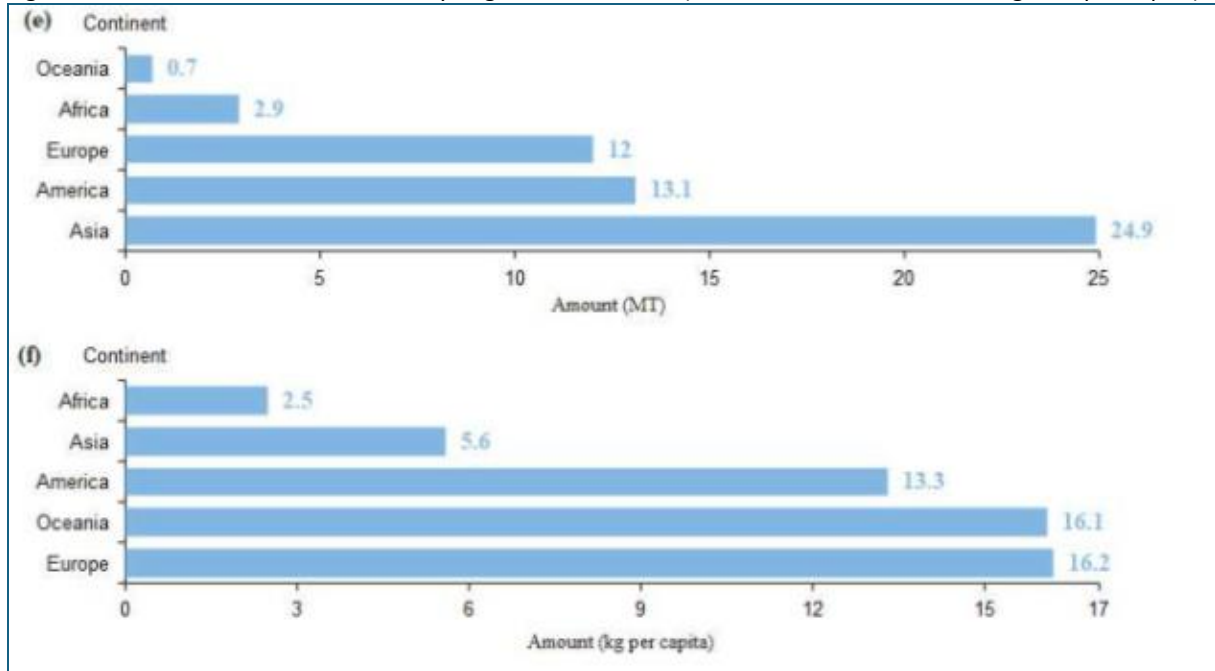


Source: <https://www.statista.com/statistics/499891/projection-ewaste-generation-worldwide/>

In 2019, the global average of e-waste generated per capita was a significant 7.3 kilograms, totaling 53.6 million metric tons worldwide. In 2019, Asia led in e-waste generation with a total of 24.9 million metric tons, followed by the Americas with 13.1 million metric tons and Europe with 12 million metric tons, while Africa and Oceania produced 2.9 million metric tons and 0.7 million metric tons, respectively.

However, Europe led globally in e-waste generation per capita, with 16.2 kilograms per capita, followed closely by Oceania at 16.1 kilograms per capita and the Americas at 13.3 kilograms per capita. In contrast, Asia and Africa exhibited lower rates, producing just 5.6 kilograms per capita and 2.5 kilograms per capita, respectively (see Figure 2).

Figure 2: Electronic Waste Generation by Region from in 2019 (in million metric tons and kilograms per capita)

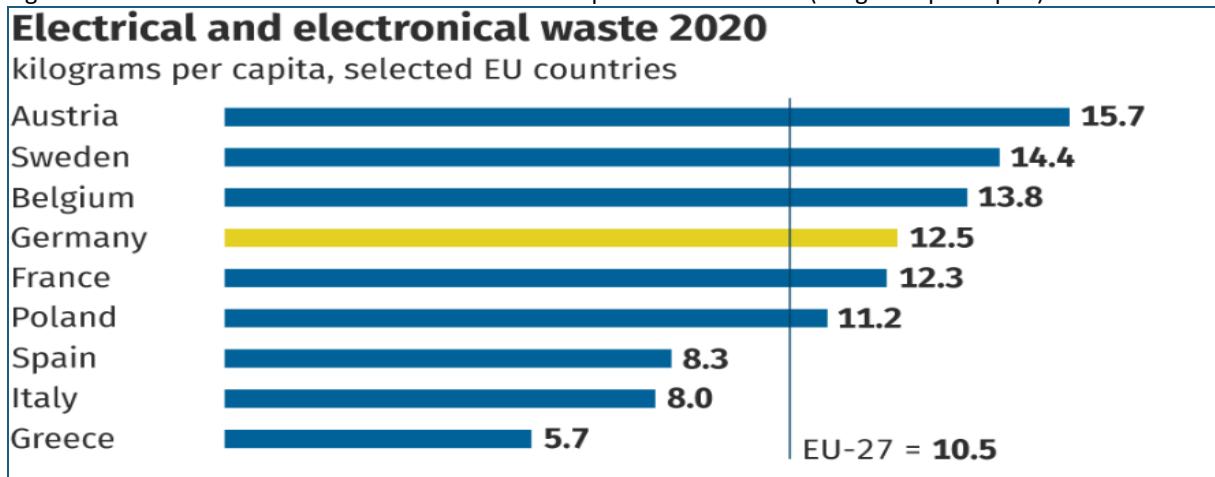


Source: Liu et al. (2023).

China emerged as the top global producer of electronic waste in 2019, generating over 10 million metric tons, while the United States followed closely behind, producing approximately seven million metric tons (Tiseo, 2024).

Within the European Union (EU-27), the average e-waste per capita reached around 10.5 kilograms in 2020. Austria recorded the highest figure at 15.7 kilograms per capita, while Greece reported the lowest at 5.7 kilograms per capita (see Figure 3).

Figure 3: Electronic Waste Generation within the European Union in 2020 (kilograms per capita)

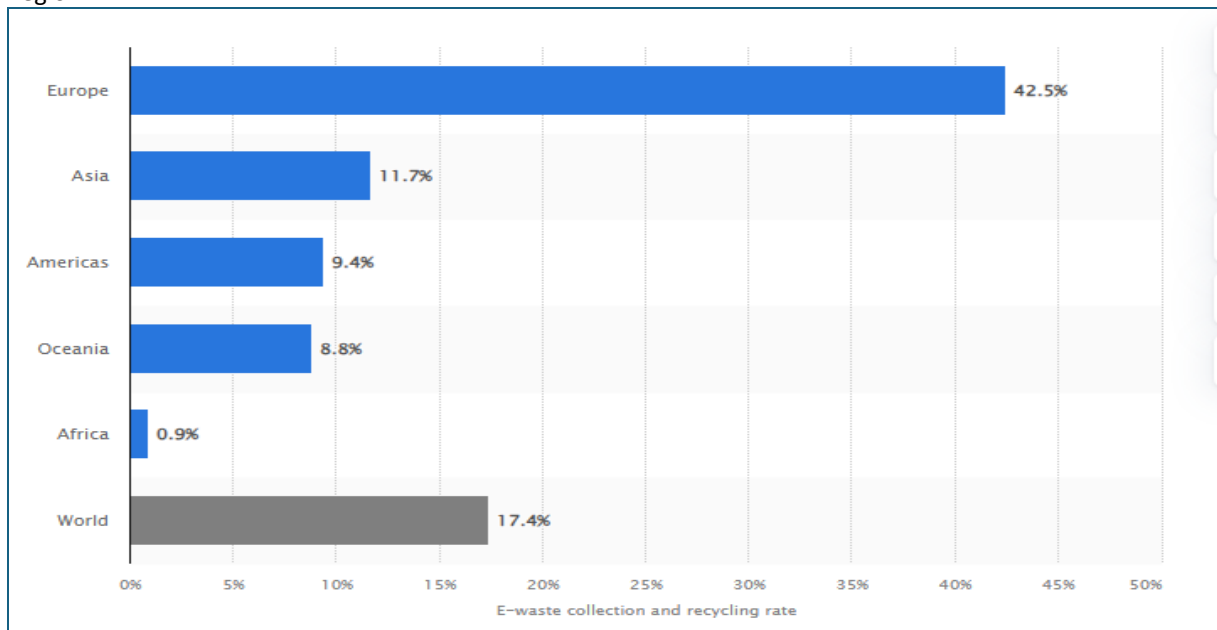


Source: [https://www.destatis.de/Europa/EN/Topic/Environment-energy/E\\_Waste.html](https://www.destatis.de/Europa/EN/Topic/Environment-energy/E_Waste.html)

### 3. E-WASTE COLLECTION AND RECYCLING RATES

In 2019, the global rate of electronic waste collected and appropriately recycled stood at 17.4 percent. Notably, Europe led with a significant rate of 42.5 percent, surpassing other regions. Asia followed with 11.7 percent, while the Americas and Oceania exhibited similar rates at 9.4 percent and 8.8 percent, respectively. Africa reported the lowest rate at merely 0.9 percent (see Figure 4).

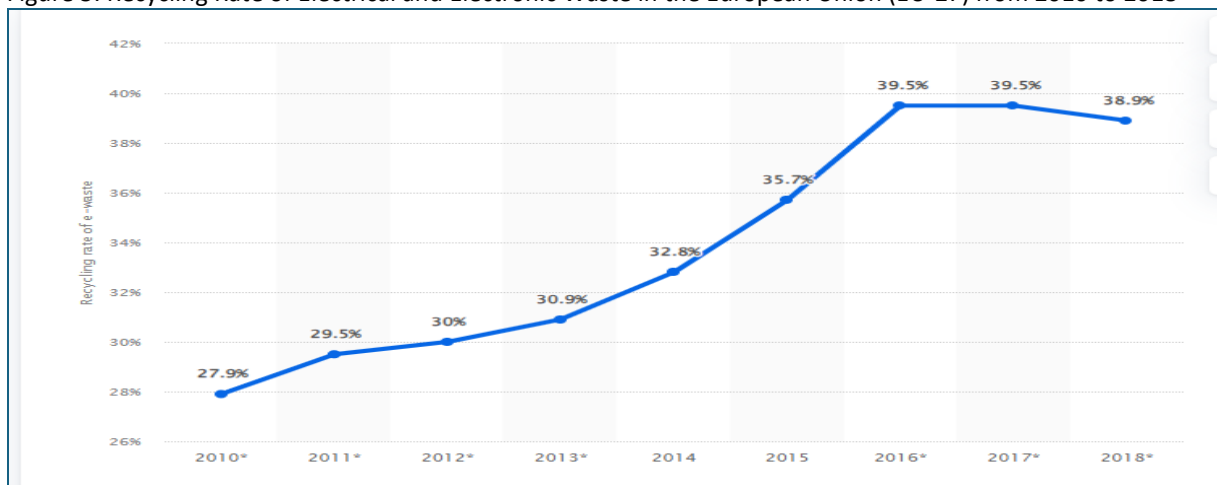
Figure 4: Share of Electronic Waste Documented to be Collected and Properly Recycled Worldwide in 2019, by Region



Source: <https://www.statista.com/statistics/1253099/ewaste-collection-recycling-rates-worldwide-by-region>

The recycling rate of e-waste within the European Union (EU-27) was estimated at 38.9 percent in 2018. This rate showed a progressive increase from 27.9 percent in 2010 to 32.8 percent in 2014, peaking at 39.5 percent in 2016 before experiencing a slight decline to 38.9 percent in 2018 (see Figure 5).

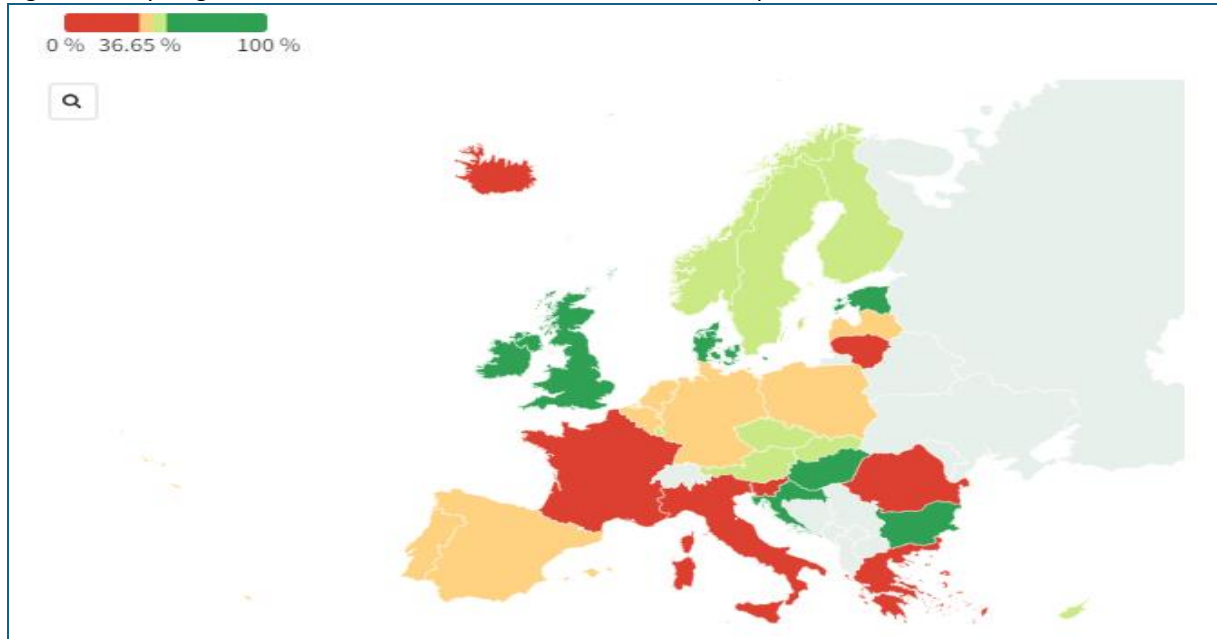
Figure 5: Recycling Rate of Electrical and Electronic Waste in the European Union (EU-27) from 2010 to 2018



Source: <https://www.statista.com/statistics/1315662/e-waste-recycling-european-union/>

However, recycling rates differ across EU nations. In 2018, Croatia recycled 83.4% of its electronic and electrical waste, contrasting with Malta's recycling rate of 20.8% (Duboust, 2022) (see Figure 6).

Figure 6: Recycling Rate of Electrical and Electronic Waste in the European Union Countries in 2018.



Source: <https://www.euronews.com/next/2022/11/03/e-waste-recycling-how-much-electronic-waste-does-europe-generate-recycle-and-repair>

#### 4. EU LEGISLATIVE EFFORTS

The European Union initiated the implementation of cohesive legislation governing the recycling and management of e-waste, exemplified by key directives such as the WEEE Directive (2003), the RoHS Directive (2006), the EuP Directive (2007), the revised WEEE Directive (2012), and the introduction of the WEEE Label of Excellence (WEEELABEX) in 2011 (Liu et al., 2023).

EU regulations tackle environmental and related concerns stemming from the increasing volume of discarded electronics within the EU. The objective is to foster sustainable production and consumption by prioritizing the prevention of WEEE, promoting the efficient utilization of resources and the recovery of secondary raw materials through re-use, recycling, and other forms of recovery, and enhancing the environmental performance of all stakeholders engaged in the lifecycle of EEE (The European Parliament, 2012).

The WEEE Directive and the RoHS Directive aim to confront the escalating volume of WEEE. In response to these challenges, EU legislation restricts the utilization of specific hazardous substances in electrical and electronic equipment under the RoHS Directive. Simultaneously, the WEEE Directive fosters the collection and recycling of such equipment.

The objective of the RoHS Directive is to mitigate the risks to human health and the environment associated with the handling of electronic and electrical waste. It achieves this by limiting the utilization of specific hazardous substances in EEE, which can be replaced with safer alternatives. These restricted substances encompass heavy metals, flame retardants, and plasticizers. By promoting the recyclability of EEE, the Directive aims to reduce the presence of hazardous substances in EEE and its components upon disposal. Furthermore, it ensures fair competition among manufacturers and importers of EEE in the European market. The RoHS Directive currently restricts the use of ten substances: lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyls (PBB) and polybrominated diphenyl ethers (PBDE), bis(2-ethylhexyl) phthalate (DEHP), butyl benzyl phthalate (BBP), dibutyl phthalate (DBP) and diisobutyl phthalate (DIBP) (The European Parliament, 2011).

The primary goal of the WEEE Directive is to encourage the gathering of discarded electrical and electronic equipment and facilitate its recovery, recycling, and refurbishment, thereby diminishing the amount ultimately disposed of. The WEEE Directive mandates the segregated collection and appropriate handling of WEEE, establishing objectives for their collection, recovery, and recycling. It aids European nations in combating illegal waste exports by increasing the difficulty for exporters to conceal illicit shipments of WEEE. Additionally, it

lessens administrative complexities by advocating for the standardization of national EEE registries and reporting formats (The European Parliament, 2012).

In March 2020, the European Commission introduced a new circular economy action plan, emphasizing the reduction of electronic and electrical waste as a key priority. The proposal delineated specific near-term objectives, including the establishment of the right to repair and enhancement of overall reusability, implementation of a universal charger, and introduction of an incentivized recycling scheme for electronics (The European Parliament, 2020).

## 5. CONCLUSION

Among the world's waste streams, electronic waste is experiencing the fastest growth, with a rapid annual increase of 3%–5%. The rapid advancement of technologies, increasing consumer demand for electronics, and shorter product life cycles, coupled with limited repair options, have propelled e-waste to become one of the fastest-growing waste streams globally. Proper collection and recycling of e-waste are crucial due to its composition of both hazardous and valuable materials. However, in 2019, the global rate of electronic waste collected and appropriately recycled stood at only 17.4 percent.

Europe leads globally in e-waste generation per capita, with 16.2 kilograms per capita. However, it also boasts the highest e-waste collection and recycling rate worldwide, standing at 42.5 percent.

The European Union initiated the implementation of cohesive legislation governing the recycling and management of e-waste, exemplified by key directives such as the WEEE Directive (2003), the RoHS Directive (2006), the EuP Directive (2007), the revised WEEE Directive (2012), and the introduction of the WEEE Label of Excellence (WEEELABEX) in 2011. The WEEE Directive and the RoHS Directive aim to confront the escalating volume of WEEE. In response to these challenges, EU legislation restricts the utilization of specific hazardous substances in electrical and electronic equipment under the RoHS Directive. Simultaneously, the WEEE Directive fosters the collection and recycling of such equipment.

EU regulations tackle environmental and related concerns stemming from the increasing volume of discarded electronics within the EU. The objective is to foster sustainable production and consumption by prioritizing the prevention of WEEE, promoting the efficient utilization of resources and the recovery of secondary raw materials through re-use, recycling, and other forms of recovery, and enhancing the environmental performance of all stakeholders engaged in the lifecycle of EEE.

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## The Pros and Cons of a Fixed Exchange Rate System: A Case Study of Egypt

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**Abstract:** Fixed exchange rates have been a subject of debate among policymakers for decades. Fixed exchange rates system, characterized by pegging a nation's currency to another currency or a basket of currencies, has both advantages and disadvantages. While it offers certain advantages in terms of stability and predictability, they also come with their drawbacks. Their suitability depends on a country's economic circumstances, policy objectives, and external environment. While they can provide stability and certainty in international transactions, they also entail risks such as loss of monetary policy autonomy and vulnerability to speculative attacks.

Fixed exchange rate regimes have a profound impact on the flow of capital into an economy. The stability and predictability provided by fixed exchange rates can attract foreign investment, yet they may also exacerbate vulnerabilities and distortions that contribute to boom-bust cycles. By analyzing the case of Egypt, this study offers insights into the challenges and opportunities posed by the interplay among fixed exchange rate systems, capital inflows, and boom-burst cycles.

**Keywords:** Fixed Exchange Rate System, Capital Inflows, Boom-Burst Cycles, Devaluation, Egypt

### 1. INTRODUCTION

Fixed exchange rates have been a subject of debate among policymakers for decades. Fixed exchange rates system is characterized by pegging a nation's currency to another currency or a basket of currencies. Fixed exchange rates system has both advantages and disadvantages. While it offers certain advantages in terms of stability and predictability, they also come with their drawbacks. Their suitability depends on a country's economic circumstances, policy objectives, and external environment. While they can provide stability and certainty in international transactions, they also entail risks such as loss of monetary policy autonomy and vulnerability to speculative attacks (Frankel, 2003; Gandolfo 2016; Mishkin, 2021).

#### Pros of Fixed Exchange Rates:

One of the primary benefits of fixed exchange rates is the currency stability they provide to international trade and investment. By pegging the value of a currency to another currency or a basket of currencies, fluctuations in exchange rates are minimized. This stability can reduce uncertainty for businesses engaged in foreign trade and investment, encouraging greater economic activity.

Fixed exchange rates simplify international trade transactions by providing certainty about the exchange rate at which transactions will be conducted. This can reduce transaction costs associated with currency exchange and hedging, making trade more efficient and fostering increased cross-border commerce.

Fixed exchange rates can instill confidence among investors and consumers, as they signal a commitment by governments to maintain the value of their currencies. This confidence can lead to increased capital inflows, as investors are more willing to allocate capital to countries with stable exchange rate regimes.

Fixed exchange rates can help maintain price stability by reducing the risk of inflation caused by currency depreciation. When a currency's value is fixed, central banks are compelled to maintain price stability through monetary policy measures, such as controlling money supply and interest rates. This can contribute to lower inflation rates and provide a favorable environment for economic growth.

#### Cons of Fixed Exchange Rates:

One of the major drawbacks of fixed exchange rates is the loss of monetary policy autonomy. When a country fixes its currency to another currency or a commodity, it relinquishes its ability to independently conduct monetary policy to address domestic economic conditions. This can be particularly challenging during economic downturns when policymakers may need flexibility in adjusting interest rates and money supply to stimulate growth or combat inflation.

Fixed exchange rates offer limited flexibility in responding to external shocks and economic shocks. In a dynamic global economy, where currencies are influenced by various factors such as interest rates, inflation,

and economic growth, maintaining a fixed exchange rate can be challenging and may require significant intervention by central banks.

Fixed exchange rates can exacerbate trade imbalances between nations. When currencies are fixed, they may become overvalued, resulting in currency appreciation. This appreciation diminishes the competitiveness of exports, potentially leading to an expansion of trade deficits.

Maintaining a fixed exchange rate can incur significant costs. Sufficient foreign exchange reserves are necessary for a country to stabilize its currency's value. Additionally, a fixed exchange rate may render a country's currency susceptible to speculation. Fixed exchange rate regimes are susceptible to speculative attacks by investors seeking to profit from perceived misalignments in currency values. If investors believe that a currency is overvalued or unsustainable, they may engage in massive sell-offs, leading to rapid depreciation and financial instability. Defending a fixed exchange rate during such attacks can deplete foreign exchange reserves and strain monetary authorities. In the event that the central bank lacks adequate foreign currency reserves, it may need to increase interest rates, potentially leading to an economic downturn.

## **2. THE INTERPLAY AMONG FIXED EXCHANGE RATE SYSTEMS, CAPITAL INFLOWS, AND BOOM-BURST CYCLES**

Fixed exchange rate systems can influence the magnitude and direction of capital inflows. Pegging the domestic currency to a stronger currency, such as the US dollar or euro, can instill confidence among foreign investors, leading to increased capital inflows. By providing a stable and predictable exchange rate environment, fixed exchange rate regimes can attract foreign investors seeking to exploit arbitrage opportunities or invest in countries with low currency risk. The inflow of capital under fixed exchange rate systems is primarily influenced by interest rate differentials. In countries with fixed exchange rates, interest rate differentials vis-à-vis the anchor currency can attract portfolio investments, where investors borrow in low-interest rate currencies to invest in higher-yielding assets in the pegged currency, leading to increased capital inflows.

However, capital inflows often come with inherent volatility, leading to boom and burst cycles that pose both opportunities and challenges for recipient countries. During the boom phase of capital inflows, recipient countries experience a surge in foreign investment, leading to various economic benefits. One of the primary drivers of this influx is the perception of high returns and favorable investment opportunities in emerging markets. In pursuit of these returns, investors flock to these countries, seeking higher yields compared to their home markets. The influx of capital stimulates economic growth, boosts investment in infrastructure and productive sectors, and creates employment opportunities. Additionally, capital inflows can enhance liquidity in financial markets, deepen domestic capital markets, and strengthen the country's external position through accumulation of foreign exchange reserves (In't Veld et al., 2011).

However, the boom phase of capital inflows also poses challenges and risks. Excessive or volatile capital inflows can pose challenges for policymakers, including inflationary pressures, asset price bubbles, and external imbalances. Excessive inflows can lead to asset price bubbles, particularly in real estate and stock markets, creating vulnerabilities in the financial system. Moreover, the appreciation of the domestic currency, fueled by capital inflows, can erode the competitiveness of the country's exports, leading to widening trade deficits. Furthermore, the surge in foreign capital may be accompanied by a build-up of external debt, exposing the economy to the risk of sudden reversals or capital flight (Amri et al., 2016).

The boom phase of capital inflows is often followed by a burst phase, characterized by sudden reversals and capital outflows. Several factors can trigger this reversal, including changes in global economic conditions, shifts in investor sentiment, or domestic policy changes. Economic downturns or financial crises in major economies can prompt investors to repatriate funds, leading to a rapid withdrawal of capital from emerging markets. Similarly, changes in monetary policy by central banks in advanced economies, such as interest rate hikes or quantitative tightening, can make investments in emerging markets less attractive, triggering capital outflows. Shifts in investor sentiment or changes in global interest rates can also trigger capital outflows, particularly if investors anticipate a devaluation of the domestic currency (Aghevli, 1999).

