



**XX. International Balkan and Near Eastern Congress Series on
Economics, Business and Management
Ohrid / Republic of North Macedonia**

October 14-15, 2023

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 Ohrid / Republic of North Macedonia. 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
October 14-15, 2023

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CONGRESS ID

TITLE OF CONGRESS

XX. International Balkan and Near Eastern Congresses Series on Economics, Business and Management-Ohrid/Republic of North Macedonia

DATE – PLACE

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Ohrid, Republic of North Macedonia

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IBANESS, University of Agribusiness and Rural Development/Bulgaria,
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EVALUATION PROCESS

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

PARTICIPANT COUNTRIES (17)

Albania, Azerbaijan, Belgium, Bulgaria, Croatia, Greece, Hungary, Italy, Kosovo, Latvia, Moldova,
North Macedonia, Palestine, Philippines, Romania, Slovakia, Turkey

TOTAL NUMBER OF PAPERS: 135

THE NUMBER OF PAPERS FROM TURKEY: 64

THE NUMBER OF PAPERS FROM OTHER COUNTRIES: 71

Program

10:00 – 11:00	Parallel Session I	Hall 1 Chair Person: Assoc.Prof.Dr. Katarina BELANOVA	
		Dina KOPEVA Ekrem GJOKAJ Sokol SALLAHU	The Role and Impact of National Funds on Agriculture Production: A Case Study of Kosovo
		Desislava STOILOVA	What is the Impact of Public Spending on Education on Economic Growth? Evidence from Central and Eastern Europe
		Wisam A. SAMARAH Mohammed YAHYA	The Impact of Budget Deficit on Macroeconomic Variables: A Case Study from Palestine
		Alerta BASHA Santina DERVISHI Sara HOXHA	The Impact of Gender Equality and Inequality in Albanian Society Today
10:00 – 11:00	Parallel Session I	Hall 2 Chair Person: Prof.Dr. Jülide YALÇINKAYA KOYUNCU	
		Sibel AKGÜN	Kosova'nın Yeniden Yapılandırılması ve Devletleşme Sürecinde Kurumsallaşma Aşamaları
		Oktay HEKİMLER	Almanya Litvanya İlişkilerinin Yeni Boyutu: Askeri İşbirliğinden Güvenlik Ortaklığına Uzanan Yol
		Uğur ZENGİNER Sibel KAVUNCU	Barack Obama Döneminde İran Nükleer Programına Yönelik Değişen ABD Tutumu
		Ruhangiz ALIYEVA Hanım KULUYEVA	Azerbaycan'da Göç Süreçlerinin Düzenlenmesinde Uluslararası Deneyimin Rolü
10:00 – 11:00	Parallel Session I	Hall 3 Chair Person: Assoc.Prof.Dr. John Noel S. NISPEROS	
		Jūlija MIRONOVA Biruta SLOKA	Impact of Work-Life Balance on Burnout of Educators
		Mihaela MIKIĆ	The Efficiency of Students' Teamwork in the Online Classroom during Covid-19

		John Noel S. NISPEROS	Professional Development Needs and Employment Satisfaction of Beginning Instructors of the College of Education
		Biruta SLOKA Ilze BULIGINA Ginta TORA Juris DZELME Kristīne LIEPIŅA	Role of State Support and Education Institution Support for Students at Risk in VET
11:00 – 12:00	Parallel Session I	Hall 1 Chair Person: Prof.Dr. Hikmet ASUTAY	
		Coşkun DOĞAN	Hoşgörü Bağlamında Toplum Çevirmenliğinin Gerekliliği
		Coşkun DOĞAN	Çağdaş Çeviri Anlayışının Yabancı Dil Öğretimine Katkısı
		Hikmet ASUTAY Binnur ARABACI CANDAN Furkan KOCA Nihal URAL	Yapay Zeka Uygulaması Olarak Makine Öğrenimi ve Yabancı Dil
		Gökhan KERSE Onur OKTAYSOY	Münazara Etkinliğinin Üniversite Öğrencilerinin Psikolojik Dayanıklılık Düzeylerine Etkisinin İncelenmesi
11:00 – 12:00	Parallel Session II	Hall 2 Chair Person: Assoc.Prof.Dr. Ruhangiz ALIYEVA	
		Luminita DIACONU	Criminal and Contraventional Liability in Environmental Law. Ecological Balance, Pollution and Environmental Damage
		Nurcan ÖZKAN	Evaluation of Negative Effects of Stubble Fires on the Environment
		Nurcan ÖZKAN	Activities of Municipal Solid Waste Management Systems
		Mücahit ÇİTİL	Logistics Performance and Industrial Pollution a Survey for Emerging Markets
11:00 – 12:00	Parallel Session II	Hall 3 Chair Person: Prof.Dr. İbrahim	