The burst phase of capital inflows can have severe consequences for recipient countries. Sudden reversals of capital inflows can disrupt financial markets, destabilize exchange rates, and undermine economic growth prospects. Sudden capital reversals can lead to currency depreciation, stock market crashes, and sharp declines in asset prices. The withdrawal of foreign investment can also disrupt domestic financial markets, leading to

liquidity shortages and credit crunches. Moreover, countries heavily reliant on external financing may face difficulties in servicing their debts, potentially leading to debt crises and sovereign defaults (Magud et al., 2014).

Several countries and regions with fixed exchange rate systems have experienced boom and bust cycles of capital inflows, characterized by periods of rapid expansion followed by sudden reversals, such as the 1997-1998 Asian financial crisis (King, 2001).

### **3. A CASE STUDY: EGYPT'S EXCHANGE RATE SYSTEM**

Several countries have experimented with fixed exchange rate systems throughout history, each with its own set of experiences and outcomes. Egypt stands as one such case, grappling with both the advantages and disadvantages of a fixed exchange rate system.

Egypt's exchange rate system has undergone significant changes over the years in response to economic challenges, policy objectives, and external pressures. For much of its modern history, Egypt maintained a fixed exchange rate regime, pegging its currency, the Egyptian pound (EGP), to the U.S. dollar. In the 2000s, the country moved to a managed float exchange rate regime, with periodic adjustments to the official exchange rate by the Central Bank of Egypt (CBE) in response to market conditions.

From the early 1990s to the early 2000s, the Egyptian government maintained a fixed exchange rate regime, pegging the Egyptian pound (EGP) to the U.S. dollar at a relatively stable rate. In 1991, Egypt's exchange rate against the U.S. dollar was 3.14 Egyptian pounds. During the years between 1991 and 2000, Egypt's exchange rate remained stable, with the rate being 3.47 Egyptian pounds in 2000.

Despite efforts to maintain stability (Handy, 1998), the fixed exchange rate regime came under pressure due to macroeconomic imbalances and external shocks. In 2001, Egypt embarked on a series of economic reforms, including currency devaluation and liberalization measures, to address structural weaknesses and enhance competitiveness. The exchange rate regime evolved into a managed float system, with periodic adjustments to the official exchange rate by the Central Bank of Egypt (CBE) in response to market conditions (Saafan, 2024). Despite efforts to maintain stability, the Egyptian pound faced depreciation pressures, especially during periods of political uncertainty and economic turbulence. Between 2000 and 2004, Egypt's exchange rate started to increase, rising from 3.47 Egyptian pounds per dollar in 2000 to 6.2 Egyptian pounds per dollar in 2004.

Between 2004 and 2014, Egypt's exchange rate remained stable, starting at 6.2 Egyptian pounds per dollar in 2004 and reaching 7.08 Egyptian pounds per dollar in 2014. However, in the aftermath of the Arab Spring and amid mounting economic challenges, Egypt faced pressure to reform its exchange rate system to address imbalances and restore competitiveness. Starting in 2014, Egypt's exchange rate increased sharply, climbing from 7.08 Egyptian pounds per dollar in 2014 to 10.03 Egyptian pounds per dollar in 2016 and 17.78 Egyptian pounds per dollar in 2017. In November 2016, Egypt implemented a significant exchange rate reform, allowing the Egyptian pound to float freely against foreign currencies (The Economist, 2016). Between 2016 and 2017, the currency experienced severe devaluation, settling at 17.78 Egyptian pounds per dollar. This decision was part of a broader economic reform program supported by the International Monetary Fund (IMF) to address macroeconomic imbalances, bolster investor confidence, and unlock external financing.

Between 2017 and 2021, Egypt experienced a decline in its exchange rate, dropping from 17.78 Egyptian pounds per dollar in 2017 to 15.64 Egyptian pounds per dollar in 2021. Beginning in early 2022, Egypt's exchange rate began to rise once more due to exacerbated shortages of foreign currency and economic crisis. The exchange rate reached 19.16 Egyptian pounds per dollar in 2022 and 30.0 Egyptian pounds per dollar in 2023.

After attempting to maintain stability around 30.85 Egyptian pounds per dollar, a level Egypt endeavored to defend throughout 2023, the government eventually permitted the overvalued pound to depreciate, leading to an increase in the official exchange rate to 49.37 Egyptian pounds per dollar in March 2024 (Eltahir and Abdallah, 2024). This decision was also one of the preconditions set by the International Monetary Fund (IMF) to approve an \$8 billion loan to Egypt, aimed at addressing macroeconomic imbalances, restoring investor confidence, and unlocking external financing (Eltahir and Abdallah, 2024).



#### 4. BENEFITS AND COSTS OF FIXED EXCHANGE RATE SYSTEM TO EGYPT

The exchange rate history of Egypt illustrates that while both fixed and managed floating exchange rate regimes initially offer short-term stability and prosperity, relying solely on them as a policy is unsustainable due to their tendency to create macroeconomic imbalances, widen the foreign trade deficit, and increase foreign currency liabilities over time.

Fixed and managed floating exchange rate regimes have allowed Egypt to initiate several large-scale infrastructure projects, often referred to as "mega projects," aimed at modernizing the country's infrastructure, boosting economic development, and improving the living standards of its citizens. Some of the notable mega projects undertaken are the following (Lewis and Werr, 2024; Saafan, 2024):

**New Administrative Capital (NAC):** The New Administrative Capital is one of the flagship projects of the government. Located in the desert east of Cairo, it is envisioned as a modern, sustainable city that will serve as the administrative and financial hub of Egypt. The \$58 billion project aims to alleviate congestion in Cairo and provide state-of-the-art infrastructure, housing, and amenities for millions of residents. Construction began in 2015, and several government buildings, residential neighborhoods, and commercial districts have been completed or are under construction.

**Suez Canal Expansion:** The Suez Canal Expansion project involved the construction of a new parallel waterway alongside the existing canal to facilitate the transit of larger vessels and increase the canal's capacity. Completed in 2015, the expansion project aimed to enhance Egypt's position as a vital maritime trade route and generate additional revenue through increased canal tolls and port activity.

**Development of Egypt's Infrastructure:** The government has prioritized the development of Egypt's infrastructure, including transportation networks, energy facilities, and urban infrastructure. Projects such as road and bridge construction, metro line expansions, and the establishment of new industrial zones aim to improve connectivity, facilitate economic growth, and attract investment.

**Suez Canal Economic Zone (SCZone):** The Suez Canal Economic Zone is a major economic development project aimed at creating a robust industrial and logistics hub along the Suez Canal. Spanning over 460 square kilometers, the SCZone offers investment incentives and infrastructure support to attract domestic and foreign investors. It aims to leverage Egypt's strategic location as a gateway between Africa, Asia, and Europe to stimulate trade, manufacturing, and investment.

**Social Housing Initiatives:** The government has launched various social housing initiatives to address Egypt's housing shortage and improve housing affordability for low-income citizens. These initiatives involve the construction of affordable housing units across the country, providing subsidized mortgages, and upgrading informal settlements to improve living conditions.

**Social Programmes for the Poor:** The government ramped up expenditures on social programs targeting impoverished demographics, notably implementing a cash assistance initiative that benefits approximately five million families (Lewis and Werr, 2024).

Moreover, over the last decade, Egypt has witnessed a significant rise in its arms imports, solidifying its position as the world's third-largest importer in this category (Lewis and Werr, 2024).

However, an over-valued currency created a persistent trade deficit and fiscal deficit. A borrowing spree to aimed at funding large-scale projects ended with substantial foreign debt. As foreign creditors have been reluctant to invest in Egyptian debt, the government started to increasingly rely on domestic borrowing to finance its expanding deficit. This reliance has been exacerbated by surging interest rates, leading to even larger deficits (Lewis and Werr, 2024).

An overvalued currency has contributed to a shortage of foreign currency, which, in turn, has hindered local business operations, resulted in backlogs at ports, delayed payments for commodities, and driven up the cost of imported goods. Besides, remittances from Egyptians employed overseas, the primary source of foreign currency for the country, have significantly declined as anticipation of the pound's depreciation grew. Remittances dropped by 30% to \$22 billion in 2022-23 as foreign workers refrained from making transfers at the overvalued official exchange rate. Moreover, the conflict in Gaza and the assaults on shipping in the Red Sea have jeopardized revenues from tourism and Suez Canal transit, two other vital sources of foreign currency, exacerbating economic strains (Magdy et al., 2024; Eltahir and Abdallah, 2024).

## 5. CONCLUSION

Fixed exchange rates have been a subject of debate among policymakers for decades. Fixed exchange rates system, characterized by pegging a nation's currency to another currency or a basket of currencies, has both advantages and disadvantages. While it offers certain advantages in terms of stability and predictability, they also come with their drawbacks. Their suitability depends on a country's economic circumstances, policy objectives, and external environment. While they can provide stability and certainty in international transactions, they also entail risks such as loss of monetary policy autonomy and vulnerability to speculative attacks.

Fixed exchange rate regimes have a profound impact on the flow of capital into an economy. The stability and predictability provided by fixed exchange rates can attract foreign investment, yet they may also exacerbate vulnerabilities and distortions that contribute to boom-bust cycles. The examination of Egypt's case underscores the intricate relationship between fixed exchange rate regimes, capital inflows, and the cyclical nature of economic booms and busts. Egypt's experience serves as a valuable lesson for policymakers and economists worldwide, highlighting the importance of carefully navigating the delicate balance between stability and flexibility in exchange rate systems, as well as the need for prudent management of capital inflows to mitigate the risks of boom-bust cycles.

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## The Economic Influence of FATF Grey and Black- Listing

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**Abstract:** Allowing or tolerating money laundering and terrorism financing in a country can be perceived to have several economic benefits, such as increased capital inflows, tax revenue, job creation, profitability in the banking sector, and economic stimulus. However, such countries may face the risk of being listed by the Financial Action Task Force (FATF). The FATF is a global organization dedicated to setting standards for combating money laundering, terrorism financing, and the proliferation of weapons of mass destruction. It was founded in 1989 after the 1989 G7 Summit in Paris. Over time, the FATF has achieved significant success in aligning national legal and regulatory frameworks, despite lacking explicit formal authority under international law. This article evaluates how the FATF has become a cornerstone institution in the new global financial regulatory structure. Specifically, this article investigates the Grey and Black listing methods of the FATF and their economic and financial impacts on the listed countries.

**Keywords:** Money Laundering, Terrorism Financing, Financial Action Task Force, Grey and Black List

### 1. INTRODUCTION

Allowing or tolerating money laundering and terrorism financing in a country can have several perceived economic benefits such as capital inflows, increased tax revenue, job creation, banking sector profit, and economic stimulus.

One of the main perceived economic benefits of allowing or tolerating money laundering is the increased tax revenue. Money laundering can potentially increase tax revenues for the government since money laundering involves hiding and disguising the origins of illicit funds, which often leads to those funds being integrated into the legitimate economy. As a result, taxable transactions occur, generating additional revenue for the government through income taxes, sales taxes, and other forms of taxation. Countries with relaxed anti-money laundering regulations might attract foreign investment, as criminals seek safe havens to hide their illicit wealth. Thus, money laundering can inject large sums of money into the economy, which might boost economic activity in certain sectors. For instance, real estate, luxury goods, and financial services might benefit from increased spending. The illicit funds circulated through money laundering could create employment opportunities in various industries, particularly those catering to high-end clientele. Banks and financial institutions may benefit from money laundering through increased deposits, transactions, and fees associated with managing illicit funds. All these can create an illusion of economic growth and stability, bolstering the government's fiscal position in the short term.

The Financial Action Task Force (FATF) is a global organization dedicated to setting standards for combating money laundering, terrorism financing, and the proliferation of weapons of mass destruction. The FATF was founded in 1989 and has its headquarters situated in Paris (FATF, 2024).

The Financial Action Task Force (FATF), initially known as the Financial Action Task Force on Money Laundering, originated from the collaboration between the G7 and the European Commission after the 1989 G7 Summit in Paris. Its inception aimed to streamline international endeavors in combating money laundering associated with drug trafficking (Turner, 2014). In 2001, the FATF broadened its mandate to include the combating of terrorist financing. In 2012, the FATF extended its mandate to include combating the financing of weapons of mass destruction as well. Since 2019, the FATF has operated under an open-ended mandate (FATF, 2024).

Over time, the FATF has evolved into a central institution within a robust financial governance framework. In 2009, G20 leaders recognized the FATF as a cornerstone institution in the envisioned new global financial regulatory structure (Nance, 2018). Notably, the FATF has achieved significant success in aligning national legal and regulatory frameworks, despite lacking explicit formal authority under international law (Turner, 2014).

This article evaluates how the FATF has become a cornerstone institution in the new global financial regulatory structure. Specifically, this article investigates the Grey and Black listing methods of the FATF and their economic and financial impacts on the listed countries.

## 2. THE FINANCIAL ACTION TASK FORCE (FATF)

In April 1990, the FATF released a report outlining a set of Forty Recommendations for governments. These recommendations aimed to furnish a comprehensive strategy to combat money laundering. The FATF urges all countries to diligently enforce these measures within their respective national frameworks. In October 2001, the FATF released Eight Special Recommendations focusing on terrorist financing. In October 2004, the FATF introduced a Ninth Special Recommendation concentrating on terrorist financing, thereby enhancing the FATF standards, known as the 40+9 Recommendations. The FATF consistently enhances its global standards to adapt to emerging risks, such as regulating virtual assets, which have proliferated alongside the increasing popularity of cryptocurrencies (FATF, 2024).

As of October 27, 2023, the Financial Action Task Force (FATF) consists of 40 members, including the recent inclusion of Indonesia. On February 24, 2023, FATF suspended the membership of the Russian Federation. The FATF's membership comprises both direct members, actively engaged in its activities, and indirect members participating through FATF-Style Regional Bodies (FSRBs). As of October 2023, direct membership encompasses 40 member states and 9 regional organizations such as the European Commission (EC) and the Gulf Cooperation Council (GCC) (FATF, 2024).

To attain membership in FATF, a prospective applicant must be deemed "strategically significant." This determination considers various criteria, including quantitative metrics like population and gross domestic product, qualitative assessments such as the significance of the applicant's financial sector, and other considerations like the applicant's adherence to financial industry norms and involvement in international organizations (Turner, 2014). With a membership of 40, FATF establishes global standards, while over 200 countries and jurisdictions have pledged to adopt FATF's Standards and recommendations, forming a unified global strategy to combat organized crime, corruption, and terrorism (FATF, 2024).

The FATF oversees nations to verify their complete and efficient adoption of the FATF Standards. Over 200 countries and jurisdictions have pledged to adhere to these standards. Their compliance is evaluated through collaboration with nine FATF Associate Member organizations and other international partners, including the IMF and World Bank.

Assessment of compliance with the 40+9 Recommendations occurs through comprehensive mutual evaluations conducted on a country-by-country basis over the course of a year. A full mutual evaluation typically spans 18 months and involves the following stages: Assessor training, Country training, Selection of assessors, Technical compliance, Scoping, On-site visit, Report drafting, Plenary discussion, Final quality review, Follow-up. The evaluations are carried out by experts employed by the Secretariat, who conduct on-site visits and prepare draft reports. These reports are shared with the country under assessment, FATF members, and observers. Following revisions, the Plenary adopts the final report, which is then made public. The evaluations adhere to a consistent methodology and documentation, overseen by the FATF Secretariat, IMF, or World Bank (Turner, 2014; FATF, 2024).

The FATF convenes a plenary session thrice annually. A nation that adheres to all Recommendations is recognized as having a robust and extensive AML/CFT framework. Following each Plenary, the FATF discloses significant cases publicly. Nations in violation may be listed on one of two categories (FATF, 2024).

The first list, termed the "Grey List", consists of "jurisdictions under increased monitoring". These nations have committed to rectifying strategic deficiencies related to money laundering, terrorist financing, and proliferation financing within an agreed timeframe, subjecting them to increased scrutiny. The FATF regularly reviews countries on the grey list to assess their progress toward establishing a robust AML compliance framework. As of February 2024, 21 countries are included on the FATF Grey List: Bulgaria, Burkina Faso, Cameroon, Croatia, Democratic Republic of Congo, Haiti, Jamaica, Kenya, Mali, Mozambique, Namibia, Nigeria, Philippines, Senegal, South Africa, South Sudan, Syria, Tanzania, Turkey, Vietnam, and Yemen (FATF, 2024).

The second list is referred to as the “Black List” designating “high-risk jurisdictions subject to a call for action”. This list identifies countries failing to collaborate in global endeavors aimed at thwarting financial crimes like money laundering, terrorist financing, and proliferation of weapons of mass destruction. These countries are perceived as posing elevated risks concerning money laundering, terrorist financing, and proliferation financing due to substantial strategic shortcomings in these areas.

The FATF urges its members and other jurisdictions to implement heightened due diligence measures and, in severe cases, to enforce countermeasures against these nations. By listing countries on the FATF blacklist, other nations become aware of their status and recognize the risks associated with engaging in business transactions with them or individuals originating from these countries. The FATF blacklist assists countries in identifying which nations to include in their sanction lists, aiding their business entities in discerning with whom not to engage in business. When the FATF deems countries insufficiently compliant, other nations are encouraged to sever ties with them until they enhance their AML frameworks to meet FATF standards and thereby remove their names from the blacklist. As of February 2024, only the Democratic People's Republic of Korea, Iran, and Myanmar are cited in the FATF blacklist as countries subject to a Call for Action (FATF, 2024).

The main distinction between the countries listed on the blacklist and those on the FATF grey list lies in their respective approaches to AML compliance. The former exhibit no discernible effort toward establishing an AML compliance framework, whereas the latter adhere to FATF recommendations aimed at rectifying deficiencies within their AML compliance and regulatory systems (FATF, 2024).

Countries or jurisdictions blacklisted by the FATF face significant strategic shortcomings in combating money laundering, terrorist financing, and the proliferation of weapons of mass destruction. Enhanced due diligence measures and sanctions are imposed on these blacklisted jurisdictions to safeguard the global financial system against the risks associated with money laundering, terrorist financing, and proliferation financing (FATF, 2024). On the other hand, countries on the FATF grey list collaborate closely with the FATF to address strategic deficiencies within their regimes concerning money laundering, terrorist financing, and proliferation financing. These greylisted jurisdictions are committed to resolving identified issues within agreed-upon timeframes and are subject to heightened monitoring (FATF, 2024).

The FATF Grey List undergoes frequent updates, with removals and additions based on countries' performance and comprehensive analysis conducted by the FATF across various parameters. The FATF consistently monitors countries' efforts to combat financial crimes and collects reliable information, forming the basis for the listing process. To exit FATF monitoring, a jurisdiction must effectively address most, if not all, components of its action plan. Upon determining that a jurisdiction has taken appropriate steps, the FATF arranges an on-site visit to verify the progress of legal, regulatory, and operational reforms and assesses the presence of requisite political commitment and institutional capacity for sustained implementation. With a favorable outcome from the on-site visit, the FATF decides on delisting the jurisdiction from public identification during the subsequent FATF plenary session. Removal from these lists requires countries to demonstrate to the FATF that they have remedied the identified weaknesses in their controls against money laundering, terrorist financing, and proliferation financing (FATF, 2024).

### **3. THE ECONOMIC IMPACT OF BLACK AND GREY LISTING**

Although the FATF lacks direct authority to prohibit a country from engaging in commerce with others, its issuance of a blacklist serves as a suggestion to other nations interacting with a blacklisted country, advising against maintaining such trade relationships due to the potential risks posed to their businesses and the financial systems of both countries (FATF, 2024).

Once a country finds itself on the FATF blacklist, member states of the FATF along with other international entities are likely to enforce sanctions and implement restrictive measures against the blacklisted nation. This can severely affect the economy of the blacklisted country, as the economic sanctions imposed by numerous countries and global financial institutions will hinder its ability to obtain funds. Additionally, the blacklisted nation will witness a decrease in international trade and foreign exchange inflows. International trade will become more expensive, and the country's banking system will struggle to remain viable (FATF, 2024).

The FATF Standards emphasize a risk-based approach rather than blanket de-risking or exclusion of all customer classes. While the FATF doesn't prescribe direct actions for grey-listed countries, being grey-listed can

influence other lists and lead to repercussions for countries connected to EU member states and the UK (Maslen, 2023).

Despite the absence of official sanctions, grey listing can trigger adverse economic and reputational effects. A decrease in capital inflows, a decline in international aid, official development assistance, and financing, an increase in the costs of doing business with trade partners, a decrease in the country's access to global financial markets and international loans, an increase in the cost of syndicated loans, a decline in correspondent banking relations, a reduction in the number of cross-border payments from other jurisdictions, and a decrease in economic growth are the negative effects of being included in the grey list.

#### 1) A decrease in capital inflows

Grey-listed countries might witness a reduction in capital inflows, including foreign direct investment (FDI), portfolio flow, and various banking transactions, amounting to a certain percentage of their gross domestic product (GDP). The disruption in capital flows can occur for two primary reasons. Firstly, de-risking, wherein banks terminate relationships with customers to evade heightened compliance costs. Secondly, investors may utilize the grey list as an indicator of the risk associated with engaging in business with a particular country, potentially reallocating resources elsewhere if the country is grey-listed (Maslen, 2023). According to a study by Kida and Paetzold (2021), the average decline in capital inflows is approximately 7.6% of GDP following grey listing. Consequently, there is a 3% decrease in FDI flow and a 2.9% decline in portfolio flow.

#### 2) Decrease in international aid and financing

Grey-listed countries might encounter a reduction in international aid, official development assistance, and financing. Often, international assistance organizations condition delisting from the grey list. For instance, the IMF, a member of the FATF, includes delisting as one of its prerequisites for participation in IMF bailout programs. Consequently, grey listing adversely affects public sector entities reliant on development finance institutions for financing public spending and countries heavily dependent on international financial assistance to navigate economic crises (Maslen, 2023). De Koker et al. (2023) observed a significant correlation between FATF grey listing and a decrease in development assistance, including net official development assistance (ODA), loans from the International Bank for Reconstruction and Development (IBRD), and credits from the International Development Association (IDA).

#### 3) An increase in the cross-border transaction costs of doing trade with partner countries

Grey-listed countries may face heightened cross-border transaction expenses when conducting trade with partner nations due to the complexity of cross-border transactions. Governments might intensify trade regulations concerning the listed country, necessitating additional compliance checks, which could alter the aggregate volume, variety, quality, and cost of goods and services, potentially impacting national profitability. Consequently, grey listing negatively impacts the international trade of the listed country (Maslen, 2023).

#### 4) Decrease in the country's access to the global financial markets and international loans

Grey-listed countries may encounter a reduction in their access to global financial markets and a decrease in loans. International financial institutions may opt for de-risking measures, which could limit the country's—and its citizens'—access to the global financial market. Consequently, international loans decline for grey-listed countries (Maslen, 2023).

#### 5) Decline in correspondent banking relations and the number of cross-border payments from other jurisdictions.

Grey-listed countries may encounter delays in bank payments when concluding transactions, as well as a reduction in correspondent banking relations and the volume of cross-border payments from other jurisdictions. International banks may redistribute resources away from a listed country and diminish their cross-border liabilities with that country due to stricter customer due diligence regulations (Maslen, 2023). Research by Colin et al. (2016) suggests that countries added to the grey list experienced a 10% decrease in the volume of cross-border payments from other jurisdictions.

#### 6) An increase in the cost of syndicated loans

Grey-listed countries might face elevated costs associated with syndicated loans as a result of international financial institutions demanding higher risk premiums (Erli, 2023).

#### 7) Decrease in economic growth

Grey-listed countries may witness a slowdown in their economic growth stemming from reduced capital inflows, restricted access to global financial markets and international loans, heightened costs associated with foreign borrowing, as well as increased administrative and transaction expenses.

#### 4. CONCLUSION

Allowing or tolerating money laundering and terrorism financing in a country can be perceived to have several economic benefits, such as increased capital inflows, tax revenue, job creation, profitability in the banking sector, and economic stimulus. However, such countries may face the risk of being listed by the Financial Action Task Force (FATF).

The Financial Action Task Force is a global organization dedicated to setting standards for combating money laundering, terrorism financing, and the proliferation of weapons of mass destruction. It was founded in 1989 after the 1989 G7 Summit in Paris. Over time, the FATF has achieved significant success in aligning national legal and regulatory frameworks, despite lacking explicit formal authority under international law.

The FATF oversees nations to verify their complete and efficient adoption of the FATF Standards. Over 200 countries and jurisdictions have pledged to adhere to these standards. The FATF convenes a plenary session thrice annually. A nation that adheres to all Recommendations is recognized as having a robust and extensive AML/CFT framework. Following each Plenary, the FATF discloses significant cases publicly. Nations in violation may be listed on one of two categories: the Black List (high-risk jurisdictions subject to a call for action) and the Grey List (jurisdictions under increased monitoring).

Although the FATF lacks direct authority to prohibit a country from engaging in commerce with others, its issuance of a blacklist serves as a suggestion to other nations interacting with a blacklisted country, advising against maintaining such trade relationships due to the potential risks posed to their businesses and the financial systems of both countries. Once a country finds itself on the FATF blacklist, member states of the FATF along with other international entities are likely to enforce sanctions and implement restrictive measures against the blacklisted nation. This can severely affect the economy of the blacklisted country, as the economic sanctions imposed by numerous countries and global financial institutions will hinder its ability to obtain funds. Additionally, the blacklisted nation will witness a decrease in international trade and foreign exchange inflows. International trade will become more expensive, and the country's banking system will struggle to remain viable.

The negative consequences of being placed on the grey list include reduced capital inflows, diminished international aid, official development assistance, and financing, heightened expenses associated with conducting business with trade partners, restricted access to global financial markets and international loans, elevated costs of syndicated loans, weakened correspondent banking relationships, and fewer cross-border payments from other jurisdictions.