		BAKIRTAŞ	
		İbrahim BAKIRTAŞ Emre YARDIMCI	Türkiye’de Savunma Harcamaları, Teknolojik Değişim ve Ekonomik Büyüme Üzerine Bir Araştırma
		Utku ALTUNÖZ	Yatırım-Tasarruf İlişkisi Bağlamında Türkiye’de Feldstein-Horioka Hipotezinin Analizi
		Havva ARABACI	Doğrudan Yabancı Sermayenin Ekonomik Büyümeye Etkisi Üzerine Teorik Bir İnceleme
		Jülide YALÇINKAYA KOYUNCU Deniz SONGUR	Gelişmekte Olan Ekonomilerde Ticari ve Finansal Globalleşmenin Kamu Harcamaları Üzerindeki Etkisi
12:00 – 13:00	Parallel Session II	Hall 1 Chair Person: Prof.Dr. Laszlo KOZAR	
		Veronica GISCA Tonu RENATA	Children’s Rights and Their Protection
		Ebtisam Abu HAMAD Maria ROTH	Inclusion of Children with Developmental Gaps in Kindergartens
		Veronica GISCA Turcanu ALEXANDRA	Neglect - Specific Form of Child Maltreatment
		Anna ANGENA Biruta SLOKA	Challenges and Needs for Support of Medical Professionals via Supervision in Latvia
12:00 – 13:00	Parallel Session II	Hall 2 Chair Person: Prof.Dr. Cüneyt KOYUNCU	
		Meftune ÖZBAKIR UMUT Meltem NURTANIŞ VELİOĞLU	Pandemi Döneminde Yaşanan Aşı Tereddüdü Belirleyicilerinin Analizi
		Haluk GÜMÜŞ Hakan ADANACIOĞLU	Covid 19 Salgınının Tüketicilerin Online Gıda Alışveriş Davranışlarına Etkisi: İzmir İli Örneği
		Nijat HUSEYNOV Meltem OKUR DİNÇSOY	Döngüsel Ekonomi ve COVID-19 Pandemisinin Etkileri
13:00 – 13:30	Lunch		
13:30 – 14:30	Parallel Session III	Hall 1 Chair Person: Assoc.Prof.Dr. Emanuela ESMEROVA	
		Pranvera TROKA	An Examination of Food Scandals in Albania:

		Ilir KAPAJ	Causes, Consequences, and Policy Recommendations
		Cihat GÜNDEN Ela ATIŞ H. Ece SALALI	Underlying Food Values Influencing Food-Related Behaviors of Consumers in Turkey
		Zaiga OZOLIŅA Biruta SLOKA	The Role of Importance of Changes in Legal Regulation for Blue Mussel Production in the Baltic Sea
		Emanuela ESMEROVA	The Effects of Quality in the Food Industry
13:30 – 14:30	Parallel Session III	Hall 2 Chair Person: Assoc.Prof.Dr. Onur ÇETİN	
		Duygu DÖNMEZ İbrahim TÜRKMEN	Girişimcilerin Sürdürülebilirlik İle İlgili Bilgi Düzeylerinin KOBİ'lerin Sürdürülebilir Girişimcilik Uygulamalarına Etkisi
		Havva ARABACI Derya DİNÇER GÜLTEKİN	Türkiye’de Sürdürülebilir Kalkınma ve Sağlık İşletmelerinde Sürdürülebilirlik
		Serdar ERDOĞAN Havanur ERGÜN TATAR	Dış Borç Sürdürülebilirliğinin Seçilmiş Ülkeler Örneğinde Analizi: Fourier KPSS Durağanlık Testi
		Buket AKDÖL	Kontrol Odağı, Şans Faktörü ve Girişimcilik Eğitiminin Üniversite Öğrencilerinin Girişimcilik Eğilimindeki Rolü
		Onur ÇETİN	Sürdürülebilir Depolama Kavramı ile İlgili Bibliyometrik Bir Analiz
13:30 – 14:30	Parallel Session III	Hall 3 Chair Person: Prof.Dr. Eketarina ARABSKA	
		Carmen Sonia DUŞE Dan Maniu DUŞE	Effective Strategies for School Improvement and Educational Leadership
		Christos KANAVAS Sotiria TRIANTARI	The Concept of Empathy in the Context of Leadership in Education
		Jūlija MIRONOVA Viktorii RIASHCHENKO Olga VERDENHOFA Valentina DJAKONA	Artificial Intelligence in Higher Education – Challenges and Opportunities

		Kyriaki EFTHALITSIDOU Ioannis BETSAS Marina VEZOU Nikolaos SARIANNIDIS Konstantinos SPINTHIROPOULOS	Welfare State and Education in Greece
14:30 – 15:30	Parallel Session IV	Hall 1 Chair Person: Asst.Prof.Dr. Selçuk TEKİN	
		Ali Gökhan GÖLÇEK	Davranışsal Kamu Maliyesi: Nudge Teorisi ve Kamu Politikalarındaki Rolü
		Derya DİNÇER GÜLTEKİN Raşit GÜLTEKİN	Sağlık Turizmi ve Vergilendirme Rejimi: Türkiye Uygulamaları Hakkında Bir Değerlendirme
		F. Dila TAŞDEMİR	Türkiye Ekonomisinde Bazı Vergi Türlerinin, Finansal Gelişmişlik ve Ekonomik Büyüme İlişkisi Üzerine Bir Araştırma
		Selçuk TEKİN Aykut TAVŞANCI	Son Düzenlemeler Işığında Türk Vergi Hukukunda Enflasyon Düzeltmesinin Uygulanabilirliği Üzerine Bir Çalışma
14:30 – 15:30	Parallel Session IV	Hall 2 Chair Person: Prof.Dr. Antonella REITANO	
		Szabolcs DIÓSI	Latest Amendments to the European Union's Artificial Intelligence Act-The Emergence of General-Purpose and Generative AI Technologies
		Simeana BESHI Driola SUSURI	Harmonization Standards and Regulations: The Role of the EU in Promoting the Single Market
		Vasileios TAMATEAS Lampros SDROLIAS Grigorios GIANNARAKIS Ioannis KOUKOUMPLIAKOS	Systemic Dynamics Approach to Public Administration with Emphasis on Local Government, Especially in Regions: The Administrative Perspective
		Filip TASKOVSKI Ena Petreska TOMESKA	The Russian-Ukrainian Conflict, a Challenge for the International Monetary System
14:30 – 15:30	Parallel Session IV	Hall 3 Chair Person: Prof.Dr. Hasan VURAL	
		Elmira AKSÜT	Türkiye ve İran Ayçiçeği İthalat Talep