In conclusion, while there might be perceived short-term benefits to tolerating money laundering, the long-term consequences far outweigh them. Countries that combat money laundering effectively demonstrate commitment to the rule of law, integrity, and global security, fostering sustainable economic development and social well-being.

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## Faiz ve Enflasyon Bağlamında Türkiye Ekonomisi İçin Fisher Etkisi Üzerine Teorik ve Ampirik Araştırma

Prof. Dr. Utku ALTUNÖZ

**Özet:** Bu çalışmanın amacı, Türkiye ekonomisi için Fisher etkisinin faiz ve enflasyon ilişkisi üzerindeki teorik ve ampirik etkilerini incelemektir. Fisher etkisi, nominal faiz oranının reel faiz oranı ve beklenen enflasyon oranıyla ilişkisini ifade eder. Bu çalışma, Fisher etkisinin Türkiye ekonomisindeki geçerliliğini anlamak için teorik bir çerçeve oluşturmayı ve bu çerçevenin ampirik verilerle test edilmesini amaçlamaktadır. Çalışmanın sonuçları, Türkiye'nin faiz ve enflasyon ilişkisi üzerindeki teorik ve ampirik bulguları derinlemesine analiz ederek, Fisher etkisinin Türkiye ekonomisi için önemini ve etkilerini ortaya koyacaktır. Bu çalışma, ekonomi politikalarının belirlenmesinde ve enflasyonla mücadelede önemli bir rol oynayabilir ve Türkiye'nin ekonomik istikrarını sağlamak için önemli bir katkı sunabilir.

**Anahtar Kelimeler:** Faiz oranı, enflasyon, Fisher etkisi, hata düzeltme modeli, eş bütünleşme analizi, ARDL, sınırlar test

### Theoretical and Empirical Research on The Fisher Effect for The Turkish Economy in The Context of Interest and Inflation

**Abstract:** The aim of this study is to examine the theoretical and empirical effects of the Fisher effect on the relationship between interest rates and inflation in the Turkish economy. The Fisher effect denotes the relationship between the nominal interest rate, the real interest rate, and the expected inflation rate. This study aims to establish a theoretical framework and to test this framework with empirical data to understand the validity of the Fisher effect in the Turkish economy. The findings of the study will delve into the theoretical and empirical evidence regarding the relationship between interest rates and inflation in Turkey, thereby elucidating the significance and impacts of the Fisher effect on the Turkish economy. This study could play a significant role in shaping economic policies and combating inflation, thereby making a substantial contribution to ensuring Turkey's economic stability.

**Keywords:** Interest rate, inflation, Fisher effect, error correction model, co integration analysis, ARDL, bounds testing.

### GİRİŞ

Fisher Etkisi, nominal faiz oranları ile beklenen enflasyon arasındaki ilişkiyi açıklar. Irving Fisher'ın öncü çalışması, nominal faiz oranlarının reel faiz oranı ve beklenen enflasyonun toplamı olduğunu öne sürer. Bu ilişki, modern ekonomi teorilerinde ve para politikası uygulamalarında önemli bir yer tutar. Fisher (1930), nominal faiz oranlarının, reel faiz oranlarının üstüne enflasyon beklentilerinin eklenmesiyle oluştuğunu matematiksel olarak formüle etmiştir. Bu teori, ekonomik aktörlerin enflasyon beklentilerini kredi ve yatırım kararlarına nasıl entegre ettiklerini anlamak için hayati öneme sahiptir. Sonraki çalışmalar, Fisher Etkisi'nin uygulanabilirliğini ve ekonomi politikası yapımındaki rolünü incelemiştir. Örneğin, Mishkin (1984) ve Plosser (1989) çalışmaları, Fisher Etkisi'nin gerçek dünya verileriyle nasıl uyumlu olduğunu ve para politikası yapımcıları için önemli çıkarımlar sağladığını göstermektedir. Bu çalışmalar, enflasyon beklentilerinin nominal faiz oranları üzerindeki etkisinin zamanla ve farklı ekonomik koşullar altında nasıl değişebileceğini analiz eder.

Fisher Etkisi'ni anlamak, merkez bankalarının enflasyon hedefleme uygulamaları ve faiz oranı kararları için hayati önem taşır. Taylor (1993) tarafından geliştirilen Taylor Kuralı, Fisher Etkisi'ni dikkate alır ve merkez bankalarının enflasyon ve işsizlik hedefleri doğrultusunda faiz oranlarını nasıl ayarlaması gerektiğine dair bir çerçeve sunar.

### Teoride Fisher Etkisi

Faiz oranı ile enflasyon arasındaki ilişki, ekonomide en çok tartışılan problemlerden biridir. Fisher'a (1930) göre, nominal faiz oranı, beklenen enflasyon ile reel faiz oranının toplamına eşit olacaktır. Başka bir deyişle, enflasyondaki artışa paralel olarak, nominal faiz oranları artar ancak nominal faiz oranları bu durumdan etkilenmez. Bu durum ekonomide Fisher Etkisi olarak adlandırılır. Fisher'a göre, Milli gelir uzun vadede tam istihdam seviyesinde olacaktır. Bu gerçek nedeniyle, enflasyondaki artış tam olarak yansıtılırken, reel oranlar aynı kalır (Fama, 1975:17). Enflasyon ile faiz oranları arasındaki ilişkiyi formüle etmek için Fisher denklemi kullanılır. Denklem, para büyümesi, enflasyon ve oranlar hakkında kanıtlar sunar. Denklem aşağıda verilmiştir (Fisher, [1930] 1961: 27).

$$i \equiv r^* + \pi \quad (1)$$

eşitlik (1)'de  $i$  nominal oranları,  $r^*$  reel oranları ve  $\pi$  enflasyonu simgeler. Benzer şekilde; Basitçe, Fisher etkisi, nominal faiz oranlarının ( $i_t$ ) beklenen enflasyonun ( $\pi_t^e$ ) ve reel faiz oranlarının ( $r_t^e$ ) toplamına eşit olduğunu gösterir. Fisher etkisini aşağıdaki gibi formüle edebiliriz:

$$i_t = r_t^e + \pi_t^e \quad (2)$$

Rasyonel beklenti varsayımı altında, beklenen enflasyon, gerçek enflasyon oranı ( $\pi_t$ ) ve rastgele bir hata terimi ( $\varepsilon_t$ ). toplamına eşittir. Formülleştirme eşitlik (3)'teki gibidir.

$$\pi_t^e = \pi_t + \varepsilon_t \quad (3)$$

Denklem 3'te yer alan ( $\varepsilon_t$ ), modelin hata düzeltme terimini ifade eder ki bu, denge dışı önceki sapmaların ne hızla düzeltildiğini ölçer. Bazı kaynaklarda, Fisher hipotezi yerel Fisher Hipotezi, uluslararası Fisher hipotezi ve genelleştirilmiş Fisher hipotezi olmak üzere üç farklı yaklaşımla incelenir. Yerel Fisher hipotezi, nominal faiz oranının reel faiz oranı ve beklenen faiz oranının toplamına eşit olduğunu belirtir. Ancak, yerel politika değişikliklerinin reel faiz oranlarını etkilemesi nedeniyle yerel Fisher etkisi her zaman geçerli olmayabilir. Ceteris paribus (diğer şartlar sabit) varsayımı altında, nominal faiz oranı, reel faiz oranı ve enflasyon oranı arasındaki ilişkiler aşağıdaki denklem 4'te gösterilebilir.

$$1 + r_t = \frac{1 + i_t}{1 + \pi_t} \quad (4)$$

In the equation (4),  $i_t$  shows the nominal interest rate,  $\pi_t$  shows the inflation rates and  $r_t$  shows the real interest rate. By considering  $r_t$ , we can reach the equation (5) as below;

Denklem (4)'de,  $i_t$  nominal faiz oranını,  $\pi_t$  enflasyon oranlarını ve  $r_t$  ise reel faiz oranını gösterir.  $r_t$  dikkate alınarak, aşağıdaki gibi denklem (5)'e ulaşabiliriz;

$$r_t = \frac{i_t - \pi_t}{1 + \pi_t} \quad (5)$$

Paydanın göz ardı edildiği ve reel faiz oranının sabit tutulduğu durumda, dönemin başındaki beklenen enflasyon  $\pi_t^e$ , nominal faiz oranının belirleyicisidir. Böylece, aşağıdaki gibi denklem (6) elde edilir:

$$i_t = r + \pi_t^e \quad (6)$$

Fisher etkisinin ikinci türü, genelleştirilmiş Fisher etkisi olarak bilinir. Bu, iki ülke arasındaki nominal faiz oranı farklarının, bahsedilen ülkelerin enflasyon oranı farkına eşit olduğunu açıklar. X ve Y ülkeleri varsayımı altında, genelleştirilmiş Fisher koşulu eşitlik (7)'deki gibidir.

$$i_x - i_y = \pi_x - \pi_y \quad (7)$$

In the equation (7)  $i_x$  ve  $i_y$  is respectively

Denklem (7)'de  $i_x$  ve  $i_y$  sırasıyla

$$i_x - i_y = \pi_x - \pi_y \quad (7)$$

Eşitlik (7)'de  $i_x$  ve  $i_y$  sırasıyla X ve Y ülkelerinin nominal faiz oranlarını,  $\pi_x$  ve  $\pi_y$  ise sırasıyla X ve Y ülkelerinin beklenen enflasyon oranlarını temsil eder. Fisher'ın parasal ve reel sektörlerin bağımsız olduğuna inanmasından dolayı, reel getiri oranı finansal faktörlerle, mali getiri oranı ise parasal faktörlerle belirlenir (Akıncı ve Yılmaz, 2016: 36). Böylece denklem (7)'deki anlam, beklenen enflasyonun yüksek olması durumunda, nominal faiz oranının önemli ölçüde yüksek olacağıdır.

Fisher etkisinin üçüncü türü, uluslararası Fisher Etkisi olarak adlandırılır ve iki ülke arasındaki nominal faiz farkının, bu ülkelerde beklenen döviz kuru değişiklikleri hakkında bilgiyi yansıtacağını açıklar. Uluslararası Fisher etkisi, genelleştirilmiş Fisher etkisi ve göreceli satın alma gücü paritesi ile birleşmekten oluşur. Göreceli satın alma gücü paritesi, her iki ülke için beklenen enflasyon oranlarının, beklenen döviz kuru değişikliğine eşit olacağını ifade eder. Bu durum aşağıdaki denklem (8) ile gösterilir:

$$\pi_x - \pi_y = \frac{S_{t+1} - S_t}{S_t} \quad (8)$$

Denklem (8)'de,  $S_t$  ve  $S_{t-1}$  sırasıyla mevcut ve sonraki dönemin spot döviz kurlarını yansıtır. Denklem (7) ve (8) birleştirildiğinde, uluslararası Fisher etkisi aşağıdaki denklem (9) olarak oluşturulabilir:

$$\pi_x - \pi_y = i_x - i_y = \frac{S_{t-1} - S_t}{S_t} \quad (9)$$

Denklem (9) göre, yüksek enflasyon oranlarına sahip ülkelerde faiz oranlarının arttığı söylenebilir. Bu duruma paralel olarak, döviz kuru yükselir ve ulusal para birimi değer kaybeder. Hatemi-J ve Irando (2008) tarafından belirtildiği üzere, teorik temeline rağmen, Fisher hipotezi ampirik olarak güçlü bir şekilde desteklenmemiştir. Fama ve Gibbon (1982), Huizinga ve Mishkin (1986) ve Kandel vd. (1996), reel faiz oranlarının beklenen enflasyon oranlarına negatif şekilde etkilendiğini belirlemişlerdir. Yine de, ekonomi literatürünün büyük çoğunluğu, Fisher'ın orijinal çalışmasında belirtildiği gibi Fisher Denklemi'ni kabul etmektedir.

## Ekonometrik Analiz

Bu çalışmada, Fisher etkisi, Türkiye ekonomisi için 2000:01-2023:12 periyodunda ARDL yaklaşımı kullanılarak test edilecektir. Analizde değişkenler olarak kullanılacak olan nominal faiz oranları ve enflasyon oranları, Türkiye Cumhuriyet Merkez Bankası (TCMB) ve Türkiye İstatistik Kurumu (TÜİK) web sayfasından elde edilecektir.

Table 2: Değişkenlere Ait Semboller

$R_t$	Nominal Faiz Oranı
$\pi_t$	Enflasyon Oranı
$\eta_t$	Hata Terimi

Vektör otoregresyon (VAR), birden fazla zaman serisi arasındaki doğrusal bağımlılıkları elde etmek için kullanılan bir ekonometrik analizdir. Vektör otoregresyon (VAR) modelleri, birden fazla gelişen değişkenin olmasına izin vererek tek değişkenli otoregresyon (AR) modellerini genelleştirir. Analize ait değişken eşitlik (10)'de izlenebilmektedir.

$$R_t = \gamma_0 + \gamma_1 \pi_t + \eta_t \quad (10)$$

Denklem (1)'de,  $R_t$  nominal faiz oranlarını,  $\pi_t$  ise gayrisafi milli hasıla deflatörüne dayalı enflasyon oranını gösterir.

Durağan bir zaman serisi, ortalaması, varyansı ve otokorelasyonu gibi istatistiksel özelliklerinin tümü zamanla sabit kalan seridir (Gujarati, 1999: 712,713). Durağan olmayan serilerde, zaman serisi belirli veya stokastik bir eğilim içerir. Bu durumda, sahte regresyon sorunu ile karşılaşabiliriz. Çalışmada ADF (Augmented Dickey-Fuller) ve yapısal değişiklikleri dikkate alan PP (Phillips Perron) testleri kullanılmaktadır. ADF birim kök testi, Dickey ve Fuller (1981) tarafından, denklem (11)'de belirtildiği üzere tanımlanmıştır

$$\Delta Y_t = \alpha + \beta t + \gamma Y_{t-1} + c \sum \Delta Y_{t-1} + u_t \quad (11) \quad H_0: \gamma = 0$$

$$H_1: \gamma \neq 0$$

Eğer  $H_0$  reddedilirse, Y değişkeni orijinal seviyede durağandır. Eğer  $H_0$  hipotezi reddedilmezse, Y değişkeni durağan değildir.

Phillips ve Perron (1988) tarafından önerilen birim kök testinde, belirgin yapısal gelişmelerin ve değişimlerin zamanlarının önceden bilinmesi varsayımı altında, bu tür kırılmaların modele dahil edildiği bir birim kök yaklaşımı geliştirilmiştir. PP metodunda kullanılan regresyon denklemi, ADF metodunda kullanılan regresyon denkleminin benzeridir. Ancak, PP yaklaşımı, bir önceki döneme ait parametrenin ( $\delta$ )  $\tau$  istatistiğine parametrik olmayan bir düzeltme uygulayarak oto korelasyon sorununu giderir. Bu durum denklem (12) ile gösterilebilir. Regresyon denkleminin formülasyonu;

Kullanılan regresyon denklemi;

$$\Delta Y_t = \beta' D_t + \pi Y_{t-1} + u_t \text{ ve } u_t \sim I(0) \quad (12)$$

Birim kök sonuçları tablo 3'de sunulmaktadır.

Tablo 3: ADF ve PP Birim Kök Test Sonuçları

Değişkenler	ADF		İlk Fark	PP		
	Seviye	İlk Fark		Seviye	İlk Fark	
	Sabit	Sabit Trend	Sabit	Sabit	Sabit Trend	Sabit
$R_t$	-5.300(3)*	-4.903(3)*	-	-2.671(4)	-3.097(4)	-
$\pi_t$	-1.2137(6)	-1.398(5)	-6.491(0)	-1.031(4)	-2.008(4)	-7.112*(1)

*ADF testi gecikme uzunlukları (maksimum 5) SBC bilgi kriterine göre otomatik olarak seçilmiştir.*

*PP testi Bant Genişliği ise Newey – West Bandwidth esas alınarak otomatik olarak seçilmiştir.*

\* 0.01 düzeyinde anlamlılığı göstermektedir.

Gecikmeli düzey ilişkisinin önemi, F istatistiğinin hesaplanmasıyla belirlenebilir. Boş hipotez, değişkenler arasında eş bütünleşme ilişkisi olup olmadığını ifade eder. Aşağıdaki gibi şekillendirilir:

$$H_0 : \lambda_1 = \lambda_2 = 0$$

$$H_1 : \lambda_1 \neq 0, \text{ or } \lambda_2 \neq 0 \text{ (Pesaran et al. ,2001:8).}$$

Table 4: F İstatistiği Analizi

		Kritik Sınır Değerleri					
		10%		5%		1%	
d	I(0)	I(1)	I(0)	I(1)	I(0)	I(1)	
1	4.01	4.14	4.81	6.39	8.54	8.89	
Hesaplanan f istatistiği							
$F_T$ 12.008							
$F_{\pi}$ 1.415							

İlk olarak, nominal faiz oranının bağımsız bir değişken olduğu koşul altında F istatistiği hesaplanmış olup bir sonraki adımda enflasyon bağımsız bir değişken olarak kabul göz önünde bulundurulmuştur. Eğer F istatistiği, %1 anlamlılık düzeyindeki kritik değerlerin en yüksekinden büyükse, boş hipotez reddedilir. Bu, değişkenler arasında uzun vadeli bir ilişki olduğunu gösterir. Sonuçlara göre, faiz oranı ve enflasyon arasında uzun vadeli bir ilişki bulunmaktadır.

### ARDL Sınır Testi Yaklaşımı

Otokorelatif dağılımlı gecikme (ARDL) modeli, Pesaran ve Shin (1999) ve Pesaran ve diğerleri (2001) tarafından, tüm değişkenlerin durağan I(0) olduğu varsayımı altında, I(0) ve I(1) değişkenlerini aynı model altında birleştirmek amacıyla geliştirilmiştir. Bu koşullar altında, sıradan en küçük kareler (OLS) yöntemi kabul edilebilir. Ancak, modelin değişkenleri durağan olmayan I(1) ise, vektör hata düzeltme modeli (VECM, Johansen Yaklaşımı) tercih edilir çünkü bu model daha basit bir alternatif sunar. Geleneksel sıradan en küçük kareler, değişkenlerden herhangi biri veya tümü I(1) olduğunda güvenilir bir şekilde tahmin edilemez çünkü bahsedilen değişken, OLS'de gereken sabitler gibi davranmaz. Bu durumlarda, sıradan en küçük kareler yanlışlıkla yüksek t değerlerine yol açabilir, bu da sahte sonuçlara neden olur. Analizin R karesi, Durbin-Watson istatistiğinden daha yüksek olduğunda, sahte bir problemle karşı karşıya kalırız.

ARDL sınır testi iki bölümden oluşur. İlk bölümde, aşağıda verilen denklem (8) kullanılarak değişkenler arasındaki uzun vadeli ilişkiler test edilecektir.

$$\Delta R_t = a_0 + \sum_{i=1}^p b_i \Delta R_{t-i} + \sum_{i=0}^p c_i \Delta \pi_{t-i} + \lambda_1 R_{t-1} + \lambda_2 \pi_{t-1} + \varepsilon_t \quad (8)$$

Daha sonra, kısa vadeli ilişkiler denklem (8) kullanılarak incelenecektir. ARDL sınır testini kullanmanın avantajı, ARDL'nin incelenen tüm değişkenlerin aynı dereceden bütünleşik olmasını gerektirmemesi ve altta yatan değişkenler birinci derecede, sıfır derecede veya kesirli olarak bütünleşik olduğunda uygulanabilir olmasıdır" (Belloumi, 2014:19).

Tablo 6: ARDL (1,0)

Değişken	Katsayı	t İstatistiği
$R_{t-1}$	0.532*	2.22
$\pi_{t-1}$	0,410*	2.91
C	0.211	-0.009
LM	2.00(0.543)	

Hata düzeltme modelinin tutarlılığını sağlamak için, katsayının negatif olması gerekir. Hata düzeltme modelinin sonucu şu şekildedir:

Tablo 7: Hata Düzeltme Modeli Sonucu

Değişken	Katsayı	t İstatistiği
$\Delta\pi_t$	0,374 *	3.303
$EC_{t-1}$	-0,56*	-600

Tablo 7'ye göre, EC (Hata düzeltme) istatistiksel olarak anlamlı ve negatiftir. Terimin katsayısı -0.56'dır ki bu, teorik olarak yönlendirilmiş yaklaşımın, bir zaman serisinin diğerine olan kısa ve uzun vadeli etkilerini tahmin etmek için faydalı olduğu anlamına gelir. Sonuç, uzun vadeli dengeye yapılan şokun %56'sının bir dönem sonra kaybolduğunu gösterir.

Table 8: ARDL Long Run Results

Değişken	Katsayı	t İstatistiği
$\pi_t$	0,212	3.10
C	-0.17	-0.20

Tablo (8)'de elde edilen sonuçlara göre, uzun vadeli enflasyon oranının istatistiksel olarak nominal faiz oranları üzerinde güçlü ve anlamlı bir etkisi vardır.

## SONUÇ

Bu çalışmada, 2000:01-2023:12 dönemi için Türkiye'de Fisher hipotezi, sınır testi yaklaşımı kullanılarak incelenmiştir. Bu amaçla, nominal faiz oranları ve enflasyon oranı değişken olarak kullanılmıştır. Elde edilen sonuçlara göre, terimin katsayısı-0.56'dır ki bu, teorik olarak yönlendirilmiş yaklaşımın, bir zaman serisinin diğerine olan kısa ve uzun vadeli etkilerini tahmin etmek için faydalı olduğu anlamına gelir. Sonuç, uzun vadeli dengeye yapılan şokun %56'sının bir dönem sonra kaybolduğunu gösterir. Sonuç olarak, ilgili dönemler için Türkiye'de Fisher hipotezinin geçerli olduğu sonucuna varılmıştır. Fisher etkisi hakkında çalışmadan elde edilen sonuçlar, nominal faiz oranı ve enflasyon oranının eş bütünleşik olduğunu göstermektedir. Çalışmadan üç farklı sonuç çıkarılabilir. Bunlardan ilki, Türkiye'de uygulanan para politikalarının uzun vadeli reel faiz oranları üzerinde çok daha etkili olamadığıdır. İkinci sonuç, ekonomik ajanların enflasyon beklentilerine göre, kaynakların yatırımlara yönlendirileceği ve bahsedilen ilişkilerin orantılı olacağıdır. Üçüncüsü ise, enflasyonist baskının, faiz oranlarındaki ayarlamalarla engellenebileceğidir.

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## Corporate Social Responsibility, as a Dynamic Concept Reflected in the Modern Business Environment

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**Abstract:** The aim of this thesis is to highlight the dynamics provided by Corporate Social Responsibility in the prevalence of a smooth business environment. Corporate Social Responsibility expresses a concept that is of increasing concern to the modern business environment. It concerns businesses, employees, local communities and the environment.

This work was based on the qualitative research method and utilized the tool of literature review. Sources from secondary publications from the international bibliography were sought for a fuller approach to the subject under consideration.

The conclusions of the paper are considered worthwhile, as they provide up-to-date information on Corporate Social Responsibility. The further utilization of these by the business sector will provide a safe way to address dilemmas and questions in their effort for their development and development.

**Keywords:** Corporate Social Responsibility, development, local communities, employment.

### 1. INTRODUCTION

Corporate Social Responsibility expresses and refers to a kind of commitment to the integration and implementation of best and good practices among the parties involved. It promotes and wishes the dialogue that businesses should develop internally, strengthening social cohesion and pursuing sustainable development. It expresses an entrepreneurial thinking in the way of management, according to which business entities attempt to broaden their good profile, the good reputation of the company, contributing to the acquisition of the economic and social development of the enterprise (Garriga & Melé, 2004).

### 2. Implementation of CSR

#### 2.1. The needs for the implementation of CSR

It is appropriate first to highlight the aspects that promote the need to implement CSR. In an effort to come up with the most important ones, we would identify the following:

The views of the participants:

The participants, having been affected by the business scandals that took place from time to time, focus more on business ethics, so as not to provoke public opinion and consumers with unethical behavior. Besides, it is a fact that public opinion is influenced by irresponsible business practices and has the ability to expose scandals, organize boycotts, and target business websites ( Anousou 2017 ) .

Public preference for businesses aiming at sustainable development:

It has been observed that consumers prefer to acquire products from those businesses that adopt responsibility in their policies. The expansion of the Internet enables Non-Governmental Organizations to inform the public to prefer to consume goods from businesses implementing CSR ( Tanimoto, 2004 ).

Ethical codes and new standards. :

Over the years, new paradigms for CSR gradually emerge (Fliess, 2007). Standards and codes provide specific guidelines in their effort to create an ethical principle for business (Phatak et al, 2005).

On the other hand, many researchers believe that it is particularly demanding for businesses to become active in CSR, due to the abundance of patterns that appear (Leipziger, 2003).

Although CSR standards are created to help businesses guide ethical behaviours, differences exist between countries and cultures (Donaldson, 2002).

Regulations and legislation:

As Carroll (2004) argues, the legal responsibilities of businesses are a focal point for CSR. Businesses must comply with the legal framework of the country concerned, otherwise the prestige and reputation of the business will be compromised

The question that arises for businesses is whether they continue to apply the laws of the countries that started their action, or will they adapt to the laws of the countries where they operate (Galbreath 2006).

Responsibility throughout the supply chain:

CSR is developing and evolving, distinguished by an expansion of business responsibility. Participants supervise the responsibilities of businesses for the actions of business partners and suppliers, paying particular attention to issues related to (Anousiou 2017):

- ❖ human resources,
- ❖ health and safety conditions of the workforce,
- ❖ environmental burden

Legality, transparency:

Businesses are receiving more and more transparency, optimizing environmental, social and economic performance.

It is important that businesses provide information material and information to the public about their operational actions. Such moves increase the credibility of businesses and transparency in the way they operate.

On the other hand, the public wants to know the methods used by businesses to assess whether they are in line with corporate responsibility. It is worth noting that several companies provide information on environmental burden issues, even when this information is negative (Anousiou 2017).