		Canan ABAY	Fonksiyonunun Ekonometrik Tahmini ve Karşılaştırılması
		Jülide YALÇINKAYA KOYUNCU İmdat Yasin GÜNGÖR	Türkiye'de Globalleşmenin Tarımsal Hammadde İhracatı Üzerine Etkisi: ARDL Analizi
		Hasan VURAL	Gıda Sektöründe Yapısal Değişimler ve Kalite Güvence Kullanımı
		Hasan VURAL	İncir Üretimi ve Pazarlaması
15:30 – 16:30	Parallel Session IV	Hall 1 Chair Person: Prof.Dr. Laura DIACONU	
		Laura DİACONU (MAXİM)	The Relationship between Social Entrepreneurship, CSR and Values in Theory and Practice
		Frederik CUCLLARI Mirela CINI Matia CUCLLARI	Albanian Women Entrepreneurs and the Work-Family Conflict
		Muhammad ADNAN Biruta SLOKA	Entrepreneurship in Silver Economy
		Yasin AKKUŞ	Social Entrepreneurship as a Disaster Fighting Element
15:30 – 16:30	Parallel Session V	Hall 2 Chair Person: Prof.Dr. Burak GÜRİŞ	
		Burak GÜRİŞ Yağmur YAVUZ	D-8 Ülkelerinde Ekolojik Ayak İzi Yakınsaması: Doğrusal ve Doğrusal Olmayan Birim Kök Testleri İle Analizi
		Arzu ERDOĞAN	Türkiye’de Çevre Vergileri ile Kişi Başına Gelir İlişkisine Yönelik VAR Analizi
		Gökhan ZENGİN	Seller Karşısında Dirençli Kentler: Sünger Kent ve Uygulamaları
		Funda DURGUN	Yenilenebilir Enerji, Beşeri Sermaye, Enerji Verimliliği ve CO2 Emisyonu İlişkisi: Türkiye Örneği
15:30 – 16:30	Parallel Session V	Hall 3 Chair Person: Assoc.Prof. Dr. Qazim TMAVA	
		Elena DOBRE	Using Accounting Principles in Internal Controls and External Public Auditing

		Serkan VARSAK Sıla BALCI	Determination of Financial Literacy Level and Socioeconomic Importance in the Process of Adaptation to Financial Innovations in the Turkish Banking Sector: The Case of Bilecik Province
		Filloreta Kunoviku DEMIRI Qazim TMAVA Ajtene AVDULLAHİ Elena GJOEVSKA	The Size of the Business as a Determinant of the Interest Rate for Bank Loans - Comparative Analysis between Kosovo and North Macedonia from the Banks' Perspective
		Igor ZDRAVKOSKI	The Impact and Significance of the Statement of Cash Flows
16:30 – 17:30	Parallel Session V	Hall 1 Chair Person: Assoc.Prof.Dr. Resül YAZICI	
		İlknur ESKİN	Vergi ve Muhasebe Yönüyle Bağış Yoluyla Kitle Fonlama Modeli
		Selçuk BÜKLÜ	Bitcoin; Tether ve Litecoin Özelinde Kripto Paraların Spekülatif Balon ve Volatilité Dinamiklerinin Analizi
		Resül YAZICI Ayla YAZICI	Piyasalarda Adil Fiyatın Oluşmasında Rekabet Kurumunun Önemi
		Hakan Sabri ÇELİKAY	Yasama Dokunulmazlığının İstisnası Olarak Anayasanın 14. Maddesi ve Anayasa Mahkemesi Kararları Üzerine Bir Not
16:30 – 17:30	Parallel Session V	Hall 2 Chair Person: Assoc.Prof.Dr. Galina CHIPRIYANOVA	
		Nikolaos KARANASIOS Antonella REITANO Angelita BITONTI Marco FAZIO Elena STAVROVA	Cash-Flow vs HR Management, in the Corporate Strategy
		Ioannis KOUKOUMPLIAKOS Grigorios GIANNARAKIS Lampros SDROLIAS Konstantinos SPINTHIROPOULOS	Corporate Social Responsibility as an Important Factor in Business Development and Growth

		Kakkos NIKOLAOS Ioannis PAPADIMOPOULOS Dimitrios DEVETZIS Nikolaos KOUKOUMPLIAKOS Vasileios TAMATEAS	
		Oktay KOÇ Abdullah KIRAY	Gossip in Action: How Academic Managers Use “Gossip” as an Instrument in Managerial Processes?
		Galina CHIPRIYANOVA	Contemporary Measurements of Corporate Reporting in the Context of the Sustainable Development Concept

Sunday Sessions

11:00 – 12:00	Parallel Session I	Hall 1 Chair Person: Asst.Prof.Dr. Nikolaos KARANASIOS	
		Olga KAPOULA Konstantinos PANITSIDIS Sotiria TRANTARI Konstantinos SPINTHIROPOULOS Labros SDROLIAS	Systemic Approach and Educational Innovation: The Case of Military Academies
		Anastasia ROMANOVA Rodica SVETLICHNAIA	Mass Labour Migration in the Republic of Moldova: Causes and Prospects
		Jana KUBICOVÁ	The Outbound Tertiary Students' Mobility from Post-Communist European Countries
		Besmir SALIHU	An Analytical and Structural Overview of Labor Market Needs in the Republic of Kosovo
11:00 – 12:00	Parallel Session I	Hall 2 Chair Person: Prof.Dr. Ahmet KUBAŞ	
		Emine ÇETİNEL Sevdiye ERSOY YILMAZ	Potansiyel Çalışanların İşveren Tercihinde Kurumsal Sosyal Sorumluluk Boyutlarının Etkisini Belirlemeye Yönelik Bir Araştırma
		Menekşe ÖZTOPRAK Şükran ÖKTEM	Çalışanların İş Doyumu ile Sosyal Kaytarma Algısı Arasındaki İlişkinin Yiyecek ve İçecek İşletmelerinde İncelenmesi: Ankara İli Örneği
		Ecehan TURGUT	Marka Güveninin, Halkla İlişkiler Faaliyetlerine Yönelik Müşteri Algısı ile Müşteri Sadakati Arasındaki İlişkideki Düzenleyici Rolünün İncelenmesi: Bankacılık Sektöründe Bir Uygulama
		Elif BİLGİN Erdal YILMAZ	Kalitenin Evrimi ve Kalite 4.0
11:00 – 12:00	Parallel Session I	Hall 3 Chair Person: Assoc.Prof.Dr. Ulker IMAMALIYEVA	

		Panagiota XANTHOPOULOU Alexandros SAHINIDIS	Pandemic Crisis and Digital Transformation: Implications for Electronic Consumer Behaviors
		Ena Petreska TOMESKA Filip TASKOVSKI	Innovative Aspects in Digital Marketing of Textile Companies from Prilep
		Laszlo KOZAR	E-model in Price Risk Management
		Hatice NAYMAN HAMAMCI Selim AREN	Mediating Role of Trust in the Impact of Financial Tribalism and Narratives on Risky Investment Intention
12:00 – 13:00	Parallel Session I	Hall 1 Chair Person: Assoc.Prof.Dr. Erdal ARSLAN	
		Erdal ARSLAN Ali BORA	Türk Bankacılık Sektöründe Faaliyet Gösteren Yabancı Sermayeli Mevduat Bankalarının Finansal Performanslarının DuPont Yöntemine Göre Analizi: 2015 - 2022 Dönemi
		Korkmaz KESKENDİR	Türk Bankacılık Sektöründe Mevduat Hesaplarının Tanımı, Kapsamı, Önemi ve Muhasebeleştirilmesi Üzerine Bir Araştırma Örneği
		Mehmet Mete KARADAĞ	İnternet Bankacılığı ve Mobil Bankacılık: Türkiye İncelemesi
		Ece ÖZKELEBEKOĞLU Mehpere KARAHAN GÖKMEN	TFRS 9 Finansal Araçlar Standardı'nın Değer İlgililiği Üzerindeki Etkisi: Türkiye Bankacılık Sektöründe Bir Uygulama
12:00 – 13:00	Parallel Session II	Hall 2 Chair Person: Assoc.Prof.Dr. Igor ZDRAVKOSKI	
		Laszlo KOZAR	Introducing Public Warehousing in Vietnam
		Katarína BELANOVÁ	Macro and Micro Perspectives of Innovation Performance of the Slovak Republic
		Albina KALIMASHI Ardi AHMETI Yilka AHMETI	Sustainable Growth Analysis of Kosovo's Manufacturing Companies: An Investigation Using the PRAT Model
		Rasim YILMAZ	Comparing Turkey's Medium-Term Economic Programs: Strategies to Tackle Inflation and Foster Sustainable Growth
12:00 – 13:00	Parallel Session II	Hall 3	