European interest and initiatives:

At European level, it is commendable that the Multistakeholder Forum of Europe on CSR has been set up since 2004, with the aim of advising the Commission on how to integrate CSR into the way businesses operate.

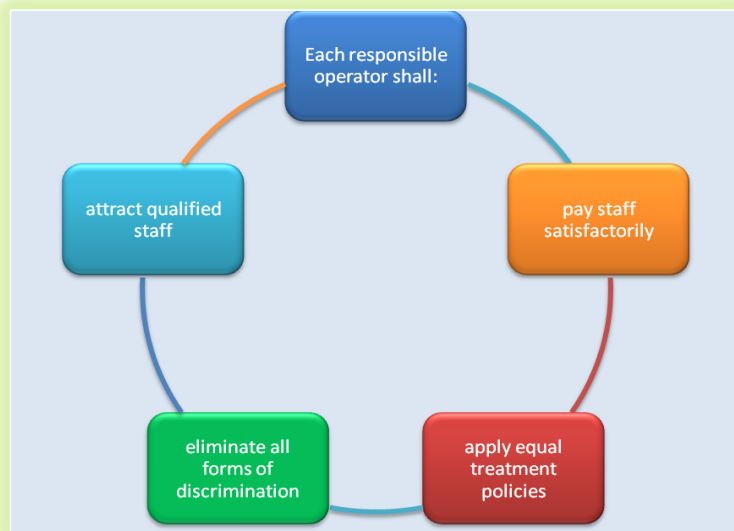
In countries such as the United Kingdom and France, standards are promoted, according to which the CSR updates and reports they carry out must be made. In addition, Denmark is strengthening cross-industry cooperation, while the Luxembourg State has adopted its own model for CSR.

At the same time, support activities for CSR are adopted by the World Summit on Sustainable Development and the UN Global Compact (Global Compact), in which a large number of businesses participate (Anousiou 2017).

For a fuller understanding follows in Figure 1.



Figure 1. Responsible business operations.



Source: Koukoumpliakos et. al., 2023.

### 3. Advantages of CSR implementation

#### 3.1. Benefits of CSR implementation

The need to adopt CSR arises from its multiple benefits. It is worth noting that the most important points highlighted by the implementation of CSR are the following ( Anoussou, 2017 ) :

- ❖ acquisition of a good reputation of the company,
- ❖ customer satisfaction,
- ❖ satisfaction of the company's staff,
- ❖ mainstreaming innovation
- ❖ enhancing learning,
- ❖ easier access to funds and resources;
- ❖ increasing consumer confidence,
- ❖ reduction of business risk,
- ❖ reduction in operating costs,
- ❖ increase in productivity
- ❖ increase of product quality,

Regarding the reputation of the company, we mean that it is perceived by consumers, investors, the workforce and suppliers and local communities Many investors, before investing in a business, also examine the company's performance in CSR issues. Many companies, in their effort to avoid negative publicity that will damage their reputation, incorporate CSR practices (Gillis & Spring, 2001)

Businesses value CSR as gaining a competitive advantage that reflects initially on the reputation of the company and then on facilitating the finding of new capital and the search for suppliers and partners (Anousiou, 2017 ).

On the other hand, staff satisfaction helps increase their performance, thus increasing the efficiency of the business. Consequently, the satisfaction of the workforce coincides with the efficiency of enterprises. At the same time, CSR is even more valuable for highly qualified executives, as these executives seek to work in companies with high operating standards.

Therefore, prospective employees evaluate the companies that intend to work according to CSR standards, while at the same time companies use their reputation to be able to attract a quality and qualified workforce (Gillis & Spring, 2001) .

In this light, it is easy to conclude that the integration by businesses in CSR actions contributes to the development of the workforce to align its development and development with the objectives of the business. When this happens, then businesses also have the opportunity to retain trained staff more easily and to attract new promising human resources.

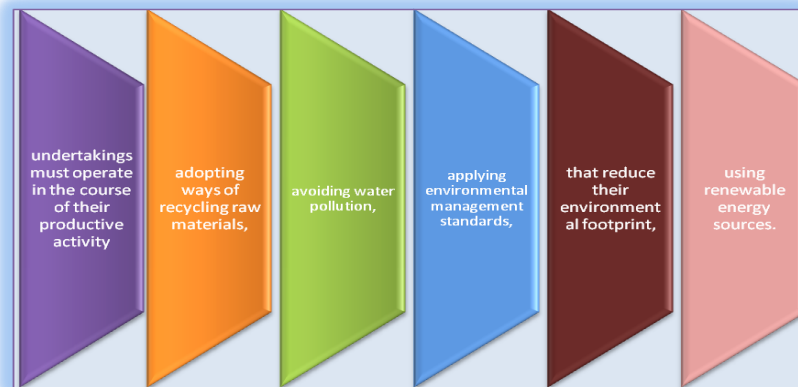
In addition, learning and integrating innovative practices helps businesses to survive and progress, while pushing them to respond to social, environmental concerns. At the same time, accessibility to capital and resources correlates with the reputation of businesses to successfully undertake and execute projects with risk and prospect (Anousiou, 2017) .

When it comes to risk mitigation, the majority of companies want to handle all kinds of ethical and legal issues to prevent negative reviews in the media (Weber, 2008).

Regarding the reduction of operating costs, it is noted that innovative CSR actions related to the environment are able to reduce waste production by improving production. In particular, actions aimed at recycling materials can minimize the waste produced by companies (Schiebel and Pöchtrager, 2003).

For a fuller understanding follows in Figure 2.

Figure 2. Responsible business operations.



Source: Koukoumpliakos et al., 2023.

#### 4. CONCLUSION

Businesses often incorporate CSR actions following pressure from consumers, partners, the workforce, local communities and other stakeholders (Schiebel & Pöchtrager, 2003).

Apart from the benefits for businesses from CSR actions, there are also significant benefits for citizens. In particular, citizens obtain important and reliable information about the operation of businesses. In this light, citizens, either as consumers or investors, have the choice to highlight their preference for businesses that operate in a responsible and conscientious manner ( Tencati et, al., 2004 ).

Consequently, the implementation and implementation of CSR actions by businesses initially benefits businesses, then consumers and by extension the local communities in which businesses operate.

This strengthens social cohesion, promotes knowledge and innovation and prioritises the prevalence of good corporate responsibility practices.

For a fuller understanding follows in Figure 3.

Figure 3 External dimension of Corporate Social Responsibility.



Source: Koukoumpliakos et al., 2023.

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## Ahududu Üretimi ve Ekonomisi

Prof. Dr. Hasan VURAL

**Özet:** Dünyada 2021 yılında toplam 886538,58 ton ahududu üretilmiştir. Türkiye’deki üretim miktarı bazı ülkelerle kıyaslandığı zaman yok denecek kadar azdır. Ancak Türkiye’de hem üretilen alanda hem de üretilen miktarda artış görülmektedir. Türkiye’de 2022 yılında toplam üretim miktarı 6652 tondur. Dünya ahududu üretiminde de 14.sırada bulunmaktadır. Ahududunun anavatanı olarak anılan Türkiye’de yetiştiriciliği kolayken bugünlerde büyük işletmelerde, aile işletmelerinde önem kazanmıştır. Bugünlerde daha da ilgi gören üzümü meyveler taze tüketim için tüketicileri, işlemek için de sanayi sektörünün ilgisini çekmektedir. Üreticilerin kiminin üretimi fazla olsa bile giderlerden ve ürünün satış fiyatından dolayı ürün toplamayı anlamsız bulurken, kimi de ürünün verimli olmamasından yakınmaktadır. Ürünün satış fiyatının belirlenmesinde söz sahibi olmak isteyen çiftçinin de örgütlenmeye sıcak bakması gerekmektedir. Bu duruma çözüm olarak kooperatif pazarlaması önerilmektedir.

### 1. GİRİŞ

Türkiye bulunduğu konumun kazandırdığı iklim koşulları sayesinde birçok meyve türüne ev sahipliği yapmaktadır. Bu meyve türleri arasında üzümü meyveler de bulunmaktadır. Bugünlerde daha da ilgi gören üzümü meyveler taze tüketim için tüketicileri, işlemek için de sanayi sektörünü cezbetmektedir. Türkiye İstatistik Kurumu(2018) verilerine göre Türkiye dünyada üzümü meyve üretiminde %8 paya sahiptir. Yine TÜİK’in paylaştığı istatistiklere göre bitkisel üretimde diğer meyveler kategorisinde 2022 yılında toplam 1 619 471 ton meyve (cennet hurması, nar, dut, keçiboynuzu, çilek, ahududu, böğürtlen, yaban mersini) üretilmiştir. Bu veriye yüzdeler bakıldığında %44,96 ile çilek ilk sıradayken kalan meyveler %55,4’tür. Bunlardan en az üretilen böğürtlen (%0,21) ahududu da %0,41’dir.

Yabancı halde ülkenin birçok yerinde bulunan üzümü meyvelerin şu sıralar rövanşta olma sebebi ülkenin ve dünyanın atlattığı COVID-19 pandemi dönemiyle birlikte sağlığın öneminin bir kez daha gündeme gelmesi denebilir. Tüketici bakışı ile sağlıklı ve lezzetli gıdalar olması önemli bir etken olabilir ama üretici için üretilmesinde üreticiye hızlı dönüş yapması, satışta diğer ürünlere göre daha iyi fiyata gitmesi gibi artılardan dolayı diyebiliriz.

### 2. GEÇMİŞTE ÜZÜMSÜ MEYVELER



1990 Başları	1996	2003
Karadeniz Bölgesinde seleksiyon projesi başlatıldı.	11 Ziraat Fakültesinin ve 6 Araştırma Enstitüsünün katıldığı projede yurtdışı çeşitleri 17 farklı ilde denendi. Finanstan dolayı <b>başarısız</b> oldu.	<b>Ulusal Kivi ve Üzümsü Meyveler Sempozyumu'</b> nda devam ettirilen çalışma sonuçları sunuldu.

### 3.ÜZÜMSÜ MEYVELERDEN AHUDUDU

#### MEYVELER

1.Yumuşak Çekirdekli Meyveler: Elma, armut, ayva, aliç...

2.Sert Çekirdekli Meyveler: Kiraz, vişne, kayısı, erik...

3.Sert Kabuklu Meyveler: Ceviz, badem, kestane, fındık...

4.Üzümsü Meyveler: Çilek, ahududu, böğürtlen, dut...

5.Turunçgiller: Limon, portakal...

6.Akdeniz Meyveleri: Muz, hurma, incir...

7.Keyif Bitkileri: Çay, kahve...

Meyveler özelliklerine göre yukarıdaki şekilde görüldüğü gibi sıralanır. Ahududu, meyvelerin özelliklerine göre sınıflandırmada dördüncü madde olan üzümsü meyveler grubunda yer alır.Aynı zamanda ılıman iklim Meyve Türleri ve Toplu(Agregat) Meyveler grubunda yer alır.

#### 3.1.Sistemik Yeri

Angiospermae sınıfının, Rosales takımının, Rosaceae familyasının, Rosoideae alt familyasının Rubus cinsindedir.Rubus cinsi İdaeobatus Focke ve Eubatus Focke isminde iki alt cinse ayrılır.Ahududu ilk alt cinsdedir.İlk cinsin ikinci cinsden farkı saptan ayrılması ve meyve içi boşluktur.Ahududu çeşitlenmesi rengine ve yılda ürün verme durumuna göre olur.Bugünkü sınıflandırılması:

1. *R. idaeus var. vulgatus* ve *var. Strigosus*; kırmızı ve sarı meyveli,



2. *R. Occidentalis*; siyah meyveli,



3. *R. Neglectus*; mor meyveli şeklindedir.



Kırmızı ahududular en fazla üretimi yapılandır. (Crandall, 1995)Dik büyüdüğü için 3-4 yıl sonra herak kullanımına geçilir. Siyah renkli ahududu hassas olduğu için çok tercih edilmez.Uç ve basit daldırma ile çoğaltılır.Sürgünü çok dik olmadığı için telli terbiye sistemi kullanılır.Mor ahududu kırmızı ve siyahın melezedir.İki çeşidin ortasında gelişme gösterir.Telli terbiye sistemi kullanılır.Sarı ahududu tercih edilmediği için genellikle araştırmalarda ve ıslah çalışmalarında yer alır.

### 3.2.Morfolojik ve Biyolojik Özelliği

Çalimsı bitkiler olarak adlandırılan ahududu,saçak köklere sahiptir.Uygun topraklarda(kumlu-tınlı) kökleri 1-1.5m derinliğine inebilir. İklim ve toprak isteklerini daha iyi anlamak için Türkiye'deki doğal alanlarına bakılmalıdır. Türkiye'de ahududu bitkileri; Güney ve Doğu Marmara Bölgesi ve tüm Karadeniz Bölgesinden Artvin'e kadar 1000 m'nin üzerindeki yüksekliklerde, genellikle kuzeye bakan yörelerin orman kenarlarının veya içlerindeki güneş gören açık alanlarının su kaynaklarına yakın yerlerinde veya dere boylarında görülür. İlk yıl köklerdeki adventif gözden çıkan sürgünler vejetatif gelişirken ikinci yıl generatif gelişir.İki yıllık sürgün meyve verir.Meyve veren sürgünler artık solar.Yani kökler çok yıllık olmasına rağmen sürgün iki yıllıktır.Meyvesi bitişik üzümçüklerden oluşur.Her üzümçükte çekirdek bulunur.Meyvenin ortasındaki boşluğa por denir.Meyve şekilleri konik ve yuvarlakken meyve tablasından kolay ayrılabilir.Hatta hasat gecikmesinde meyve dökülmesi gerçekleşir.Erselik çiçek yapısı vardır.Kendine verimlidir. %90 arı ve diğer böceklerle tozlanır. Bu nedenle ticari olarak üreticiler daha fazla ürün için çiçeklenme zamanında 4 dekar için 1-2 kovan kullanır (Crandall, 1995; Daubeny, 1996, Strik, 2007).

### 4.DÜNYADA AHUDUDU ÜRETİMİNDE TÜRKİYE

Dünyada 2021 yılında toplam 886538,58 ton ahududu üretilmiştir.(FAO 2021) En yüksek üretime %22,30 ile Rusya sahiptir. Türkiye'deki üretim miktarı bazı ülkelerle kıyaslandığı zaman yok denecek kadar azdır. Ama Türkiye'de hem üretilen alanda hem de üretilen miktarda artış görülmektedir. Türkiye'de 2022 yılında toplam üretim miktarı 6652 tondur.(TÜİK 2022)Dünya ahududu üretiminde de 14.sırada bulunmaktadır.(TÜİK,2014)Ahududunun anavatanı olarak anılan Türkiye'de yetiştiriciliği kolayken bugünlerde büyük işletmelerde, aile işletmelerinde önem kazanmıştır. Hem taze hem de sanayi için hammadde halinde kullanılan ahududunun ticarete adımı 1995 yılında atılmıştır.(Ertürk ve Geçer,2012)

Çizelge1.Ülkelerin 2021 yılındaki ahududu üretim miktarı

ÜLKELER	Üretim Miktarı(ton)	%
Azerbaycan	11866,05	1,34
Belarus	0,00	0,00
Bosnia and Herzegovina	16833,00	1,90
Bulgaria	5560,00	0,63
Canada	5562,00	0,63
Mexico	165676,62	18,69
Poland	103900,00	11,72
Portugal	27950,00	3,15
<b>Russian Federation</b>	<b>197700,00</b>	<b>22,30</b>
Serbia	110589,00	12,47
Spain	48830,00	5,51
Sweden	450,00	0,05

Switzerland	4602,00	0,52
Ukraine	36290,00	4,09
United States of America	81150,00	9,15
Zimbabwe	98,00	0,01
DÜNYA	886538,58	100,00

Kaynak: FAO

Çizelge 2. Ülkelerin 2021 yılındaki ahududu verimi

ÜLKELER	VERİM(hg/ha)	%
Azerbaijan	45014,00	56,14
Bosnia and Herzegovina	62669,00	78,16
Bulgaria	34110,00	42,54
Canada	39729,00	49,55
Mexico	194449,00	242,51
Poland	52475,00	65,45
Portugal	192759,00	240,40
Russian Federation	83035,00	103,56
Serbia	53150,00	66,29
Slovenia	60000,00	74,83
Spain	201777,00	251,65
Switzerland	222319,00	277,27
Ukraine	67204,00	83,82
United States of America	120080,00	149,76
Dünya	80181	100,00

Kaynak: FAO 2021

Ülkemizdeki ahududu üretiminin 6393 tonu Bursa'da olurken 2019 verilerine göre de 5 ton/da ihracat gerçekleşmiştir. İhracatta çilekten sonra ahududu büyük öneme sahiptir. Uluslararası piyasada toplam ihracat değeri 457.843.000 dolarken birim fiyatının da 4,67 dolar olması değerli üzüm meyvelerinden bir tanesi olduğunun göstergesidir. (Anonim, 2019).

Çizelge 3. Türkiye'de 1995-2015 yıllarında ahududu üretimi

YILLAR	ALAN(DEKAR)	ÜRETİM(TON)
1995	3 500	1 319
2000	3 150	1 800
2005	3 410	2 200
2010	2 198	1 980
2015	4 885	4 320

Kaynak: TÜİK

Çizelge 4. Türkiye'de 2019-2022 yıllarında ahududu üretim miktarı

YILLAR	ALAN(DEKAR)	ÜRETİM(TON)
2019	6 875	5 975
2020	6 943	5 445
2021	7 095	5 093
2022	7 981	6 652

Kaynak: TÜİK 2022



Çizelge5. Türkiye’de 2019-2022 yıllarındaki ahududu verimi

YILLAR	VERİM(kg/da)
2019	869
2020	784
2021	718
2022	833

Kaynak: TÜİK 2022

Güney sahilleri hariç her yere uygundur. Üretiminin %97,6’sı Doğu Marmara Bölgesinde yapılmaktadır. Üretimde en önemli il Bursayken üretimin %96.6’sı Bursa’da yapılmaktadır. Diğer bölgelerin ve illerin ahududu üretim miktarı oldukça düşüktür (Anonim, 2019).

Çizelge6. Türkiye illere göre 2019-2022 yıllarındaki ahududu üretim miktarı

	ADANA	BURSA	ISPARTA	MARAŞ	YALOVA
2019		5869	38	13	16
2020	2	5323	38	14	13
2021	4	4937	38	14	13
2022	48	6393	38	14	13

Kaynak: TÜİK 2022

Tüketici ve sanayici kesimi bu meyveye ilgilidir. Ancak bu ilgiye uygun üretim ve pazarlama zinciri yoktur. Bunların oluşturulması önemlidir.

## 5.SORUNLAR VE ÇÖZÜM ÖNERİLERİ

Üreticilerin kiminin üretimi fazla olsa bile giderlerden ve ürünün satış fiyatından dolayı ürün toplamayı anlamsız bulurken, kimi de ürünün verimli olmamasından yakınmaktadır. Üründen verim alabilmek için arazinin özelliklerine uygun bir çeşit dikmiş olması gerekir. Ürünün satış fiyatının belirlenmesinde söz sahibi olmak isteyen çiftçinin de örgütlenmeye sıcak bakması gerekmektedir. Bu durumlar bakanlığın sayfasında yayınlanan raporlarda da bulunmaktadır. O raporlarda da bu duruma çözüm olarak kooperatif sunulmaktadır.

Üreticinin eğitimsizliği ve bilgi eksikliği bir başka sorundur ve en kolay dillendirilen sorun diyebiliriz. Bu sorun çiftçiye,toplayıcıya vs işle ilgili olan herkesi ilgilendirmektedir. Bu ürünün daha yaygın olup bilindiği yerlerden eksik olan yerlere doğru bir bilgi akışı sağlayacak bireyler yönlendirilmelidir. Böylece hem yetkili kişi hem de üretici ürüne hakim olacaktır.

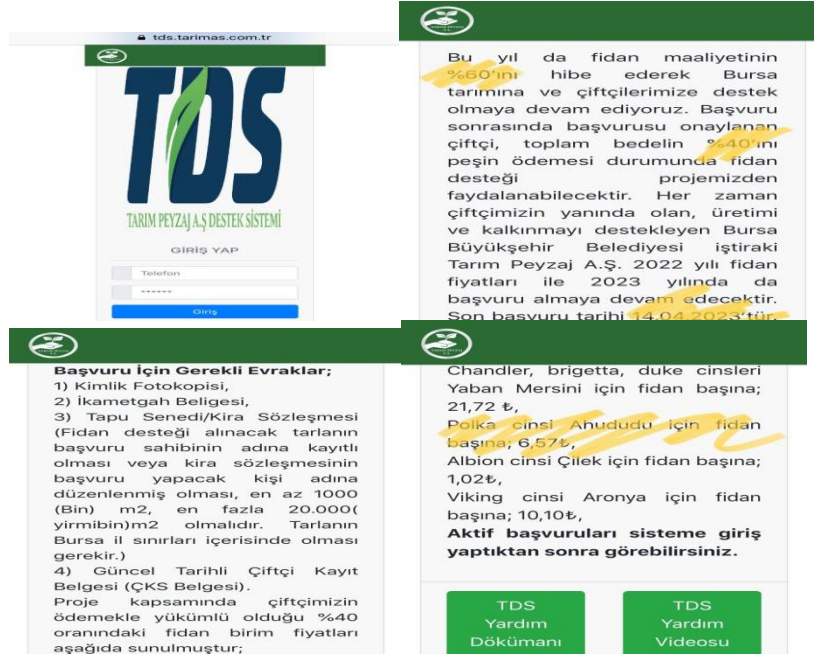
Halkın da alışkanlıklardan dolayı ilgisiz durumdakitüketim tavrı değiştirilmelidir. Halk da bilgilendirilmeli ki bilinçli bir tüketici ile muhattap olabilsin üretici. Tüketicinin ahududuyu taze tüketme alışkanlığının olmaması üreticiye hakkını alamamasına neden olmaktadır. Çünkü üretici direk pazarda satışı ile girdileri azaltarak sunduğu için belirlenen fiyatta üreticiye kalan miktar daha fazla olmaktadır.

Üretici, girdilerinin yüksek fiyatta olmasından dolayı daha fazla devlet desteği beklemektedir. Giderlerden biri de işçinin verimsizliğidir. Çünkü işçi işe kendini tam anlamda vermemektedir. 2016 yıllarında yevmiye 55-70 arasında konuşulurken şimdilerde 500’ü geçmiştir.

Yakın zamanlarda üründe verim alamama durumundan dolayı yeni bir çeşit kullanılmaya başlanmıştır.Polka çeşidi Bosna Hersek’e gidildiğinde öğrenilmiş bir çeşittir.Kesteldeki kooperatifler gezi sırasında öğrendikleri bu çeşidi belediye ile birlikte belediyenin sağladığı proje yardımı ile getirmişlerdir ülkemize.1 dönüme 1000 tane fide 2-2,5 ton verim verebilir.Bir aileyi 5-10 da arazinin geçindirebildiği bir çeşittir.

Bursa’nın Kestel ilçesindeki kooperatifler ahududu üreticileri ile işbirliği içerisinde.Hatta sektördeki taban fiyatı belirliyorlar diyebiliriz.Üzümsü meyveler gibi depolanması sıkıntılı olan ürünlerde örgütlenmenin önemi daha da göz önüne çıkmaktadır.Üreticilere aynı zamanda örgütlenme içinde eğitim verilmelidir, böylece sektörde söz sahibi olabilirler ve pazarlamada araçlara değilde gelirin çoğunluğu üreticiye kalmalıdır.





The image shows a screenshot of the TDS Tarım Peyzaj A.Ş. website. The top part features the TDS logo and a login form with fields for 'Telefon' and 'Giriş'. Below the login form, there is a section titled 'Başvuru için Gerekli Evraklar;' (Required Documents for Application). This section lists four items: 1) Kimlik Fotokopisi, 2) İkametgah Belgesi, 3) Tapu Senedi/Kira Sözleşmesi (Fidan desteği alınacak tarlanın başvuru sahibinin adına kayıtlı olması veya kira sözleşmesinin başvuru yapacak kişi adına düzenlenmiş olması, en az 1000 (Bin) m2, en fazla 20.000 (yirmibin)m2 olmalıdır. Tarlanın Bursa il sınırları içerisinde olması gerekir.) 4) Güncel Tarihli Çiftçi Kayıt Belgesi (ÇKS Belgesi). Proje kapsamında çiftçimizin ödemekle yükümlü olduğu %40 oranındaki fidan birim fiyatları aşağıda sunulmuştur; and a list of prices for different plant varieties: Chandler, brigetta, duke cinsleri Yaban Mersini için fidan başına; 21,72 ₺, Polka cinsi Ahududu için fidan başına; 6,57₺, Albion cinsi Çilek için fidan başına; 1,02₺, Viking cinsi Aronya için fidan başına; 10,10₺. Below this list, there are two green buttons: 'TDS Yardım Dökümanı' and 'TDS Yardım Videosu'. The text on the right side of the screenshot mentions that this year, a 60% subsidy will be provided to Bursa farmers and growers, and that the application process is ongoing. It also states that the total cost of the application is 40% of the total cost, and that the application fee is 14.04.2023.

Kaynak: Tarım Peyzaj A.Ş.

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tarihinde

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## Health as a Motive for Choosing Healthy Foods

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**Abstract:** The impact of food choices on health is a crucial topic in nutrition research. Undoubtedly, health is a significant factor that influences the selection of nutritious food options. The importance of conscious dietary decisions highlights the intrinsic connection between diet and well-being. Demographic factors such as age, gender, and income often influence preferences for healthy foods. Studies indicate that older adults prioritize health in their diets, possibly due to increased awareness of health concerns and proactive wellness management. The way food is produced has a significant impact on people's food choices. When consumers are aware of sustainable production practices, they tend to prefer food items that align with these standards. This preference for organically grown, locally sourced, or sustainably produced foods is driven by their perceived health benefits and environmental sustainability. To sum up, health is an undeniable factor that motivates people to choose healthy foods. It is crucial to comprehend the relationship between health motivations, demographic factors, and perceptions of food production.

This paper highlights health as a motive for choosing healthy foods. The questionnaire helps us with information on demographic variables; questions from which the research hypotheses emerge. The considered sample size is around 200 questionnaires.

**Key Words:** Health, Healthy Foods, Nutrition Research.

### 1. INTRODUCTION

Nutrition is a crucial aspect mentioned in the SDG-2 and plays a vital role in achieving all 17 SDGs. The objective of this research is to explore the question, "Does good health motivate individuals to choose healthy foods?" It is essential to understand how people perceive the value of health in relation to food because this can have a significant impact on their dietary choices.

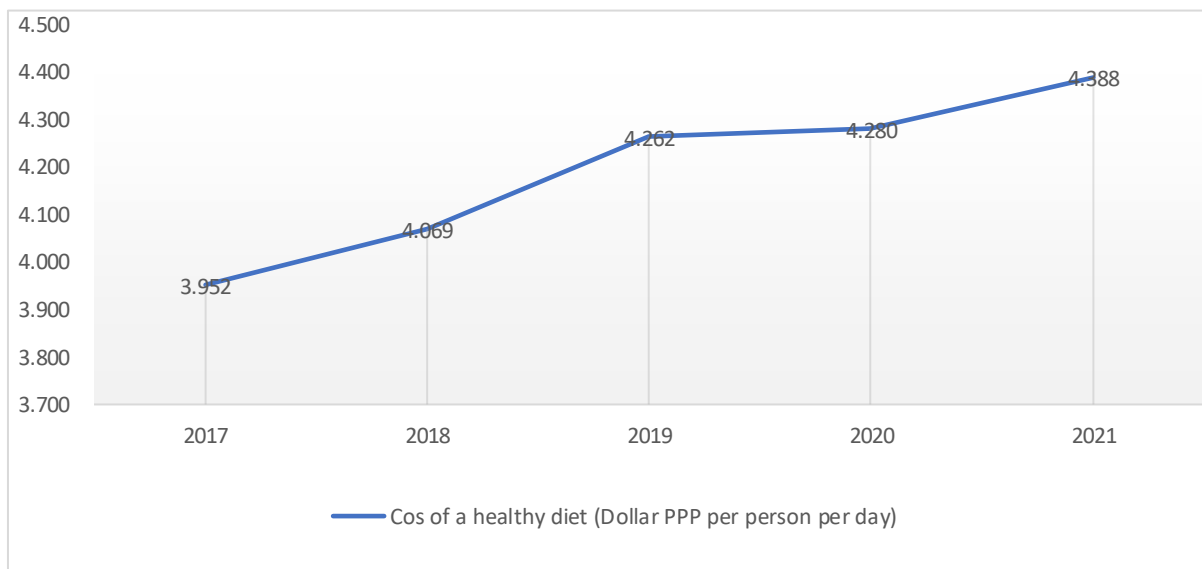
Consuming a nutritious diet throughout all stages of life is essential for health and disease prevention, and is crucial in achieving food security goals.

The decision to choose nutritious foods is driven by many factors, not just health. Our food choices are shaped by a complex interplay of various factors such as individual preferences, cultural contexts, social norms, and access. Although health is an important motivator for making healthy food choices, it is not the only one.

There is a strong connection between our diet and our overall health, and this has been proven through extensive scientific research. Studies consistently demonstrate that a balanced, healthy diet can help reduce the risk of various diseases, including cardiovascular disease, diabetes, obesity, and some types of cancer. This knowledge provides a compelling reason for individuals to choose foods that are beneficial for their health, as they seek to manage their well-being proactively through their dietary choices.

According to the Food and Agriculture Organization (FAO) in 2023, around 2.4 billion people, mostly women and those living in rural areas, were unable to access nutritious, safe, and sufficient food throughout the year in 2022. The ongoing impact of the pandemic on people's disposable income, the increasing cost of healthy food, and the general rise in inflation have left millions of people without access to an affordable healthy diet.

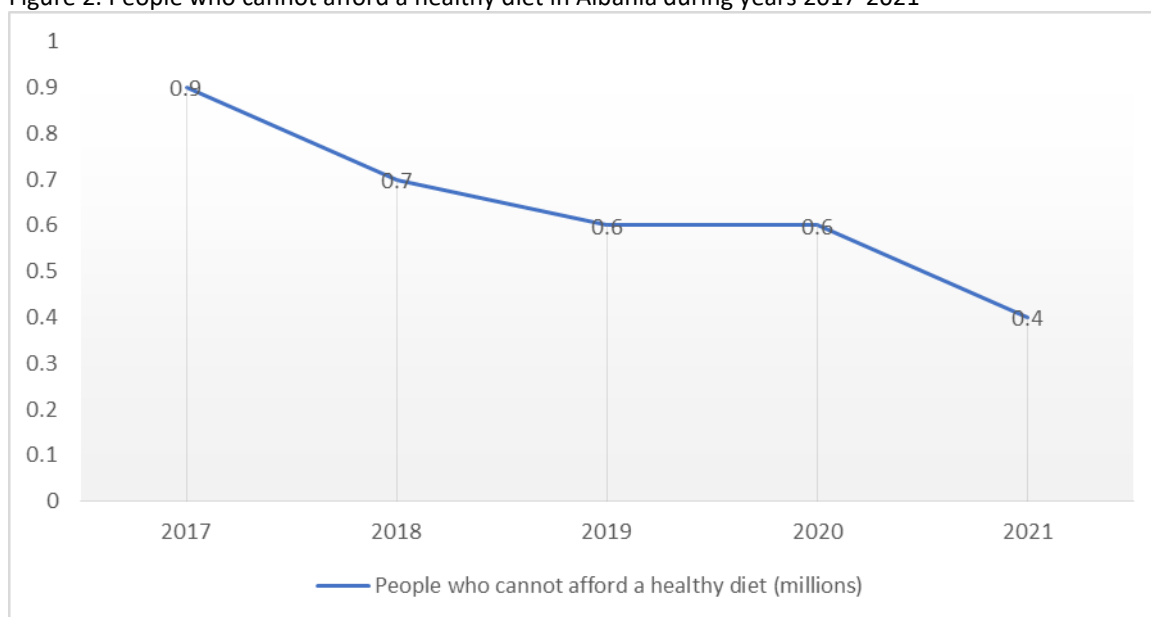
Figure 1. The cost of maintaining a healthy diet in Albania between years 2017 and 2021



Source: FAO 2023

To maintain a healthy diet, an Albanian consumer needs a minimum of 4.4 USD per day. This figure has seen an increase due to inflation, which has been on the rise since 2020, driven in part by the ongoing effects of the pandemic. Additionally, the cost of a healthy diet has increased globally by 4.3% compared to 2020, and by 6.7% compared to pre-COVID-19 pandemic levels in 2019. As of 2021, the average cost of a healthy diet worldwide stands at 3.66 PPP dollars per person per day, and in Europe, the figure is slightly lower at 3.22 PPP dollars.

Figure 2. People who cannot afford a healthy diet in Albania during years 2017-2021



Source: FAO 2023.

About 400,000 people in Albania cannot afford a healthy diet in 2021, which is an improvement from the estimated 600,000 in 2020 due to the pandemic restrictions.

Table 1. Availability of food groups to complete a healthy basket in 2020

EUROPE(%)	
Main Foods	73
Food of animal origin (except oil)	258

Legumes, nuts, and seeds	-67
Vegetables	-27
Fruits	-24
Fats and Oils	82

Source: FAO 2023

The availability of vegetables and fruits is insufficient to meet daily dietary requirements in Europe, and thus, the above-mentioned foods are crucial for a healthy diet.

## 2. LITERATURE

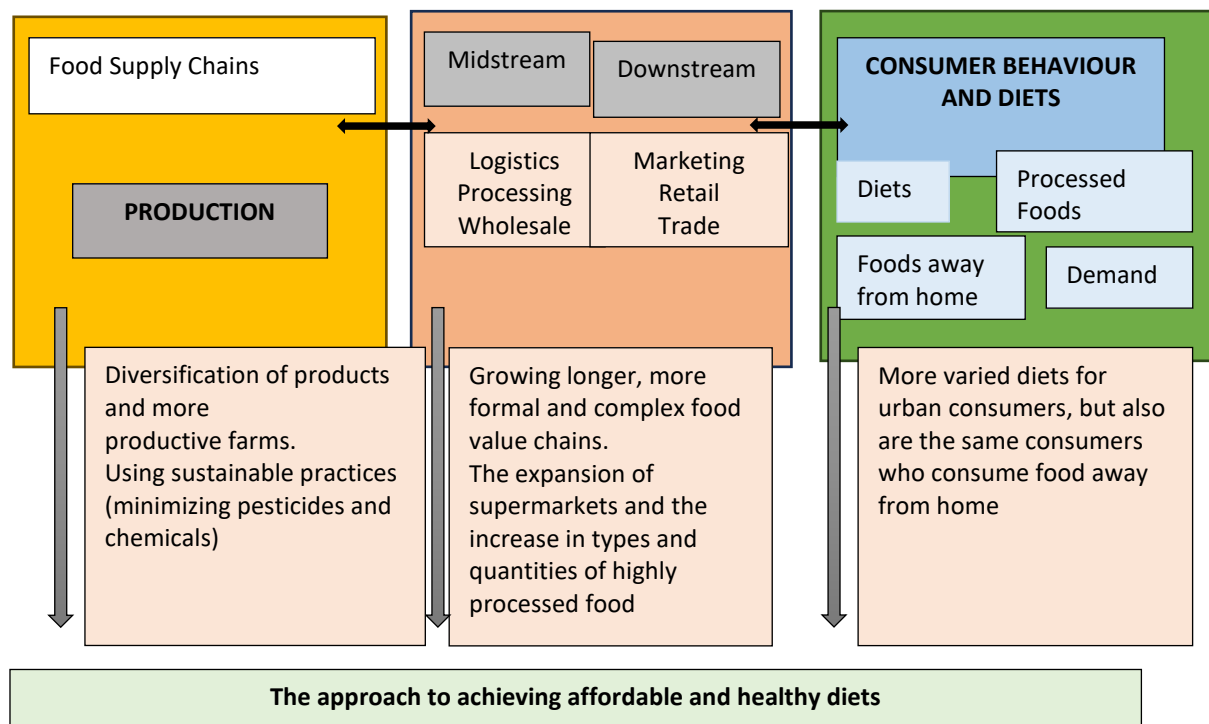
### 2.1. Analysis of the value chain at the producer level

To better understand how people's views on food production methods affect their motivation to choose healthy foods, we need to focus on the production stage in Albania. Consumers often associate healthier options with specific production practices, such as organic farming, sustainable agriculture, or organic foods. If Eurostat data shows a correlation between a preference for healthy foods and a positive perception of sustainably produced goods within Albania, it would indicate a link between health motivation and production-related perceptions. Therefore, it is crucial to examine people's perception of food production within the value chain, particularly during the production stage in Albania.

If Albanian consumers prefer foods that are produced using environmentally friendly or sustainable methods, it could indicate that they consider such foods to be healthier and more conducive to overall well-being. By studying Albanian consumers' perception of the production process within the value chain, we can determine if particular production methods or practices are crucial to their dietary choices.

By analyzing data from Eurostat, we can gain valuable insights into various aspects of food production in Albania. This may include people's preference for locally sourced produce, their attitudes towards organic farming, and their opinions on sustainable fishing practices or fair trade practices. If the data shows that individuals who prioritize their health also prefer foods produced through environmentally friendly methods, it suggests a strong connection between production-related perceptions and health motivations.

Figure 3. The approach to maintaining a healthy diet



## **2.2. Factors that influence the choice of healthy foods**

The link between various socio-economic factors and healthy eating habits is significant. Age, gender, income, and education are some of the most crucial factors that determine this link. Studies that have focused on these factors conclude that individuals with higher socio-economic status are more likely to maintain a healthy diet.

### **2.2.1. Age**

*H1: Older ages are expected to positively influence the selection of healthy foods.*

A study conducted by Lallukka et al. (2007) revealed that women aged between 50 to 60 years tend to report healthy eating habits more frequently than younger women. However, for men, the trend for healthy eating was only observed for 60-year-olds and was not statistically significant. Eurostat data shows that older individuals in Albania are more likely to make healthier food choices. This inclination towards healthy eating could be due to various factors such as an increased awareness of health-related issues with age, accumulated knowledge about nutrition, and a tendency towards more health-conscious behavior due to existing health conditions.

### **2.2.2. Gender**

*H2: Women tend to influence more positively the selection of healthy foods compared to men.*

Health and high quality are the most important characteristics of healthy food for both genders, but women tend to prioritize them more than men, according to Bryła (2016). Regardless of age, people view food through the lens of health. Lallukka et al. (2007) conclude that young people often prioritize food quality, while older people tend to focus more on health properties. When it comes to choosing food products, men tend to be influenced by advertisements and curiosity, while women are more likely to be guided by product safety and health considerations.

### **2.2.3. Income**

*H3: Higher income is expected to positively influence the selection of healthy foods.*

Individuals with limited financial resources may perceive healthy eating habits as costly, possibly leading to lower consumption of healthy foods. According to Bryła (2016) individuals with lower incomes are often motivated by prices and quality guarantees, whereas wealthier consumers are strongly motivated by product safety and health considerations. Additionally, according to Shafie & Rennie (2012) willingness to pay higher prices for healthy foods appears to increase with income. However, a Norwegian study found no significant effect of income on the selection of healthy products. Lastly, while income can be a determining factor for consumers who choose healthy products, the correlation is not very strong, according to research by Gil et al. (2000).

### **2.2.4. Education**

*H4: Education has a positive effect on the consumption of healthy foods.*

According to Lallukka et al. (2007), self-education can lead to differences in dietary habits between low and high education groups. This is because self-education can increase knowledge, skills and awareness of healthy eating habits, and people with higher education tend to be more willing to pay for healthy foods. Additionally, Wardle et al. (2004), found that the relationship between educational level and healthy eating was twice as strong in women compared to men.

## **3. METHODS**

The focus of this research will be on consumers, who will serve as the primary data source. To gather this data, a questionnaire will be administered, consisting of two main sections. The first section will gather information on demographic variables, while the second section will include questions from which the research hypotheses

will emerge. The sample size for this study will be approximately 200 questionnaires, chosen at random. The margin of error for this sample size is estimated to be 7%.

### Operationalization

Concepts	Variable type	Method of measurement	Symbol
		The dependent variable	Y
Willingness to choose healthy foods	Ratio Variable	Mean ratings for expressions measuring healthy food choices (6.2.1)	Y
		Independent variables	X
Age	Ratio Variable	Age of consumers, expressed in number of years	X1
Gender	Dichotomous Variable	Dummy variable with values 0=Male and 1=Female is used	X2
Income	Ratio Variable	Consumer income expressed in %	X3
Education	Ratio Variable	Consumers' years of education	X4

### THE MODEL

The multiple linear regression model will be used in this research. Its general form is:

$$Y = f(X_1, X_2, \dots, X_k) + e \quad (1)$$

$$\text{Otherwise: } Y = a_0 + a_1X_1 + a_2X_2 + \dots + a_kX_k + e \quad (2)$$

Where:  $a_0$  is the free parameter and indicates the expected value of Y when all factors are 0. The parameters for  $a_i=1,2,3,\dots,k$  are the partial regression coefficients or partial marginal increments of Y. The ratios between the two regression coefficients give the marginal rate of substitution of the respective factors with each other such that the expected value of Y does not change or is the same.

In our case we have:

Y or dependent variable = Willingness to choose healthy foods

Independent variables:  $X_1$ = Age,  $X_2$ = Gender,  $X_3$ = Adults,  $X_4$ = Education

$$\text{Model : } Y = a_0 + a_1X_1 + a_2X_2 + a_3X_3 + a_4X_4 + e \quad (2)$$

The multiple linear model is the most appropriate model to use in this research, since the dependent variable is a quantitative variable.

### QUESTIONNAIRE TEMPLATE (EUROSTAT)

Data have been collected from Eurostat regarding health and the healthiest eating age groups.

Once the data was collected, it was analyzed and processed in excel. The results of the study are presented below. To determine which age group tends to eat healthier, a thorough examination of various factors such as dietary patterns, food choices, and lifestyle preferences is required. This detailed analysis will delve into findings from a comprehensive study of eating habits across different age groups, aiming to provide insights into the nuances that contribute to healthier dietary practices. Understanding eating habits is crucial for public

health initiatives and policy development. This study investigates the dietary behaviors of different age groups, seeking to identify patterns and variations in healthy eating practices.

The study employed a mixed methods approach that combined quantitative surveys and qualitative interviews to gather comprehensive data. The study population was categorized into different age groups, namely children (5-12 years), adolescents (13-19 years), adults (20-50 years), and elderly (51+ years). The surveys included questions about daily food intake, food preferences, awareness of nutritional guidelines, and barriers to adopting healthier food choices. The interviews provided in-depth insights into the socio-cultural factors that influence dietary habits.

Table 2. Data from Eurostat categorized by age

Age group	Percentage by health care
Children	20%
Adolescents	5%
Adults	35%
Elderly	40%

Table 3. Data from Eurostat categorized by gender

Gender	Percentage by health care
Female	61%
Male	39%

## 4. RESULTS ACHIEVED

### Children (5-12 years old)

- It was found that children tend to prefer healthy food choices more than previously expected, and this can be attributed to the influence of parents and school feeding programs.
- The study revealed that fruits, vegetables, and whole grains are the most favored options among children. However, there is a growing trend towards processed foods, which is believed to be influenced by marketing and family members.

### Adolescents (13-19 years old)

- Adolescents have a varied dietary profile. Although many of them acknowledge the significance of healthy eating, their choices are largely influenced by social factors.
- Fast food consumption is quite high among them, influenced by peer preferences and limited awareness of nutritional consequences. However, a considerable subgroup of adolescents show a proactive interest in healthy food and recipes.

### Adults (20-50 years old)

- The adult age group displays a variety of dietary patterns. Busy lifestyles often result in dependence on convenient but not necessarily healthy food choices.
- Some adults consciously balance their diets with a variety of food groups, while others struggle with time constraints and the perceived affordability of healthier options.

### Elderly (51+ years old)

- Older adults prioritized nutrient-dense foods due to perceived health benefits and emphasized traditional and homemade meals.
- Prevalent dietary restrictions and limited access to certain foods were issues for this age group due to health conditions.

## 5. CONCLUSIONS

Children have a tendency to prefer healthy food choices, which can be attributed to the impact of parents and school feeding programs. This indicates the crucial role of early exposure and education in shaping dietary habits. Their inclination towards fruits, vegetables, and whole grains suggests that children are open to nutritious options when presented to them. However, despite the preference for healthier options, there is a growing trend towards processed foods, which is likely influenced by marketing and family members. This



highlights the need for continuous efforts in promoting healthy eating habits and counteracting the influence of unhealthy food marketing.

Adolescents have a wide range of dietary preferences that are significantly influenced by social factors. Due to peer preferences and limited awareness of nutritional consequences, there is a high consumption of fast food among adolescents. However, a notable subgroup of adolescents shows an active interest in healthy food and recipes, indicating potential for intervention and education targeting this demographic.

The adult age group exhibits a range of dietary behaviors that reflect the diversity of lifestyles and preferences within this demographic. Busy lifestyles often lead to a dependence on convenient, albeit less healthy, food options. While some adults make conscious efforts to balance their diets with a variety of food groups, others struggle with time constraints and affordability issues when opting for healthier options.

Many older adults focus on consuming nutrient-dense foods because they believe it has several health benefits. They tend to prefer traditional meals and homemade dishes. However, this age group faces various dietary restrictions, and limited access to certain foods due to health conditions, which can be a challenge. This emphasizes the need for personalized nutrition interventions and support services.

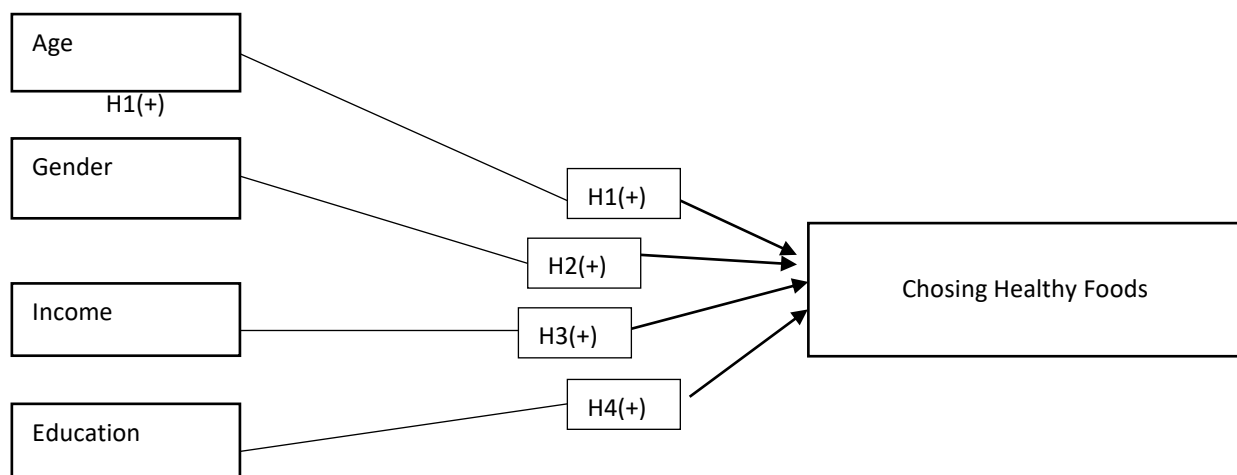
In general, the analysis emphasizes the intricate interplay of various factors that affect dietary habits among people of different age groups. These factors include the influence of family and society, personal preferences, and health considerations. To promote healthy eating habits effectively, strategies must consider these diverse factors and be customized to meet the specific needs and challenges of each demographic.

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## Annex

### Conceptual Framework



# **ABSTRACTS**

## Public Debt Management Strategy In The Context Of European Integration

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### Abstract:

Purpose of the article: With this article the authors want to highlight the particularities of public debt management, methods and management tools on public debt strategy, risks that can influence the level of public debt. For these reasons, effective risk management is essential from the perspective of effective public debt management. The impact of financial and fiscal risks can lead to an increase in the government debt balance.

Dealing with the effects of the economic crisis caused by the global COVID-19 pandemic, coupled with measures to combat inflation and geopolitical risks at unprecedented levels due to the military conflict in Ukraine, are medium and long-term challenges that are focusing government efforts globally. As a result of rising global financing costs, excessive increases in raw material and electricity prices, food prices are rising. This process has also been affected by the military conflict in Ukraine. All these moments have had a negative influence on the development of the national economy, on the collection of revenues to the public budget, on the size of the budget deficit and on the size of the public debt of the Republic of Moldova.

Methodology: In the elaboration of this article the method of analysis, comparison of statistical data presented by the National Bank of Moldova, the Ministry of Finance and the National Bureau of Statistics; the method of synthesis of bibliographical sources related to the analyzed topic were used.

Conclusions: Following the research carried out on the topic under analysis, we can conclude that the insufficiency of the sources of financing the budget deficit and the need to identify them will jeopardize the possibilities of financing the committed budget expenditure. In recent years the budget has received considerable support from external donors, whose aim was to support Moldova in the difficult conditions of energy crisis and war vicinity.

The increase in total government debt in 2022 - 2023 was influenced by the increase in the balance of both external and domestic debt. State debt policy is geared towards achieving the fundamental objective in the process of public debt management, i.e. ensuring the financing needs of the state budget deficit at an acceptable level of expenditure in the medium and long term, while limiting the risks involved.

Originality: The material presented by the authors in this article can be used in practice by workers in the banking sector and can also be used by students to prepare for lessons.

**Key words:** Public debt, government debt, government debt, management, strategy, management, financial risk, gross debt, floating debt, debt consolidation.

**JEL:** F17,B 27, H63

## Mapping The Globalization Financial Network

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**Abstract:** This study explores the evolution of global financial cooperation through Fintech Technologies, highlighting their efficiency, cross-border applications, and potential for economic diversification, but also addressing regulatory challenges. The methodology is a theoretical presentation of the analysis of how Fintech is facilitating better access, transparency, and financial service provision, hence revolutionizing the public sector. Public authorities worldwide are increasingly promoting fintech sectors and solutions, to explore the potential and challenges of digital money. To encourage innovation for public authorities, fintech integration into government services presents not only significant opportunities as well as challenges for privacy, data security, ensuring equal access to digital devices. Blockchain technology offers a secure and open solution reducing tax evasion and fraud, streamlining tax collection process, attracting foreign investment, and reducing administrative overhead.

At the end this study concludes that for successful e-governance, financial network is a key point of globalization intertwined with the future of government services.

**Keywords:** Fintech, globalization, public sector, e-governance, foreign investment.

## The Constitution as a source of private international law

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**Abstract:** Private international law is a new branch of law, specifically in Kosovo, after the law of private international law entered into force in 2022. As a set of legal norms that shows which country's law is competent to regulate legal relations - private with a foreign element. So every state has private international law as a branch of the legal system, but they do not separate it as a separate branch of law because it does not have as its object only one type of relationship, but it is comprehensive, specifically it regulates the relationships of all branches of law. Thus, private international law is defined by the constitution of Kosovo, at the moment where it is stated that the resources of international states have superiority over the resources of our country in case there is a legal agreement between the parties, specifically between the states, then the interested party can choose which law which country should be used during the procedure for the termination of the legal relationship. Thus, the constitution of Kosovo gives precedence to international sources in case of the expression of the use of tertiary sources. Thus, at the moment of solving the international source, then the law of the state that we choose for the specific case creates superiority over the laws of the country. Thus, I will speak more broadly about the subject in question during the presentation of this paper.