		Chair Person: Prof.Dr. Hülya BAKIRTAŞ	
		Senem Hazel BAŞER Hülya BAKIRTAŞ	İş Dünyasının Beklentileri ile Üniversite Programlarının Karşılaştırılması: Yönetim Bilişim Sistemleri Örneği
		Caner PEŞİNCİ Adil OĞUZHAN	Pazarlama Eğitiminin Girişimcilik Eğilimine Etkisi: Bir Alan Araştırması
		Sevi BALOĞLU Aytaç GÜT H. Selçuk ETİ	Anksiyete ve Satın Alma
		Ulker İMAMALİYEVA	Modern Elektronik Yönetim Teknolojilerinin Siyasi Kültüre Etkisi
13:00 – 13:30	Lunch		
13:30 – 14:30	Parallel Session III	Hall 1 Chair Person: Prof.Dr. Nurcan METİN	
		Dafina VLAHNA	Synthetic Taxes and their Importance in the Formation of the Budget
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Case Study: Gross National Happiness as a certification framework for sustainable development in the Slovak business context

Prof. Andrea Bencsik¹

Viktor Busánszki²

Alžbeta Simon³

¹ Department of Management, University of Pannonia, Hungary, bencsik.andrea@gtk.uni-pannon.hu , ORCID: 0000-0001-8204-3706

² Department of Management, J. Selye University, Slovakia, 121727@student.ujs.sk, ORCID: 0009-0004-7206-7690

³ Department of Management, J. Selye University, Slovakia, 122007@student.ujs.sk, ORCID: 0000-0001-7234-5428

Abstract: Sustainable development is a topic that is constantly in the spotlight today. One of the main pillars of sustainable development is that SMEs should not only consider business interests in their activities but also aim to improve human well-being. The GNH framework certification process can help to achieve these goals. The objective of this research is application of Gross National Happiness (GNH) framework, grounded in the principles of Buddhist economics, in the Eastern European sustainable development context, specifically in Slovakia. This is a pilot study where the GNH certification framework is presented in relation to a specific company. The aim of the research is to assess the applicability of the GNH framework in the Slovak entrepreneurial environment and to identify critical points where improvement is essential for long-term success. Two SMEs were surveyed, the research methodology was based on the GNH certification publication of the Centre for Bhutan Studies. This study aims to contribute to the existing and further research of sustainability, about the possibility of applying the GNH framework in European culture in context of social, environmental and economical sustainable development.

Keywords: culture of entrepreneurship, gross national happiness, Slovakia, sustainable development