**Keywords:** constitution, right, law, legal relationship, international.

## Foreign Direct Investment in Southeast and Eastern Europe: A Scientometric Review

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**Abstract:** The domain of Foreign Direct Investments in Southeast and Eastern Europe (FDISEE) has witnessed substantial growth, thereby presenting avenues for systematic and bibliometric evaluations. However, a notable gap exists as no bibliometric inquiry has hitherto been undertaken in this domain. To bridge this void, we employed bibliometric analysis to quantitatively assess published literature and gauge its influence within the scholarly sphere. Our examination involved 952 articles indexed in Scopus within the FDISEE domain, authored by 1781 researchers spanning the period from 2004 to 2023. Utilizing the R data analysis package, bibliometrix, we conducted a comprehensive qualitative and quantitative analysis. Our findings encompassed insights regarding the foremost influential authors and journals, theoretical underpinnings, thematic orientations, and prevailing research trajectories within the FDISEE domain, and its impact on business issues. Additionally, we examined the evolution of research paradigms and emergent trends within FDISEE areas, identifying numerous prospective avenues for forthcoming inquiry.

**Keywords:** FDI, Eastern Europe, Southeast Europe, Literature Review

## The importance of management through information technology in enterprises in Kosovo

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**Abstract:** In order for commercial enterprises to function, they must manage the activity well, both inside and outside the enterprise. We can say that nowadays information has become a fundamental source for every company, this is due to the fact that in cases where a company has information coming from the country or abroad, then it is easier for that company to know how to act in it. the future. Thus, the information makes it easy for the company to know what to produce and where to send the produced goods. All the information that companies receive these days are received electronically through the electronic network using the information system, since they are related to the collection of data and their processing using information technology. Information technology is largely used by large enterprises, but do not leave aside medium and small enterprises, as these are also influenced by information technology. So we can say that information and that received electronically has become necessary nowadays. And since there is a great use of information technology by companies, whether large, medium or small, I took this topic into consideration by looking at how the information system is used in Kosovo. Thus, I will speak more broadly about the topic in question during the presentation of this paper.

**Keywords:** enterprise, development, information technology, electronic way, management.

## The use of computer networks in business processes in Kosovo

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**Abstract:** Based on today's modern research, computer technology has a positive impact on all spheres, especially businesses. Thus in businesses it influenced their development by getting information on how to work and develop based on other businesses. Thus the use of computer networks in business processes has enabled efficient communication twenty-four hours a day, and the transfer of customer requests from one time zone to another. Information technology, specifically through computer networks, helps large enterprises and especially medium and small enterprises, which through the fast communication that they can do through the computer can achieve more easily in carrying out their activities as well as achieving more easily success in the economy. So it is not surprising that today all activities, especially business activities, are closely related to the Internet, which is considered one of the most important tools in a business activity. Based on recent research, it is shown that over 96% of SMEs in Kosovo have computer equipment and are connected to the Internet. Also, research shows that the use of communication and technology will be an important factor for competitive growth in regional as well as global markets. It can be said that markets around the world have been observed to mark technological growth from year to year. Positive trends were noted mostly in 2005 and 2006 and also without excluding the year 2007 until today in 2024, where we can freely say that information technology through the electronic network has become an inseparable part of every business and every commercial activity. whether large, medium or small. Thus, the topic in question will be discussed in more detail in the presentation of this paper.

**Keywords:** information, business, development, network, economy.



## Obtaining public loans in Kosovo during the year 2019-2022

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**Abstract:** Based on public revenues in Kosovo, there were always problems with their collection, since the state budget is formed from them. The problem was that the state budget was never formed only with designated public revenues, i.e. such as taxes, contributions, customs, excise. Since the budget cannot be formed with the designated revenues, then the possibility has been created to request non-designated revenues such as the public loan. Thus, the state of Kosovo has been taking public loans since the 1990s, until 2019, in which year, even though the forecasts were to reduce the requests for borrowing, unexpected actions occurred which forced the state of Kosovo to request public loans from the European Union organization. This is due to the fact that there was once a pandemic, and then the war in Ukraine, and in both cases a loan was requested to fill the state budget since the budget could not be filled from the intended revenues, since the last cases created stagnation in the collection of revenues such as taxes, customs, contributions, etc. Thus, during 2019, Kosovo received and then continued with the same requirements until 2022. For the loan received, Kosovo had to create a contractual agreement with the European Union, in which contract the rights and obligations of the contracting parties are presented. Thus, the state of Kosovo has taken loans, but I have to return them for an indefinite period. From this it is understood that the state of Kosovo must return the loans received since non-return is considered a debt. Thus, we will talk more broadly about obtaining public loans in the above-mentioned years during the presentation of this paper.

**Keywords:** public loans, borrowing, destination, loan repayment, legislation.

## **Central Bank Digital Currencies challenges – reshaping relationship between public and private money in the new monetary landscape**

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**Abstract:** Over the last ten years, cryptocurrencies have become increasingly important and have attracted the attention of companies, investors, consumers and public and private institutions. Central banks have considered the development of these currencies. In this context, central bank digital currencies (CBDCs) could reshape the relationship between public and private money. Some studies emphasise the risks to monetary and financial stability posed by this evolving landscape. The ongoing debate about the potential impact of cryptocurrencies on the traditional financial system remains open and opinions differ. While some see them as a potential threat, others consider them too volatile and unreliable to become a dominant payment system. Developing an optimal model for digital currencies requires a mindful approach that recognises the fundamental purpose of money as a tool for users to obtain essential goods and services through exchange. This article proposes an analysis of the current general and ethical challenges associated with digital currencies issued by central banks. Based on qualitative research - a documentary analysis of the specialised literature - the advantages and disadvantages, the costs and benefits, the opportunities, the risks and, above all, the consequences and ethical implications for the economy, users and society in general are critically examined.

## **Creative Hubs As Catalysts: The Influence Of Ziphouse On The Fashion Industry's Value Chain In Moldova**

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**Abstract:** This paper explores ZIPhouse Fashion Design Hub's role in evolving Moldova's fashion industry from traditional low value added manufacturing to design and brand creation. Highlighting the resilience of Moldova's fashion exports, it analyzes the shift towards local branding and its economic impact. The study also underscores creative hubs' importance in fostering innovation and growth in the fashion industry. It suggests that these hubs, empowered by contemporary dynamics, are crucial for microbusinesses and emerging independent designers. ZIPhouse's role encompassed fostering talent, entrepreneurial growth, and modernizing business practices for the local fashion sector. The paper highlights the strategic development of ZIPhouse's programmatic pillars, the university-industry synergy in its governance and management. It also touches on ZIPhouse's contributions to sustainable fashion education and the broader fashion ecosystem in Moldova, emphasizing community building and international collaboration. The paper concludes that ZIPhouse has been a critical catalyst in advancing the Moldovan fashion industry, nurturing a new generation of brands, and positioning Moldova within the international fashion arena.

**Key words:** fashion sector, competitiveness, value added, creative hub, innovation

## **E-Commerce Innovation In Emerging Fashion Markets: A Case Study of Moldovan Designers' Digital Expansion and Role of Support Programs**

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**Abstract:** This paper explores the transformative role of e-commerce in the emerging Moldovan fashion market, focusing on the digital expansion of local designers. It examines the industry's shift from traditional manufacturing to innovative online sales channels, highlighting the challenges and opportunities this transition presents, including the need for new skills, legal framework adaptability, and investment. The study also discusses the impact of the COVID-19 pandemic, which accelerated the adoption of e-commerce among Moldovan fashion firms. With the support of programs like the Fashion Omnichannel Mentorship Program, these firms are enhancing their digital presence and competitiveness. The paper emphasizes the importance of mentorship and tailored support in enabling Moldovan brands to thrive in the digital marketplace, contributing to their growth and success in the global fashion industry.

**Key words:** fashion sector, ecommerce, support programs; value added

## **The importance of the application of the law at the time of the commission of the criminal offense according to the Criminal Code of Kosovo**

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**Abstract:** At the moment when the criminal offense is committed, they look at which factors affect that moment, based on the time factor, the circumstances, the law that is in force, etc. Thus, at the moment when the criminal offense is committed and investigations begin or even court proceedings begin, then it is looked at which law was in force at the time the criminal offense was committed. Based on the Criminal Code of Kosovo, it is emphasized that: the law that was in force at the time of the criminal offense is applied to the perpetrator. And so in the event that the applicable law changes before the final decision is announced, then the law that is most favourable applies to the orderer. This is due to the fact that if any change or amendment to the law is made and that change is more favourable for the perpetrator of the criminal offense, then the Criminal Code of Kosovo allows the implementation of the law which is more favourable. to the party. But this can only happen if a decision has not yet been made and that decision has not been finalized. It is further emphasized that if the new law does not incriminate the offense, but the perpetrator has been sentenced by a final judgment in accordance with the previous law, the criminal sanction does not begin to be executed or is terminated if it has begun. Thus, I will speak more extensively about the implementation of the most favourable law during the presentation of this paper.

**Keywords:** law, favour, performance of the deed, time, place, procedure.

## **Pronouncing the sentence for the perpetrator of the criminal offense according to the Criminal Code of Kosovo**

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**Abstract:** Based on the past as well as today, for every person who does not respect the legal rules or violates them, a special provision has been defined for him, on the basis of which the punishment for that person has been determined. Thus, especially in the criminal law, in the case that the person violates the Criminal Code of Kosovo, then the provision of the sentence has been determined for the perpetrator. Depending on the criminal offense caused, the punishment for the perpetrator is determined. Among other things, the court must take into account the purpose of the punishment, the principles set forth in this chapter and the mitigating and aggravating circumstances related to the particular criminal offense or the punishment. This means that the punishment should be pronounced but and why the person is the perpetrator of the criminal offense and for this reason every mitigating circumstance or vice versa aggravating circumstance should be taken into account. More specifically, it is emphasized that the punishment must be proportionate to the gravity of the criminal offense and the behavior and circumstances of the perpetrator. So, in general, when committing a criminal offense, we must take into account the measurement of punishment based on the Criminal Code of Kosovo. I will present more about the subject in question during the presentation of this paper.

**Keywords:** criminal offense, code, perpetrator, sentence, sentence.

## Research on the Current Situation and Future Trends of Ecotourism in Montenegro: A Sustainable Development Perspective

He Yiyang<sup>1</sup>

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**Abstract:** This paper presents a comprehensive analysis of the current situation, future trends, and sustainable development perspectives of ecotourism in Montenegro. With its unique geographical and cultural landscape, Montenegro offers significant potential for developing ecotourism as a sustainable alternative to conventional tourism practices. Through an extensive literature review, comparative analysis with global best practices, and alignment with the Sustainable Development Goals (SDGs), this study explores the opportunities and challenges facing Montenegro's ecotourism sector.

The findings reveal that while Montenegro possesses a rich natural and cultural heritage conducive to ecotourism, there are several areas requiring strategic focus, including enhancing community engagement, developing sustainable infrastructure, and implementing effective conservation strategies. The comparative analysis underscores the importance of learning from global ecotourism leaders to adopt best practices in community involvement, sustainable management, and policy support.

Looking ahead, the paper predicts a growing demand for sustainable travel experiences, highlighting the need for Montenegro to leverage advancements in technology, community-based tourism models, and eco-certification programs to meet future trends. The feasibility assessment confirms that sustainable ecotourism in Montenegro is viable and can significantly contribute to the country's economic development, environmental conservation, and social inclusivity.

Aligning with the SDGs, the study proposes recommendations for sustainable ecotourism practices, emphasizing the role of policy frameworks, stakeholder collaboration, and community benefits. The implications of this research extend to policymakers, industry stakeholders, and local communities, offering a roadmap for enhancing the sustainability and competitiveness of Montenegro's ecotourism sector.

Future research directions include exploring innovative sustainable tourism development approaches, assessing the long-term impacts of ecotourism, and understanding tourists' perceptions of sustainable travel. This paper concludes that ecotourism represents a critical pathway for Montenegro to achieve sustainable development, highlighting the need for concerted efforts to realize its full potential.

**Keywords:** Ecotourism, Sustainable Development, Montenegro, Sustainable Tourism Practices, Environmental Conservation, Community Engagement, Sustainable Development Goals (SDGs), Comparative Analysis, Future Trends, Policy Frameworks

## The impact of bullying on the deviation of psychosocial behaviors in children with divorced parents

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**Abstract:** This study aimed to understand the impact of bullying on the psychosocial maladjustment of children with divorced parents. To achieve this goal, an extensive research involving 100 children aged 12-16, raised by divorced parents, was conducted. A quantitative approach was employed, utilizing two measurement instruments, one assessing bullying and the other psychosocial maladjustment.

The results reveal a significant positive correlation between bullying and self-esteem, self-worth, aggressiveness, and shame in children with divorced parents. This suggests that children who exhibit more bullying tendencies tend to have higher levels of aggression and shame, while experiencing a negative impact on their self-esteem and self-worth. These substantial findings underscore the need to better comprehend the relationship between bullying and the psychosocial well-being of children with divorced parents.

This research analysis provides an opportunity to gain deeper insights into the influence of bullying on the psychosocial behavior of children in divorce situations and may serve as a foundation for the development of strategies and interventions to enhance the responses and treatment of children in this group.

**Keywords:** Bullying, children, divorced parents, self-esteem, aggressiveness, shame.



## The Impact of Technological Development in Digital Marketing Strategies

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**Abstract:** While technology has extensively developed and internet usage has advanced day by day, marketing strategy and tactics have undergone inevitable changes. The technological development and widespread Internet, combined with the effects of globalization and the improvement of education and knowledge level of employees and customers, have helped the communication improvement, and facilitated the access around the globe.

The development of technology, and its use in businesses, have led to the replacement of traditional performance indicators with criteria such as attained and produced knowledge, the use of technology, the profile and satisfaction of customers, the quality of products and services, the trust given to the customers, the long-term satisfaction of the customer, and the contribution to the environment.

This qualitative research article explores the innovations and technologies that are influencing the direction of marketing. Rapid technological advancement and changing consumer behaviors, challenge businesses and marketers with staying relevant and effective in their digital marketing strategies. Two face-to-face interviews were conducted with one business expert and two marketing professionals of a PR & Marketing Agency and a business in the field of Home and Office furniture in Albania. These interviews provide helpful information related to the latest trends and technologies that impact the marketing of businesses. Marketers and businesses can use these findings to adjust their way of working and succeed within this ever-changing environment. Several key trends and technologies, such as the increasing importance of AI and machine learning in personalizing marketing campaigns, the rise of voice search and smart speakers, the influence of augmented and virtual reality on consumer engagement, the significance of data privacy and transparency, and the growing role of sustainability and ethical marketing practices are highlighted during the interviews. This study serves as a foundation for strategic decision-making and innovation and offers a roadmap for staying competitive and successful in the years ahead.

**Keywords:** marketing, strategy, technology, innovation, technological innovation

## Impaired In Denial The Potential Of Dark Tourism. Evaluating Attractions And Development Perspectives

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**Abstract:** Tourism is a field open to innovations and the creativity of multiple actors involved in shaping the offering. Theorists struggle to formalize the new forms of tourism emerging on the market, some of which are extremely niche and controversial. Among these forms of tourism is dark tourism, based on values that are difficult to promote in society: decadence, death, pain. Approaches to this form of tourism range widely – from integration into established forms of tourism (cultural, historical, ethno-folkloric) to outright refusal to promote products associated with dark tourism. Internationally, subcomponents of dark tourism are described, and rankings of specific tourist destinations are made based on complex indicators. The paper aims to evaluate tourist destinations in Romania through the lens of leveraging the specific potential of dark tourism. The evaluation starts with the four basic pillars in the development of dark tourism at the national level: the Dracula myth, battlefields and symbolically significant sites of loss of human life, burial customs and sites, and communism. After selecting destinations with high potential in the field, local attractions are classified according to multiple criteria – orientation towards education or entertainment, authenticity, temporal placement, necessary tourist infrastructure, etc. The methodological approach is matrix-based – one dimension focuses on identifying with the core values of the tourist destination, while another dimension focuses on association with other forms of tourism and the typical tourist profile for that attraction. In a constructivist manner, in the final stage of the research, together with the actors involved in building the tourist offering, tourist products that can be developed for each type of tourist destination are identified. The conclusions of the paper can be considered relevant for both theorists in the field, through the case studies brought to attention and the interpretation of specific symbols of dark tourism in Romania, and practitioners, through considering improvements to the current proposed offerings and new ideas for tourist products that can be developed.

**Keywords:** Innovative Tourist Products, Myth of Dracula, Communism.

## European Approach to Managing Online Disinformation and Conspiracy Theories

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**Abstract:** Freedom of expression, as a fundamental communication right, encompasses the liberty of all communications, opinions, and ideas, including freedom of speech and press, irrespective of their mode, value, unpopularity, moral quality, and often their veracity, with certain exceptions. This freedom grants individuals the right to silence and to persuade others, as well as the right to form opinions freely, which is essential for the foundation of individual self-expression and plays a crucial role in the development of a well-functioning society aiming for progress. This is also true for the European Union, where the existence of free and independent media is considered a cornerstone of democracy. Among other responsibilities, the European Union faces the challenging and unenviable task of delineating and establishing the boundary between “free speech and free reach”. This is necessary as misinformation rapidly spreads through society, eroding trust in institutions, science, empirical evidence, and both digital and traditional media, thereby undermining democracy by hindering citizens from making informed decisions.

The study aims to analyze the measures and approaches proposed by the European Union to address online disinformation and conspiracy theories, with a particular focus on the role and responsibility of digital platforms. The research includes an examination of documents from the European Commission, a review of relevant literature, and an analysis of expert interviews. The study concludes that although the European Union has taken several steps to combat disinformation, further coordinated efforts and closer cooperation with digital platforms are necessary to effectively curb misinformation while avoiding excessive institutional intervention and censorship, thereby preserving one of the pillars of democracy based on inclusive and pluralistic public discourse.

**Keywords:** EU Commission, Freedom of Expression, Disinformation, Conspiracy Theories

## The procedure for taking evidence in civil proceedings according to the law in Kosovo

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**Abstract:** Civil procedures take place in the state court and those of arbitration. When it comes to the judicial procedures that take place before the state courts, the basis for the procedure is the law of civil procedure, non-contentious, enforcement and bankruptcy. In the cases of civil proceedings which take place in regular courts, the law of contested civil procedure determines how the procedure should start and how it will take place until the decision is reached. Taking evidence is important in a civil procedure, since the decision is made from the evidence and the civil case for which the procedure has been started is resolved. Thus, the taking of evidence can be taken at the hearing of the main review, and especially at a special hearing in which the evidence is presented from both sides, both from the plaintiff and the defendant. Further, the judge examines the evidence presented by the parties, investigates it and finally finds the material truth on the basis of which he makes the decision on the specific case. Thus, evidence can be obtained by going to the scene, calling a witness to a court session, calling an expert in the relevant field, or presenting any document received by a state body such as administration, notary, etc. Thus, the evidence has a special importance in the procedure developed by the court, since the decision is made from it and the judicial procedure ends. Thus taken in general regarding the progress of the procedure of obtaining evidence, we will talk more extensively during the presentation of this paper.

**Keywords:** civil procedure, development, progress, evidence, taking evidence.

## The development of the enforcement procedure in disputes from the labor relationship

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**Abstract:** The enforcement procedure is one of the civil procedures that deals with issues from the labor relationship, family issues, and issues from disputes with financial value. Thus, the enforcement procedure takes place in the court and with the private bailiff. Based on the practice developed in the court, cases from the three cases above are presented, but when we are dealing with disputes from the labor relationship and from family law, the judge makes a decision with which he obliges the defendant party, as well as in case of failure fulfills the obligation, the judge himself has the competence of the private bailiff to take the same actions that the private bailiff undertakes. Whereas when it comes to disputes with property values, then the judge makes a decision and has the power only to oblige the defendant party, and in case the defendant party does not fulfill his obligation, then the plaintiff party can turn to the private executor to forcibly execute the property of the defendant in case that person has assets. When it comes to disputes from the labor relationship, only the judge conducts the enforcement procedure and makes a decision. So the procedure starts in court and the judge makes a decision with which he obliges the defendant party and forces him to fulfill the obligation, concretely he returns the worker to the employment relationship in case he finds that the worker has left without right. So in all these cases, the judge leads the enforcement procedure and takes actions in these cases the same as the private bailiff. Thus, we will talk about the topic in more detail during the presentation of this paper.

**Keywords:** procedure, court, executor, disputes, labor relationship.

## Criminal investigation as the initial stage of the criminal procedure

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**Abstract:** At the moment when it is thought that a criminal offense has been committed, or is being committed or is still pending the suspect are also investigated as a criminal offense. The purpose of the criminal investigation is the collection of material, non-material evidence. The facts related to the criminal offenses, and then based on this evidence, it is decided whether the indictment can be filed or not, or whether the procedure can be terminated because there is not enough evidence to convince the court. The criminal investigation is carried out by the criminal prosecution body from the state prosecutor's office through prosecutors, jointly and cooperation with the law enforcement agencies and the police. The investigation is the initial criminal phase, a very sensitive phase because at this stage procedural efficiency and the principles of speed in obtaining the evidence must be as fast as possible because there is a risk of destruction of evidence and facts by suspect or over time some evidence fades and then it is difficult to discover the truth.

**Keywords:** *Investigation, the role of the police at this stage, and the indictment*

## The impact of low-cost airlines' competition on Romanian aviation market

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**Abstract:** The emergence of the low-cost carriers (LCCs) put a high pressure on the traditional airlines all around the world. However, in Romania, the low-cost airlines started to gain ground only in the beginning of the 21st century. In 2007, after the implementation of the "open skies" agreement, the number of the routes operated from/to this state and the number of the airlines' passengers has considerably increased. Considering these aspects, the purpose of the present paper is to analyse the major features of the Romanian air travel market and to identify the characteristics of the passengers of both LCCs and traditional airlines. In order to reach this purpose, the research methods consisted in an investigation of the specialized literature, in a statistical analysis of the secondary data and in a comprehensive survey that targeted passengers from Iasi Airport, which travelled on routes served by LCCs, as well as by traditional carriers. The obtained results indicate that there are significant differences between the low-cost and traditional airlines' passengers, not only in terms of travelling purpose, but also in terms of the travelling frequency. Meanwhile, we notice large differences depending on age and gender. Our findings reveal important aspects that might be useful not only for the decision-makers of the low-cost companies, but also for the CEOs of the Romanian airports.

**Keywords:** low-cost airlines, competition, aviation market, Romania.

## Empirical investigation of the nexus education spending - economic growth

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**Abstract:** The public spending accounts for a large share of the financing of education in most countries, but especially in the developing ones. This can be explained through the fact that, usually, the size of the public sector is considered to be positively related to the level of the economic growth. The literature offers a large support of this idea. For example, Wagner’s law of increasing state activity points to an apparent empirical regularity whereby an increasing share of overall government expenditure in the national economy is associated with rising income per capita. Yet, the problem of public spending efficiency has been largely debated. Considering these aspects, the purpose of the present paper is to empirically investigate whether there is a direct relationship between the public spending on education and the economic growth of the countries. By exploring the patterns of public education spending, we intend to offer insights into differences in the size of the government for developed versus developing states. Our findings underline that the developed economies do not necessarily value education more than the developing states, but they have greater capacity to generate income from taxes. However, the link between the education spending and economic growth is not entirely confirmed.

**Keywords:** education, government spending, economic growth.



## Importance Of Opening Place Of The Inheritance In Republic Of Moldova

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**Abstract:** The death of a natural person is the legal fact that triggers the inheritance devolution. This legal effect is called the opening of the inheritance. Spatial location helps us determine who is the competent authority to determine the circle of heirs. Inheritance devolves at the place where the deceased had its habitual residence at the time of death, and if this habitual residence is not known, the place where its property is located or its principal portion in terms of value is located.

The place of opening of the succession is the last residence of the one who left the inheritance. Proof of the last domicile of the deceased can be provided by any means of evidence. The proof of the last domicile is made with the entries in the identity card or the death certificate of the deceased. In the situation where the last domicile of the deceased is not known, the place where the inheritance is opened is the place where the inheritance assets are located. If the assets of the estate are located in different places, the place where the most valuable part of the immovable assets is located, the place where the most valuable part of the immovable assets is located, will be considered the place where the main part of the value of the movable assets is located.

Establishing as the place of the opening of the inheritance the last domicile of the deceased is based on the presumption that in this place the problems posed by the opening of the inheritance will be solved more easily, since data on the heirs and the patrimony of the deceased can be obtained here. Doctrinally, the notion of residence must be understood as "an element of identification of the natural person, thus not so much the fixed and main residence, as the address where the person actually lives.

In practice, the proof of the last domicile can be made with the mentions contained in: the identity card, the death certificate and/or the final judicial decision of death. [D. Negril, (2015), p. 56 ]

Identifying the domicile is more difficult when the deceased had several residences. The domicile of the natural person is the place where he has his habitual residence.

It is considered that the person keeps his domicile as long as he has not established another one. Habitual residence demonstrates a close and stable connection of the natural person with the targeted place. When determining habitual residence, all relevant factual elements are taken into account, in particular the duration and regularity of the person's presence in the place concerned, as well as the conditions and reasons for this presence.

We appreciate that the stated provisions are not limiting and, consequently, when there are doubts about the inserted mentions, the proof of the last domicile can be made by other means of proof.

**Keywords:** inheritance, place, residence, death, succession

## A Review on the Economic Costs of Domestic Violence in the Republic of Moldova

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**Abstract:** Domestic violence (DV) is one of the most frequent crimes committed in any society and country all over the world, with broad and various consequences, including financial one. The economic consequences of DV affect both victims and countries' economies overall. The aim of the study is to highlight the financial impact and costs of the domestic violence in the Republic of Moldova. The paper provides a comprehensive synthesis of the latest studies and publications on this particular topic. According to a study on the costs of domestic violence in the Republic of Moldova carried out by the Women's Law Centre in 2016, assessed expenses in the areas of social protection, medicine and justice of around 36 million MDL. Due to the response mechanism, which currently focuses on mitigation of DV and not on prevention, the highest costs are for the health sector, especially for hospital treatment of victims. The second highest spending is that of the legal sector, which is due to the procedures of the justice system once a domestic violence case enters the criminal law system. In 2012-2016 more than 81,450 Euro have been paid in reparations by the Moldovan Government to women victims of violence based on the European Court of Human Rights rulings. Studies showed that 60% of social services are covered by the CSOs. It should be noted that the victims' contribution to covering attorney services exceeds four times the state's contribution. To address these challenges, the Group of Experts on Action against Violence against Women and Domestic Violence (GREVIO) strongly encourages the authorities in the Republic of Moldova to put in place a dedicated, transparent and accountable public procedure under which all NGOs providing specialist support services to victims of all forms of violence against women and their children can apply for funding. It is important to underline that the Republic of Moldova grapples with significant costs stemming from domestic violence, underscoring the urgent need for effective measures to address this pervasive issue. Studying the cost of domestic violence is a crucial initiative to raise awareness about the multifaceted impact of such incidents on individuals, families, and society as a whole.

**Keywords:** domestic violence, economic consequences, domestic violence costs.

## Azerbaycan'da Yeşil Pazarlama Stratejinin Ana Yönleri

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**Özet:** Azerbaycan'da yeşil pazarlama stratejisinin uygulanması, ülkenin kültürel, ekonomik ve düzenleyici bağlamına uyarlanmış çevre dostu ürünlerin, uygulamaların ve girişimlerin tanıtımını içermektedir. Azerbaycan'da yeşil pazarlama stratejisinin geliştirilmesinin ana yönleri şunlardır: Azerbaycan tüketicilerinin çevre sorunlarına ve yeşil ürünlere yönelik tutum, tercih ve davranışlarını anlamak için kapsamlı bir pazar araştırması yapmak, hedef segmentlerin veya hizmet geliştirme konularının belirlenmesine yardımcı olacaktır. endişeleniyorlar. Bu süreç, enerji tasarruflu cihazları, organik yiyecekleri, çevre dostu ambalajları, sürdürülebilir modayı veya yeşil enerji çözümlerini içerebilir. Bir ürün veya hizmetin çevresel faydalarının yanı sıra sosyal veya sağlıkla ilgili faydaları vurgulayan pazarlama mesajları, Azerbaycanlı tüketiciler yerel ilgiyi ve kültürel değerleri yaratmaya ve vurgulamaya yönelik uyum, çekiciliği artırabilir.

Çevre sorunları ve sürdürülebilir yaşam uygulamalarının önemi konusunda farkındalığı artırmak için eğitim kurumlarına yatırım yapılması temel konulardan biri olarak kabul ediliyor. Bu, atölye çalışmalarını, sosyal medya kampanyalarını ve yerel çevre kuruluşlarıyla ortaklıkları içerebilir. Çevresel etkiyi en aza indirecek şekilde dağıtım kanallarını optimize etmek, tedarik zincirinin karbon ayak izini azaltmak için çevre dostu ambalajlama, yerel kaynak kullanımı ve verimli ulaşım yöntemleri gibi alanları tanımlar. Sadakat programları, geri bildirim mekanizmaları ve etkileşimli platformlar aracılığıyla sürekli müşteri katılımının güçlendirilmesi, ekolojik faaliyetlere katılımı teşvik eder. dost girişimler ve sürdürülebilir davranış için teşvikler sağlar. Yeşil bir pazarlama stratejisinin etkinliğini izlemek için temel performans göstergelerinin oluşturulması, enerji tasarrufu, atık azaltma veya karbon emisyonları gibi çevresel etki göstergelerinin düzenli olarak değerlendirilmesi kriterini gerektirir. Tüketici geri bildirimlerine dayanarak, pazar trendleri ve ortaya çıkan çevresel kaygılar göz önüne alındığında, pazarlama stratejisini sürekli değerlendirerek tüketici beklentilerini ayarlamak mümkün olacaktır.

Bu yönleri pazarlama stratejisine entegre ederek, Azerbaycan'da yeşil ürün ve hizmetlere yönelik artan talebi kullanarak çevresel sürdürülebilirliği etkili bir şekilde teşvik etmek mümkün olacaktır.

**Anahtar Kelimeler:** yeşil pazarlama, hedef segmentleri, Pazar trendleri, tüketici beklentileri.

## Main Aspects Of Green Marketing Strategy In Azerbaijan

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**Abstract:** Implementation of green marketing strategy in Azerbaijan involves the promotion of environmentally friendly products, practices and initiatives adapted to the cultural, economic and regulatory context of the country. The main aspects of developing a green marketing strategy in Azerbaijan are: Conducting comprehensive market research to understand the attitudes, preferences and behavior of Azerbaijani consumers towards environmental issues and green products will help identify target segments or service development issues. They are worried. This process may include energy-efficient appliances, organic foods, environmentally friendly packaging, sustainable fashion, or green energy solutions. Marketing messages that emphasize the environmental benefits of a product or service as well as social or health benefits are designed by Azerbaijani consumers to create and highlight local interest and cultural values. Harmony can increase attractiveness.

Investing in educational institutions to raise awareness about environmental problems and the importance of sustainable living practices is considered one of the main issues. This may include workshops, social media campaigns and partnerships with local environmental organizations. Optimizing distribution channels to minimize environmental impact identifies areas such as environmentally friendly packaging, local sourcing and efficient transportation methods to reduce the carbon footprint of the supply chain. Strengthening continuous customer engagement through loyalty programs, feedback mechanisms and interactive platforms encourages participation in ecological activities. provides incentives for friendly initiatives and sustainable behavior. Establishing key performance indicators to monitor the effectiveness of a green marketing strategy requires regular evaluation of environmental impact indicators such as energy savings, waste reduction or carbon emissions. Based on consumer feedback, it will be possible to adjust consumer expectations by constantly evaluating the marketing strategy, given market trends and emerging environmental concerns.

By integrating these aspects into the marketing strategy, it will be possible to effectively promote environmental sustainability by exploiting the growing demand for green products and services in Azerbaijan.

Keywords: green marketing, target segments, market trends, consumer expectations.

## Virtual Health Care To Health Organizations in Greece During The COVID-19 Pandemic

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**Abstract:** Virtual health care refers to the "provision of health care services, where distance is a critical factor, by all health professionals using information and communication technologies to exchange valid information for the diagnosis, treatment and prevention of illness and injury, research and evaluation and for the continuing education of health care providers, all in the interest of promoting the health of individuals and their communities" (WHO, 2010). The present study attempted to investigate the view of Greeks about virtual health care in the conditions created by the global pandemic of COVID-19. This view is explored in two dimensions: the first refers to the dimension of perceived quality and the second to the perceived level of difficulties encountered in its application. Data were collected using the European Union Questionnaire for Acceptance of Virtual Health Care to Achieve the Optimal Level of Health, known as Health Optimum, following variant proposed by Vidal-Alaball et al. (2020). The sample consisted of 152 individuals and its responses were analyzed using frequency tables, cross tabulation tables,  $\chi^2$  tests of independence and Spearman correlation analysis. The results showed that virtual health care is evaluated positively and the difficulties that accompany its implementation occur with moderate frequency. The positive rating is higher for women, people with previous telemedicine experience, and health care staff, while the perceived level of difficulty in its implementation does not differ depending on the demographic or other characteristics of the individual. Finally, these two dimensions are negatively correlated. That is, the perceived quality of virtual health care increases (decreases) the less often (more often) difficulties are encountered in its implementation.

**Keywords:** Virtual Health Care, Telemedicine, Greece, Pandemic COVID-19.

## Consumer Expenditures and Inequality in Bulgaria: A Decomposition Analysis

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**Abstract:** The paper analyzes the inequality of consumer's spending in Bulgaria by calculating and decomposing the Gini coefficient for expenditures. The study uses the inequality decomposition method proposed by Pyatt, Chen and Fei (1980). The data is obtained from the Household Budget Survey of the National Statistical Institute of the Republic of Bulgaria for the period 2008-2022. The main objective of the study is to see how overall inequality translates into inequality within each expenditure component. For this purpose, concentration coefficient, contribution and elasticity for each group of consumer expenditures are calculated. The results from the decomposition show that overall inequality in consumer expenditures is driven by non-food spending, which are more unevenly distributed than food spending. Consumer expenditures are very unequal on non-food items like recreation, culture and education; transport; furnishing and maintenance of the house. On the other hand, lower concentration coefficients are observed for the commodities, that are considered as necessities like food and health, but also for alcoholic beverages and tobacco and communication.

**Keywords:** Inequality; Consumer expenditure; Gini Coefficient; Decomposition.

## Public Finance and Parliamentary Constitutionalism: An Analysis of Institutional Dynamics

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**Abstract:** This article investigates the intricate relationship between public finance and parliamentary constitutionalism, aiming to shed light on the underlying mechanisms that shape fiscal policies within the framework of constitutional governance. The study employs a comprehensive methodology that combines legal analysis, historical examination, and empirical research to explore the evolving dynamics between parliamentary institutions and fiscal decision-making processes. The primary aim of the research is to understand how parliamentary constitutionalism influences public finance, and reciprocally, how fiscal policies impact the functioning of parliamentary systems. The methodology involves a comparative analysis of constitutional frameworks across diverse jurisdictions, examining case studies and legislative histories to identify patterns and trends in the interplay between fiscal matters and constitutional principles. Findings from the study reveal that the nature of parliamentary constitutionalism significantly shapes the formulation, implementation, and oversight of public finance policies. The paper highlights the pivotal role of parliamentary institutions in maintaining fiscal responsibility, ensuring transparency, and fostering public trust. Furthermore, it uncovers the impact of fiscal policies on the constitutional balance of powers, as well as their implications for democratic governance. The relevance of this study lies in its contribution to both academic discourse and practical policymaking. By elucidating the intricate relationship between public finance and parliamentary constitutionalism, the research provides insights that can inform constitutional reforms, legislative practices, and fiscal decision-making processes. The findings are pertinent for policymakers, legal scholars, and practitioners seeking to enhance the effectiveness of parliamentary systems while promoting responsible fiscal governance.

**Keywords:** constitutional governance, legal, parliamentary systems, public finance policies, fiscal governance.

## Failure to report the preparation of the criminal offense according to the Criminal Code of Kosovo

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**Abstract:** In the moment of identifying the commission of a criminal offense, any person who notices the same must notify the security authorities, specifically I must notify, and not only after the criminal offense has been committed, but in cases where he identifies any action that is taken to commit any criminal offense must be reported. Failure to report a criminal offense in case it is identified by a person is illegal, therefore it is considered as cooperation with the perpetrator of the criminal offense. Thus, based on the Criminal Code of Kosovo, it is emphasized that anyone who, being aware of the preparation for the commission of a criminal offense, does not report this fact at the time when the commission of the criminal offense has yet to be committed can be avoided while the criminal offense has been committed or attempted, shall be punished by a fine or imprisonment up to one (1) year. And in addition to this provision, it is also emphasized that anyone who does not notify the preparation for the commission of one or more of the criminal offenses such as serious murder, murder, assault with serious bodily injury, is punished with imprisonment from three (3) months to three (3) ) year. In addition to the above-mentioned offenses, the Criminal Code of Kosovo also mentions criminal offenses such as crimes against humanity, criminal offenses against sexual integrity, the criminal offense of official corruption and official duty, in case it is identified that they will be committed in the future and are not notified. security bodies, that person will also be punished according to the Criminal Code of Kosovo. Thus, in general, regarding the non-notification of the preparation of the criminal offense based on the provisions of the Criminal Code of Kosovo and the applicable practice, I will speak during the presentation of this paper.

**Keywords:** Criminal Offense, Failure to notify, actions, Criminal Code, penalties.

## False notification or report according to the Criminal Code of Kosovo

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**Abstract:** The criminal offenses that we identify either before or after the action must be reported, because if the opposite happens, we will be punished based on the Criminal Code of Kosovo. But announcing or reporting the actions in the event that it is false is punishable for the person who undertakes this action. This is also determined by the Criminal Code of Kosovo, according to which it is stated that anyone who makes a false report to the official person charged with the task of investigating or following up, that the designated person has committed a criminal offense which is being pursued according to the official duty, knowing that such person is not the perpetrator, shall be punished with a fine or imprisonment of three (3) months to three (3) years. In addition to this provision, it is also emphasized in the Code that anyone who provides false evidence of a criminal offense or in any other way causes the initiation of criminal proceedings for a criminal offense which is pursued ex officio against a person whom he knows did not commit the offense criminal, is punished with the punishment from paragraph 1. of this article. Also, anyone who informs himself that he has committed a criminal offense which is prosecuted according to official duty, even though he has not committed such an offense, is punished with a fine or imprisonment of up to three (3) months. In all these cases, it is forbidden to undertake false actions, since the person who informs or files a false criminal report is then punished with a fine or even years of imprisonment. Regarding the topic in question, I will speak more extensively in the presentation of the paper at the congress.

**Keywords:** notification, report, false, criminal code, criminal offense, punishment.



## “Bridges” between Management Learning and Practice: Design and Assessment of a Business Simulation Game in Higher Education

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**Abstract:** Although there is a growing scholarly thread of research which deals with measured and/or reported outcomes of simulation games, the literature that addresses design and assessment of instructional games in management and business-related topics from higher education (HE) field is surprisingly scarce. Consequently, we propose a guide for evaluating paper based (i.e., non-computer) business simulation games by conceptually overlapping the design and mechanisms of our novel business simulation game (BSG) “Bridges”, with Garris’ et al. (2002) input-process-output (IPO) model of instructional games and learning. Thus, we adopt and adapt (to a non-computer game framework) the models’ proposed game dimensions paired with the instructional content (i.e., our pedagogical goals), purposively meeting the expected learning outcomes.

Furthermore, we engage in a quantitative and qualitative exploration (i.e., thematic and content analysis) of: (1) AI-generated data, based on structured interviews regarding the assessment of the game design and a pre-game questionnaire (both, prior the game play), (2) observational data gathered (during the game play) by the authors from the dynamics of the games’ surface elements and the players actions and reactions, and (3) an post-game questionnaire, an audio recorded debriefing session and student participants’ semi structured experiential essays (all three, after the game play).The specific results of our paper derive from the proposed design and assessment methodology of a business simulation game, through an in-depth description of “Bridges” and a novel attempt to integrate AI generated evaluative data in a qualitative research framework. We not only show what can be achieved through playing a BSG but also, why it should and how this can be done. We modestly believe that this paper creates a fertile (play)ground for both scholars and instructors, to engage in teaching and/or designing and evaluating non-computer games in HE.

**Keywords:** business game, simulation, perceived outcomes, higher education

**Subject classification codes:** A220, M100, Y800

## The impact of climate change on prosperity – past, present and future

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**Abstract:** Climate change awareness and reduction represents a top target of worldwide current agendas. The purpose of this presentation is to evaluate the impact of green house gas and carbon dioxide emissions on economic prosperity. Using a balanced panel dataset for 185 worldwide countries between 2000-2022, we validate the direct impact of environmental proxies upon development through Log-Log simple regression modelling. Policy recommendations are then sketched, considering the future perspectives.

## The Importance Of Correctly Drafting The Holographic Will To Ensure The Legal Transmission Of The Inheritance

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**Abstract:** Testamentary freedom is the principle on the basis of which each person is free to decide on the elements of his patrimony for the time when he will not be alive. Holographic wills are recognized in some jurisdictions, but their acceptance and legal validity may vary. Some regions may have specific requirements or restrictions regarding holographic wills and may not be accepted in certain jurisdictions. It is essential to consult local laws or legal advice to understand the validity and acceptance of holographic wills in a particular area. While specific legal practices may evolve, in the Republic of Moldova wills must, as a rule, be drawn up in the presence of witnesses or in front of a notary public. The objective of the presented paper is to elaborate a deep and comprehensive study on all the issues related to the stability and analysis of the object as a necessary condition for the correct drawing up of the holographic will to ensure the transmission of the inheritance based on a legally drawn up will, i.e. under the law, which allows raising the level of knowledge in the given field and which will contribute to the correct application of the legislation, to the effective solution of the problems in the matter and, of course, to a better understanding of the subject, paying special attention to the comparison procedure, because we consider this way of research efficiency.

**Keywords:** testamentary freedom, inheritance, , holographic will, testamentary heir, succession procedure.

## Comorientes and co-deceaseds – de cujus successione agitur

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**Abstract:** When talking about inheritance law, the subjects entitled to inherit are the essential element of the legal relationship. They, in turn, must meet certain legal conditions in order to inherit: capacity, dignity and vocation. The relatives of the deceased, regardless of whether the family relationship results from marriage, out of wedlock or adoption, as well as the surviving spouse, are called to inheritance.

Persons with a reciprocal or unilateral vocation of succession who died without it being possible to establish whether one survived the other are presumed to have died concurrently (comorientes and co-deceaseds). The inheritance of each comorient or co-deceased is collected by his/her own heirs and no deceased is entitled to the inheritance of the other or the other deceased. However, the rule does not apply if it is shown that at least a fraction of a second has elapsed between the death of one deceased and the other.

Thus, it follows, that successors, in order to be able to inherit, must have physical capacity, that is, exist at the time of opening of the inheritance.

In a legal sense, comorientes are two or more persons who died in the same circumstance and under such conditions that it cannot be established whether one survived the other, since they are deemed to have died at once, and there is mutual inheritance between the persons concerned. Co-deceaseds are natural persons with unilateral or reciprocal succession capacity, legal or testamentary, who died in simultaneous but different circumstances, so that the order of death cannot be established.

Thus, the distinction between comorientes and co-deceaseds is dictated by the circumstances of death, which may be similar or different.

**Key words:** comorient, co-deceased, succession vocation, inheritance, survived.

## Customer Engagement Behavior And Motivation In Social Media, The Indermediary Impact Of Brand Experience. A Systematical Literature Review

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**Abstract:** This systematical literature review conceptualizes the connection between customer engagement behavior and motivation in Social Media, taking into consideration brand experience. The aim of this review is to gather and analyze existing literature on CEBs in several domains. By investigating the reasons behind consumers' use of social media and carrying out a three-dimensional assessment, we can better understand their motives for information search, entertainment, and social engagement. By analyzing how consumer brand experience functions as a mediator and establishing a connection between customer motivation and social media usage. During this paper the consumer motivation from the numerous aspects of information search, entertainment, and social connection were explored. Using a systematic literature review method, this paper provides an in-depth analysis of the extant empirical literature. Initially consumer motivation for entertainment, social media, and information seeking has a big influence on their brand experience. Secondly, customer engagement behaviors like as feedback, reuse, and WOM intents are strongly influenced by the consumer brand experience. Lastly, this study investigates how consumer brand experience influences social media by acting as a mediator among buyer incentive and customer engagement behavior. The discoveries will shed light on the factors that encourage consumers to use social media. Social media, smartphones, and electronic devices have grown into being a crucial component in everyone's everyday life. Social media has altered how individuals live in the present-days due to the fast growth of technological advances in communication and the quick spread of smart gadgets. On the other hand, the connection across consumer motivation and engagement behavior is mediated by brand experience

**Keywords:** social media, customer engagement behavior, motivation, brand experience

## Paradigm Shift in Finance: A Review of Alternative Perspectives

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**Abstract:** Mainstream approaches and modern finance theory have faced intense criticism, especially after the 2008 financial crisis. In addition to criticism and pressure on the financial system, the integration of different studies and research projects with finance has changed modern finance thought. This study focuses on these approaches and their practices such as ethical, social, and responsible finance; humanitarian and Islamic finance; and participation finance system. The theoretical background of this study depends on the paradigm shift in social sciences, criticism of mainstream economic theories and assumptions, and the necessity of rethinking finance theory. Postmodern finance approaches are then introduced in the context of the literature. Besides the evaluation of the alternative approaches and practices, topology of the changing finance paradigm is presented.

**Keywords:** Postmodern finance, paradigm shift, participation finance system.

## Dinamik Yetenekler Yaklaşımı ve Mavi Okyanus Stratejisi İlişkinin Bibliyometrik Analizi

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**Özet:** Stratejik yönetim alanındaki temel soru; işletmelerin rekabet üstünlüklerini nasıl elde ettikleri ve sürdürdükleridir. Kim ve Mauborgne (2005b), rekabetin yoğun olduğu kırmızı okyanusların tüm endüstrileri kapsadığını belirtmektedir. Kim ve Mauborgne (2005b)'nin mavi okyanus stratejisi sayesinde işletmeler yeni pazarlar bularak ya da mevcut pazarın sınırlarını genişleterek rekabetten kurtulmayı hedeflemektedir. Dinamik yetenekler, organizasyonlarda değişimi yönetmek için gerekli olan beceriler ve kabiliyetlerdir. Bu yetenekler ile organizasyonlar değişen pazar koşullarına, teknoloji trendlerine ve müşteri ihtiyaçlarına hızlı bir şekilde uyum sağlamaktadır. Mavi Okyanus Stratejisi, yeni bir pazar oluşturmak veya mevcut pazarları dönüştürmekle ilgilidir ve bu da dinamik yeteneklerin kullanılmasını gerektirir. Bir işletmenin dinamik yeteneklerini kullanarak Mavi Okyanus Stratejisi uygulayabilmesi daha etkili ve kolay olabilir. İşletme dinamik yeteneklerini kullanarak yenilikçi fikirlerin ortaya çıkmasını sağlayabilir ve böylece rekabet avantajı elde edebilir. Bu nedenle, mavi okyanus stratejisinde dinamik yeteneklerin önemi büyüktür ve stratejinin başarısı için doğru yeteneklerin belirlenmesi ve uygulanması gerekmektedir. Kim ve Mauborgne (2015), yöneticilerle yaptıkları çalışmalar neticesinde, yöneticileri şirketlerin pazar payı için kanlı bir rekabet içine girdiği kalabalık pazar alanlarına sabitleyen altı varsayım ile karşılaşmakta ve bunları kızıl tuzaklar olarak isimlendirmektedirler. Kızıl tuzaklar işletmelerin mavi okyanuslara girmesini engellemektedir. Bu durum, bu çalışmanın da temelini oluşturan 'İşletmenin sahip olduğu dinamik yetenekler sayesinde işletmenin kızıl okyanustan mavi okyanusa geçiş yapması kolaylaşır mı?' sorusunun sorulmasını ve konuyla ilgili çalışmaların incelenmesini sağlamıştır. Çalışma kapsamında 'Mavi Okyanus Stratejisi', 'Dinamik Yetenekler' ve 'Mavi Okyanus Stratejisi ve Dinamik Yetenekler' konularında odaklanmış çalışmaların bibliyometrik analizi yapılmaktadır. Bibliyometrik analiz ile görselleştirme, haritalama ve çok boyutlu analiz gerçekleştirilebildiğinden dolayı akademik trendleri izlemek kolaylaşmaktadır. Bu çalışmada konu ile ilgili yayınlar görselleştirilerek araştırma alanındaki eksiklikler tespit edilmektedir. Çalışma kapsamında veri tabanı olarak nitelikli ve güvenilir çalışmaları kapsayan Web of Science seçilmiştir. Analizler VOSviewer programında gerçekleştirilmiştir.

**Anahtar Kelimeler:** Bibliyometrik Analiz, Mavi Okyanus Stratejisi, Dinamik Yetenekler

**Abstract:** The fundamental question in the field of strategic management is how businesses achieve and sustain their competitive advantage. Kim and Mauborgne (2005) state that red oceans, where competition is intense, cover all industries. Through Kim and Mauborgne's (2005) blue ocean strategy, businesses aim to escape competition by finding new markets or expanding the boundaries of the existing market. Dynamic capabilities are the skills and abilities required to manage change in organizations. With these capabilities, organizations quickly adapt to changing market conditions, technology trends and customer needs. Blue Ocean Strategy is about creating a new market or transforming existing markets, which requires the use of dynamic capabilities. It can be more effective and easier for a business to implement a Blue Ocean Strategy by using its dynamic capabilities. By utilizing its dynamic capabilities, the business can enable innovative ideas to emerge and thus gain a competitive advantage. Therefore, dynamic capabilities are of great importance in blue ocean strategy and the right capabilities need to be identified and implemented for the success of the strategy. Kim and Mauborgne (2015), through their work with managers, come across six assumptions that anchor managers in crowded market spaces where companies compete fiercely for market share, which they call red traps. Red traps prevent businesses from entering blue oceans. This situation has led to the question 'Can the dynamic capabilities of the business make it easier for the business to transition from the red ocean to the blue ocean?', which forms the basis of this study, and to examine the studies on the subject. Within the scope of the study, a bibliometric analysis of the studies focused on 'Blue Ocean Strategy', 'Dynamic Capabilities' and 'Blue Ocean Strategy and Dynamic Capabilities' is conducted. Since visualization, mapping and multidimensional analysis can be performed with bibliometric analysis, it is easier to follow academic trends. In this study, publications on the subject are visualized and deficiencies in the research area are identified. Within the scope of the study, Web of Science, which includes qualified and reliable studies, was selected as the database. Analyses were carried out in VOSviewer program.

**Key Words:** Bibliometric Analysis, Blue Ocean Strategy, Dynamic Capabilities.

## Türkiye’de Göç Bakanlığı Kurulmasının Gerekliliği Üzerine bir Tartışma

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**Abstract:** İnsanlar tarihin ilk dönemlerinden itibaren yer değiştirmişler ve kendileri için daha elverişli olduğunu düşündüğü yerlere doğru göç hareketlerinin parçası olmuşlardır. Her göç serüveni sebep ve sonuçlarıyla farklılıklar taşıma potansiyeline rağmen bir yandan da hem sebepler hem de sonuçlar itibarıyla benzerlikler üzerinden değerlendirilebilir. İletişim ve ulaşım olanaklarının öncesiyle kıyaslanamayacak kadar geliştiği küresel süreçte ise göç hareketliliği dünya toplumları, devletler ve iktisadi sistemler için farklı bir anlam taşımaya başlamıştır. Bu açıdan bakıldığında göç tarihsel bir olgu olduğu kadar iktisadi ve toplumsal boyutları önem taşıyan siyasal ve yönetsel bir gerçeklik olarak belirmektedir.