1. INTRODUCTION

The term Buddhist economics was first used by E. F. Schumacher. He started from the premise that since one of the Buddha's basic teachings was the right way of life, there must be some kind of economic system associated with it. It distances itself from the traditional (rational) economic view of human beings. The Buddhist economic view of human beings consists of three axioms: (a) human rationality is limited, (b) human beings are interdependent, (c) they seek to minimise losses and make satisfactory decisions. Decision-making in this sense is not determined by classical rationality but by the awareness developed through the practice of meditation on the Noble Eightfold Path (Kovács, 2016; Schumacher, 1999). Herbert Simon's (1957) theory of bounded rationality also underpins the rationality hypothesis of Buddhist economics. Individuals face several constraints when making decisions. The scarcity of information about alternatives, the limitation of our cognitive abilities, and the limited amount of time available for decision making are considered to be constraints on rational decision-making. The goal is not to gather all information accurately, but to maximise the information that can be gathered up to a certain level. The theory suggests that although economic agents wish to be rational in their decisions, their cognitive limitations make it impossible for them to be rational in practice. Rational decisions are replaced by satisfactory solutions (Golovics, 2015). Buddhist economics is best defined by Puntasen (2007). According to him, Buddhist economics is a science that deals with the economic pursuit of social and individual peace and tranquillity under given conditions of scarcity (Puntasen, 2007). According to Zsolnai (2011), six factors distinguish Buddhist economics from modern Western economics. Buddhist economics seeks to minimise suffering. It seeks to simplify desires and eliminate transgressions. It seeks to reduce the use of machines. Self-interest is reduced. It follows the principle that less is more (Zsolnai, 2011).

The National Happiness Index, or GNH, is associated with the fourth king of Bhutan, Jigme Singye Wangchuck. He first used the concept of GNH in 1979, arguing that the Gross Domestic Product (GDP) indicator is less important than GNH because GDP alone cannot be used to derive a nation's happiness and ultimately its prosperity (Ura, 2015). One might wonder why one of the world's least developed countries puts happiness before GDP. The answer lies in the cultural approach. Buddhist teachings are based on the teachings of Gautama Buddha, who lived in ancient India 2500 years ago. His main insight was that the main source of suffering is the way we perceive our environment and ourselves. Things appear in our lives when they give us comfort and a lasting sense of happiness, but then we become addicted to them. This kind of possessive urge

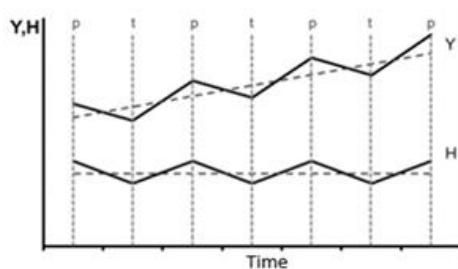
leads us to deny reality. In reality, however, these things are fleeting, constantly changing and incapable of sustaining a lasting sense of happiness (Allison, 2020). Buddhism does not reject wealth and prosperity but considers them useful as a means of conveying the idea of generosity. True happiness, according to the Buddha, does not come from acquiring and consuming material goods. Happiness is a state of mind or self-awareness that is separate from material things. For Buddhists, therefore, spiritual development is paramount. They strive to separate themselves from the materialistic world in order to achieve true liberation and enlightenment, which is the ultimate state of happiness (Tideman, 2004).

The aim of our research is to apply the GNH indicator, which is based on the Buddhist economic model, to the business sector. The GNH model highlights the parameters that qualify the level of human well-being based on trust. The parameters of the business GNH model have been modified to suit domestic conditions, resulting in a framework that can be applied to the domestic context. The research covers both the employer and employee sides in two manufacturing companies operating in the same geographical location and in the same sector. The companies are presented in more detail in a short case study.