Savaşlar, ekonomik ve siyasal krizler yanında refah ve daha iyi bir yaşam kaygısı da göç gerçekliğinin başlıca tetikleyicilerindedir. Göç süreci, niteliğine ve kapsamına bağlı olarak toplumların demografik yapılarını, iktisadi ve siyasal sistemlerini derinden etkileyebilmektedir. Göç olgusunun bu çok boyutlu niteliği devletlerin göç örgütlenmesine gittikçe daha fazla önem vermelerine ve ülkeden ülkeye değişen yaklaşımlarla ile göç merkezli kurumlar inşa etmelerine neden olmaktadır. Tarihin her döneminde Türkiye coğrafyası ya göç alan, göç veren ya da göç aktaran olarak bazen ise hepsini kapsayan niteliği ile aktif ve hareketli bir yaşam alanıdır. Türkiye Cumhuriyeti özelinde bakıldığında 2000’li yıllardan sonra bu konunun merkezi bir örgüt düzeyinde ele alınma zorunluluğu ortaya çıkmış ve Göç İdaresi Genel Müdürlüğü’nün oluşturulmasıyla temel kurumsallaşma süreci ete kemiğe bürünmüştür. GİGM, kuruluş amacına bağlı olarak son 10 yılda konusu, faaliyet alanı, personeli ve bütçesi gibi boyutlar açısından değerlendirildiğinde çok hızlı büyümüş bir teşkilatlanma süreci yaşamıştır. Bu kurumsal yapılanmaya rağmen sıklıkla göç konusunun bir genel müdürlük düzeyinde ele alınamayacağı bir göç bakanlığı örgütlenmesine gereksinim olduğu tartışmaları farklı kesimlerden, farklı siyasal parti ve kamuoyu belirleyiciler tarafından dillendirilmektedir. Bu çalışma tam da bu perspektifi inceleme konusu edinmekte ve göç olgusunu merkeze alan bir bakanlık örgütlenmesine gereksinim olup olmadığını tartışmayı amaçlamaktadır. Konu bu çalışma özelinde tarihsel bir perspektifin de yardımıyla iktisadi ve siyasal yönleri dışlamadan ama daha çok yönetsel boyutu öne çıkaracak bir biçimde ele alınacaktır.

**Anahtar Kelimeler:** Göç Bakanlığı Göç Politikası, Göç Yönetimi, Göç Örgütlenmesi.



## Analysis of Economic Targets in Türkiye Information Society Strategies Action Plans

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**Abstract:** With the spread of information and communication technologies, an information society that accelerates socially, economically and environmentally sustainable growth and development, and becomes stronger by being connected to each other, is being formed all over the world.

The process of transformation into an information society; The population structure of the country offers important opportunities in strengthening the country's economy with its entrepreneurs who have experience in using the advantages of the globalizing world economy. The Information Society Strategy, which determines strategic areas for the effective use of these opportunities, came to the agenda in Turkey in 2006. While creating strategies that include a holistic transformation to increase social welfare; It is aimed to achieve sustainable, knowledge-based social and economic development with global competitiveness.

In this study, Turkey's Information Society Strategy Action Plans covering the years 2006-2023; It was analyzed in terms of its effects on productivity increase and economic growth. Achieving the goals of Information Society Strategies is considered important as the Turkish economy brings to the fore important opportunities in investment conditions at national and international levels.

**Key Words:** Information society, economic development, social transformation

### Türkiye Bilgi Toplumu Stratejileri Eylem Planlarında Ekonomik Hedeflerin Analizi

**Özet:** Bilgi ve iletişim teknolojilerinin yaygınlaşmasıyla birlikte tüm dünyada sosyal, ekonomik ve çevresel açıdan sürdürülebilir büyüme ve kalkınmayı hızlandıran, birbirine bağlanarak güçlenen bir bilgi toplumu oluşturmaktadır.

Bilgi toplumuna dönüşüm süreci; ülkenin nüfus yapısı, küreselleşen dünya ekonomisinin avantajlarını kullanma tecrübesine sahip girişimcileri ile ülke ekonomisinin güçlendirilmesinde önemli fırsatlar sunmaktadır. Bu fırsatların etkin kullanılmasına yönelik stratejik alanları belirleyen Bilgi Toplumu Stratejisi Türkiye'de 2006 yılında gündeme gelmiştir. Planlarda, toplumsal refahın artırılmasına yönelik bütünsel bir dönüşümü içeren stratejiler oluşturulurken; küresel rekabet gücü ile sürdürülebilir, bilgiye dayalı sosyal ve ekonomik kalkınmanın sağlanması amaçlanmaktadır.

Bu çalışmada Türkiye'nin 2006-2023 yıllarını kapsayan Bilgi Toplumu Stratejisi Eylem Planları; verimlilik artışı ve ekonomik büyümeye etkileri açısından analiz edilmiştir. Türkiye ekonomisinin ulusal ve uluslararası düzeyde yatırım koşullarında önemli fırsatları ön plana çıkarması nedeniyle Bilgi Toplumu Stratejileri hedeflerine ulaşılması önemli görülmektedir.

**Anahtar Kelimeler:** Bilgi toplumu, ekonomik kalkınma, toplumsal dönüşüm

## Yapay Zekanın İşe Alım Çalışmalarında Kullanımının Etkileri

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**Özet:** Günümüzde her geçen gün daha fazla gündelik hayatta ve iş yaşamında karşılaştığımız yapay zeka, insan kaynakları politikalarında da yerini bulacaktır. İşletmelerin önemli birimlerinden olan insan kaynaklarında işe alım uygulamaları organizasyonel yapıda performansı sağlayan bir öneme sahiptir. Geleneksel işe alım uygulamalarında iş başvuru formu üzerinden alınan bilgiler ve aday ile yüz yüze görüşmeler sonrası temel şartların sağlanmasından sonra işbaşı verilebilmekteydi. Sonrasında bu yöntem de farklılıklara gidilerek sadece aday ve insan kaynakları yetkilisinin görüşmelerinin ötesinde psikolojik yapının ve farklı iş tanımlarında farklı envanter uygulamaları kullanılmaya başlanmıştır. Şuan ise bir adım daha öteye geçerek yapay zekanın getireceği pratik uygulamalar ve istatistik gibi değerlendirmelerin verilerine dayalı işe alım politikaları uygulanabilir. Günün koşullarına uyum sağlamak ve somut değerlendirmeleri gözönüne alarak işletmeler yakın tarihte yapay zekayı bu alanda da değerlendirmek isteyeceklerdir. Bu sayede insan faktörlü duygusal yoğunluğa bağlı hatalı değerlendirmeler minimize edilerek ve işverimliliğini artıracak sonuçlar elde edilebilir. Ancak, her ne kadar yapay zeka kolaylık sağlayacak olsa da bu uygulamalarda yaşandıkça çıkması olası hatalarında kök nedenleri iyi değerlendirilmesi gerekmektedir.

**Anahtar Kelimeler:** Yapay Zeka, İnsan Kaynakları

## Holding Şirketlerin İlişkili Kişilerine Borçlanma Yasağının Değerlendirilmesi

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**Özet:** Mülga 90 sayılı Kanun Hükmünde Kararname (KHK) ile bağlı ve iştiraki bulunan işletmelerin bu surette borçlanma yapmaları izin alınmasa dahi suç olarak tanımlanmamakta ve bu konuda hükümler yer almamaktadır. Ancak 6361 sayılı Finansal Kiralama, Faktoring ve Finansman Şirketleri Kanunu ile anılan kanun hükmünde kararname ilga edilmiş, izinsiz olarak para ya da başka suretlerle menfaat karşılığında borç verme eylemi ise suç olarak düzenlenmiştir. Arızı olarak tek seferde yapılmış olması dahi borç verme eylemi suç olarak tanımlanmaktadır. Bu durumda Ticaret Müdürlüklerinden izin alınmak suretiyle kurulan holding işletmelerinin faaliyet biçimlerinde bir sorun ortaya çıkmaktadır. Holding şirketleri Türk Ticaret Kanunu hükümlerine göre anonim şirket şeklinde teşekkül etmek zorundadırlar. Kuruluş amaçları; temel olarak bağlı ve iştiraki bulunduğu şirketlerin finans ve mali birlikteliklerini sağlayarak oluşturulan fonun yönetimi ve düzenli şekilde işletilerek gerekli koordinasyonun sağlanması olarak belirtilebilir. Bu sebeple holdinglere bağlı işletmelere fon ihtiyaçlarını sağlayacak organizasyonun icrası için doğasını oluşturmaktadır. Diğer taraftan vergi mevzuatımızda “para faizsiz ev kirasız olmaz” prensibi gereği her ne surette olursa olsun borç para vermek emsaline uygun bir faiz geliri elde edilmesini zorunlu kılmaktadır. Bu durumda mali idare tarafından yapılan vergi incelemelerinde ilişkili kişilere verilen borçlara yönelik adet hesabı yapılarak borç verenlere kurumlar vergisi ile katma değer vergisi tarhiyatı yapılmaktadır. Dolayısıyla bir yanda ticari yaşamın bir gereği olarak holding şirketlerinin ilişkili şirketlerine borç vermesi vergi mevzuatı yönünden faiz geliri alınmasını zorunlu kılmakta, diğer yandan da ticaret ve ceza mevzuatında izinsiz bu işlerin yapılması suç olarak belirlenmektedir.

Çalışmamızda hukuksal olarak sorun yaratabilecek ve özellikle holding şeklinde organize edilen işletmelerin sorun yaşayabileceği ortaya konulmuştur. Mülga 90 sayılı KHK ile suç olması önlenen ancak yerine ihdas edilen 6361 Sayılı yasa ile konunun suç olmasını engelleyen hükümlerin bulunmaması sebebiyle yaşanan hukuksal karmaşanın bir yasal düzenleme ile giderilebileceği sonucuna ulaşılmıştır.

**Anahtar Kelimeler:** Holding şirketler, Borçlanma Yasağı, Adat Hesabı

## Zeytinyağı İşletmelerinde İnovasyon Yönetimi Üzerine Bir İnceleme: Balıkesir- Ayvalık İlçesi Örneği

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**Özet:** Günümüzde işletmeler bir taraftan kaynak verimliliğini artırma çabası içinde iken, diğer taraftan, yasal düzenlemeler doğrultusunda, çevreye duyarlı üretim teknikleri ile sürdürülebilir üretim yaparak ve uygun saklama koşulları sağlayarak çevre kirliliğinin önüne geçmek, küresel pazara uyum sağlamak ve tüketici taleplerini karşılamak durumundadırlar.

Zeytinyağı sektöründe de verimlilik, gıda güvenliği, çevreye duyarlılığı ve rekabetçiliğin sağlanmasında inovasyon önemli bir konudur. Yeni fikirler ile ürün, yöntem ve hizmeti geliştirerek firma ve müşteri memnuniyetini artırmak ve yeni müşterilere ulaşmak hedeflenmektedir. İnovasyon yapan işletmeler yurt içi ve yurt dışı piyasalarda daha güçlü bir yer edinebilmektedir. Bu çalışmada altın sarısı renge sahip olan, hoş kokulu, aroması yüksek ve kimyasal-duyusal özellikleri çok iyi olan ve coğrafi işarete sahip olmasıyla daha da öne çıkan Ayvalık zeytinyağı ele alınmış ve Ayvalık ilçesinde bulunan zeytinyağı firmalarının inovasyon yapma durumları ve inovasyon hakkındaki tutum ve davranışları incelenmiştir. 2022 yılı itibarıyla Ayvalık ilçesinde bulunan tüm firmalar ile görüşülmesi hedeflenmiş, ancak görüşmeyi kabul eden 15 firma ile görüşülebilmektedir. Çalışmada "İnovasyon Yetenek Ölçeği" ve "İnovasyonu Destekleyen Örgüt Kültürü Ölçeği" ölçeklerinden yararlanılmış ve anket sonucunda elde edilen veriler ortalamalar ve oransal değerler olarak verilmiştir. Araştırmada kapsamında görüşülen 15 firmadan beşinin son beş yılda herhangi bir inovasyon faaliyetinde bulunmadığı, 10'unun ise inovasyon yaptığı belirlenmiştir. İnovasyon yapan firmaların ürün inovasyonu, strateji inovasyonu, süreç inovasyonu ve pazar inovasyonu yeteneklerinin iyi olduğu belirlenmiştir. Firmaların inovasyon yapmamasında etkili olan önemli bir husus ise yeni teknolojilerle mekanizasyonun daha da gelişmesiyle kültürel üretimin gittikçe yok olması endişesidir. Geliştirilen teknolojilerin fiyatlarının yüksekliği firmaların teknolojiye ulaşmasında en önemli etken olarak ortaya çıkmaktadır. Çalışmada Ayvalık zeytinyağının doku ve lezzeti korunacak şekilde kalite ve verimini arttıracak inovatif yöntemler kullanılarak bu problemlerin giderebilmesi gerektiği belirtilmiştir.

**Anahtar kelimeler:** Zeytinyağı, Ayvalık, Zeytinyağı işletmeleri, inovasyon

### A Research on Innovation Management in Olive Oil Enterprises: The Case of Balıkesir-Ayvalık District

**Abstract:** Nowadays, while enterprises strive to increase resource efficiency, on the other hand meet consumer demands by making sustainable production with environmentally sensitive production techniques and providing appropriate storage conditions in line with increasing environmental responsibility, global market adaptation and legal regulations.

In the olive oil sector, innovation is an important issue in ensuring efficiency, food safety, environmental sensitivity and competitiveness. It is aimed to increase company and customer satisfaction and reach new customers by developing products, methods and services with new ideas. Innovative enterprises can gain a stronger place in domestic and foreign markets. For this reason, the innovation status and the attitudes and behaviors of olive oil companies in Ayvalık district towards innovation were analyzed by taking Ayvalık olive oil, which has a golden yellow color, fragrant, high aroma and very good chemical-sensory properties and stands out even more with its geographical indication. As of 2022, it was aimed to interview all enterprises in Ayvalık district but the survey could be conducted with 15 companies that accepted the interview. In the study, "Innovation Capability Scale" and "Innovation Supportive Organizational Culture Scale" were used and the data obtained as a result of the survey are given as averages and proportional values. It was determined that five of the 15 enterprises interviewed within the scope of the research did not engage in any innovation activities in the last five years, while 10 of them innovated. It has been determined that the product innovation, strategy innovation, process innovation and market innovation capabilities of the innovating companies are good. An important issue that is effective in the non-innovation of the companies is the thought that cultural production will gradually disappear with the further development of mechanization with new technologies. The high prices of the developed technologies have emerged as the most important factor for companies to access technology.

It is concluded that these problems should be solved by using innovative methods to increase the quality and yield of Ayvalık olive oil in a way to preserve its texture and flavor.

**Key words:** Olive oil, Ayvalık, Olive oil enterprises, innovation

## Türkçülüğün Sınır Ötesi İnşası: Rusya Kökenli Türkçüler Üzerine Bir İnceleme

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**Özet:** Türkçüler tarafından 'milliyet yüzyılı' olarak nitelendirilen 19. yüzyıl, Türkçülük ideolojisinin de siyasal ve kültürel düzeyde güçlendiği bir yüzyıla karşılık gelmektedir. Osmanlı'nın son döneminde imparatorluk toprakları dışında da etkili olan Türkçülük, Rus İmparatorluğu'nda yaşayan Müslüman Türkler arasında taraftar bulabilmiştir. Bu ideoloji, erken Cumhuriyet dönemi Türkçülüğünden farklı olarak, her ne kadar Türkiye'nin modernleşme mecrasında bir etkiye sahip olsa da menşesine uygun olarak Rusya'daki 'milli davanın' sürdürülmesi ve gelişmesinde kilit bir rol oynamıştır. Bu 'milli davanın' ana bileşenlerini ise, milliyetçi bir modernleşme projesine uygun olarak milli benliğin korunması, bağımsızlık ülküsü, Türk dilinin Rus diline karşı muhafazası ile Batı'nın ilim ve irfanda gösterdiği başarının örnek alınması oluşturmaktadır. Rusya kökenli Türkçülerdeki bu milli davayı ve benliğin koruma güdüsü, Pantürkist ülkünün benimsenmesine yol açarken, erken Cumhuriyet dönemi milliyetçiliğinin ideolojik sınırlarını milli sınırların ötesinde hayal etmeyi de mümkün kılmıştır. Bu çalışma, milli sınırları aşan bu ülkünün Rusya kökenli Türkçüler tarafından nasıl oluşturulduğunu, Türkçülüğün çıkış sürecini ve nedenlerini Rusya kökenli Türkçüler üzerinden anlamaya çalışmaktadır. Bu anlama çabası araştırma nesnesi olarak Yusuf Akçura, İsmail Gaspıralı, Ahmet Ağaoğlu ve Hüseyinzade Ali Turan'ın eserlerine odaklanarak Pantürkizm'in sınır ötesi kökenlerini inceleyecektir.

**Anahtar Kelimeler:** Milliyetçilik, Türkçülük, Türkçüler, Rusya

**Abstract:** The nineteenth century, dubbed the 'century of nationality' by Turkists, corresponded to a period in which Turkism's doctrine gained political and cultural momentum. Turkism, which was also strong outside the empire's borders during the Ottoman Empire's final years, found adherents among Muslim Turks living in the Russian Empire. This movement, unlike the Turkism of the early Republican period, played a crucial part in the maintenance and expansion of the 'national cause' in Russia, in keeping with its origins, although having an impact on Turkey's modernization process. The main components of this 'national cause' are the protection of the national identity in accordance with a nationalist modernization project, the ideal of independence, the preservation of the Turkish language against the Russian language, and referencing Western success in science and knowledge as an example. While the desire to safeguard the national cause and identify among the Russian based Turkists resulted in the embrace of the Pan-Turkist ideal, it also allowed for the expansion of the ideological boundaries of early Republican nationalism beyond national borders. This study attempts to comprehend how Turkists of Russian descent formed this ideal that transcends national borders, as well as the process of Turkism's emergence and its reasons through Russian based Turkists. Therefore, this study will explore the genesis of Pan-Turkism across borders, with a focus on Yusuf Akçura, İsmail Gaspıralı, Ahmet Ağaoğlu, and Hüseyinzade Ali Turan.

**Keywords:** Nationalism, Turkism, Turkists, Russia

## Kazakistan Ekonomisinde Kilit Sektörlerin Değişimi: 2000-2022 Dönemi

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**Özet:** Sektörlerin üretim süreçlerindeki karşılıklı bağımlılıkları olarak tanımlanan bağımlaşma ilişkileri, girdi-çıkı modelleriyle ampirik olarak analiz edilmektedir. Politika yapıcılar açısından söz konusu ilişkilerin ortaya konulması, yatırım önceliği verilecek sektörlerin belirlenmesini sağlamaktadır. Bu çalışma, Kazakistan ekonomisi için 2000 ve 2022 yıllarına ilişkin hesaplanan girdi-çıkı tabloları üzerinden, bağımlaşma ilişkilerindeki olası değişimleri incelemektedir. Kazakistan ekonomisinin kilit sektörlerindeki potansiyel değişiklikleri belirlemek amacıyla her dönem için ileri ve geri bağlantı etkileri, Asya Kalkınma Bankası'nın 35 sektörü kapsayan girdi-çıkı tabloları kullanılarak hesaplanmıştır. Ampirik bulgular tarım, avcılık, ormancılık ve balıkçılık, madencilik ve taş ocakçılığı ile temel metaller ve işlenmiş metaller sektörlerinin her iki dönem için kilit sektör niteliğinde olduklarını göstermektedir. Buna karşın, 2000 yılında kilit sektör olarak tanımlanan tekstil ve tekstil ürünleri, kok kömürü, rafine edilmiş petrol ve nükleer yakıt, elektrik, gaz ve su temini, inşaat, motorlu taşıtlar ve motosikletler hariç perakende ticaret, ev eşyalarının onarımı ile kara taşımacılığı sektörlerinin ekonomideki ağırlıkları azalmış ve 2022 yılında kilit sektör olmaktan çıkmışlardır.

**Anahtar Kelimeler:** Girdi-Çıkı Modelleri, Kilit Sektör Analizi, Kazakistan Ekonomisi

### Transformation of Key Sectors in the Kazakhstan Economy: 2000-2022 Period

**Abstract:** Inter-industry relationships, defined as linkages in the production processes of sectors, are empirically investigated with input-output models. Regarding policymakers, revealing these relationships contributes to determining the priority sectors for investment. This study examines possible changes in inter-industry relationships through input-output tables calculated for the Kazakhstan economy for the years 2000 and 2022. Based on input-output tables covering 35 sectors provided by the Asian Development Bank, forward and backward linkage effects were calculated for each period to identify potential changes in key sectors of the Kazakhstan economy. The empirical findings indicate that agriculture, hunting, forestry and fishing, mining and quarrying, and basic metals and fabricated metals were key sectors in both years. However, the weight of textiles and textile products, coke, refined petroleum and nuclear fuel, electricity, gas and water supply, construction, retail trade except motor vehicles and motorcycles, repair of household goods and inland transport sectors, which were defined as key sectors in 2000, decreased in the economy and were no longer key sectors in 2022.

**Keywords:** Input-Output Models, Key Sector Analysis, Kazakhstan Economy

## Zeytinyağı Üretim Atıklarının Döngüsel Ekonomi Bağlamında Değerlendirilmesi Üzerine Bir İnceleme: İzmir İli Örneği

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**Özet:** Son zamanlarda etkilerini daha derinden yaşadığımız çevre sorunları aniden ortaya çıkmamış, zaman içinde birikerek bugünkü düzeyine ulaşmıştır. Sanayi devriminden başlayan günümüze kadar gelen bu birikim sürecinde artarak ve ülke sınırlarını aşarak küresel boyutta taşınan çevre sorunlarının en başında hala çevre kirliliği ve yarattığı etkiler gelmektedir. Özellikle iklim değişikliği, küresel ısınma, kuraklık, çölleşme, ormansızlaşma, biyoçeşitliliğin azalması, kaynak kıtlığı vb. son yıllarda yaşanan etkilerin en başında gelenleridir. Çevre sorunlarının çözümüne ilişkin olarak, başta çevre ve ekonomi bilimleri olmak üzere birçok bilim dalında ortak görüş, atıkların kontrolü ve yönetiminde mevcut doğrusal ekonomi modelinin başarısız olduğu ve sürdürülebilir kalkınma hedeflerine ulaşabilmenin yolunun yeni bir yaklaşım olan döngüsel ekonomi modeliyle mümkün olduğudur. Döngüsel ekonomi modeli, sistem içerisinde ortaya çıkan herhangi bir atığın mutlaka yeniden değerlendirme sürecine sokulduğu, bu sayede hammadde maliyetinin azaldığı ve çevresel yararın maksimuma çıkarıldığı sürdürülebilirlik ve yenilik odaklı temelde sürdürülebilir bir kalkınma stratejisidir. Günümüzde hemen her sektördeki bütün işletmeler artan çevre sorumluluklarının, küresel pazara uyum sağlama çabalarının, yasal düzenlemelerin getirdiği yaptırımların ve tüketici taleplerinin gereği olarak, sürdürülebilir üretim anlayışı çerçevesinde çevreye duyarlı üretim teknikleri ile üretime yönelmeye, kirliliğin oluştuktan sonra kontrol edilmesi yerine, oluşmadan önlenmesini sağlayan temiz üretim, eko-verimlilik, sıfır atık gibi çevreye duyarlı üretim yaklaşımlarını benimsemeye, nihayetinde kaynak verimliliğini artırırken atık ve emisyon miktarını en aza indirmeyi öngören sürdürülebilir kalkınmanın hedeflerine ulaşmayı amaçlayan ekonomik gelişme ile çevre korumayı entegre eden döngüsel ekonomiye doğru adımlar atmak durumundadırlar. Bu araştırmada; zeytinyağı üretimiyle ortaya çıkan atıkların döngüsel ekonomi modeli çerçevesinde değerlendirilmesine ve bu bağlamda mevcut uygulamalara ve işletmeciler görüşlerine yönelik bir çalışma yapılmıştır. Araştırmanın birinci verileri Türkiye'nin önemli tarımsal üretim merkezlerinden biri olan, İzmir ilinde zeytinyağı üretimi alanında faaliyet gösteren 30 tesisin yöneticileri/işletmecileriyle yapılan mülakat ve anketlerden elde edilmiştir. Araştırma sonucunda zeytinyağı tesisi yöneticilerinin/işletmecilerinin, karasuyun çevresel kirlilik yaratan bir sorun olup olmadığı konusunda ölçek ortalamaları açısından kararsızlık eğilimi içinde olduğu, mevcut doğrusal ekonomi bağlamında atık yönetimi uygulamalarının yeterli olduğu fakat sıfır atık temelli döngüsel ekonomi modeline de geçmeye hem fikir oldukları belirlenmiştir. Ayrıca karasuyun bir atık değil değerlendirilebilecek bir kaynak olduğunu görüşü hakimdir ve genel kabul görmektedir. Karasu probleminin çözümünde ekonomik ve ekolojik çözümlere olumlu bakıldığı ve probleminin çözümüne yönelik olarak üniversite-sanayi iş birliği ve ARGE çalışmalarıyla bilimsellikten yana tavır aldıkları belirlenmiştir.

**Anahtar Kelimeler:** Döngüsel Ekonomi, Atık Yönetimi, Zeytinyağı Üretimi, Zeytin Karasuyu, Pirina