2. LITERATURE REVIEW

Happiness, according to Mihály Csíkszentmihályi, is *"a state for which everyone must be prepared, cultivated and protected. People who learn to control their inner experiences are able to determine the quality of their lives - none of us can get any closer to happiness. While we seek happiness for its own sake, all our other goals are only important because we assume that they will make us happier"* (Csíkszentmihályi, 2010, pp. 19-20). Happy people are healthier, live longer and find more joy in life than their unhappy counterparts. Happiness is a concept that perhaps everyone would like to achieve in their lives. Research shows that external factors are important because they shape our sense of happiness, but for much less time and with much less intensity than many people think. Intentional actions determine 40% of our happiness, while external circumstances determine only 10% (Szélesné & Hornyák, 2018). The reason for studying happiness is that, despite increasing economic prosperity, we are no happier than we were in the 1950s. While the stability of the economy is important for happiness, the level of GDP does not affect our happiness in the long run. Layard (2005) has identified four factors that help explain why this is the case. Absolute wealth does not matter. There is no way for a country to increase its relative income in terms of individual, subjective things. The second factor that helps explain why higher incomes do not make us happier is adaptation. We get used to higher incomes and their benefits and feel that nothing has changed. Advertising is partly responsible for this. It creates needs that did not exist before, and so we become less satisfied with what we have. Fourth, over the same period that incomes have risen, studies show that the overall quality of human relationships, including family and work relationships, has deteriorated. The level of trust between people has declined, leading to increased individualism (Layard, 2005). Professor Layard's theory is best explained by the Easterlin paradox. In the short run, happiness and income tend to rise and fall together. The Great Recession of 2007-09 provided a recent example of this short-term relationship. As US incomes hit rock bottom, happiness fell to its lowest level ever. As the economy recovered, happiness improved. By income, the authors of the study mean real GDP, while by happiness they mean WVS survey data. In the short run, happiness (H) and income (Y) fluctuate together, as shown by the solid lines in Figure 1. However, if we define the trend lines, indicated by the dashed lines in the figure, we can see the long-term trend, i.e. the rising trend in income is not matched by a corresponding rising trend in happiness. However, it is important to note the weaknesses of the paradox. On the one hand, the paradox suggests that happiness is constant in the long run. On the other hand, a study by Bartolini & Sarracino (2014) shows that the significance of the relationship between happiness and GDP declines as the time horizon increases (Easterlin & O'Connor, 2020).

1. Figure: Easterlin paradox



Source: Easterlin & O'Connor, 2020, 24. p.

Bhutan scores low on traditional economic indicators, but a global survey of subjective well-being was conducted in 2007. The authors of the study analysed the results and concluded that Bhutan was the 8th happiest country in the world out of 178 countries surveyed (White, 2007). The result is important because Bok (2010) concluded in his survey of happiness that the primary goal of government should not be wealth accumulation but wealth creation. (1) People tend to constantly compare themselves with wealthier peers. In a happy society, it is necessary to minimise the differences between rich and poor, and the establishment of an appropriate tax system can be an excellent way of doing this. (2) Advertising campaigns of various kinds reduce happiness because they make people feel less worthy of themselves. (3) Marriage contributes to well-being and increases life expectancy by an average of 7 years for men and 4 years for women. (4) There is a significant relationship between health and happiness (Bok, 2010).

Happiness is also worth discussing from an economic point of view because, as is widely believed, income and happiness rise and fall together in the short term, but this trend cannot be confirmed in the long term. Happiness and income are separate. This also shows that while happiness does require material goods, happiness is much more complex than that. Material conditions need to be complemented by spiritual goods, such as trust. The GNH framework is therefore unique in that it links material and spiritual goods along the lines of trust, thus making happiness measurable. This is why GNH is essential in the life of companies, because the implementation of a GNH system in companies can be the cornerstone of sustainable happiness and development.

The GNH indicator is based on four pillars. The four pillars are: (1) Good governance: a pillar of happiness as it determines the living conditions in which people thrive. While the policy programmes developed in Bhutan are generally in line with the values of GNH, a number of other tools and processes are used to ensure that the values conveyed by GNH are actually embedded in social policy. One such tool is GNH certification. (2) Sustainable socio-economic development: A thriving GNH economy should value the social and economic contribution of households and families, leisure and recreation, as these are closely linked to happiness. (3) Preservation and promotion of culture: The preservation of culture also contributes to happiness. The development of cultural resilience can be understood as the ability of culture to maintain and develop cultural identity, knowledge and practices, and to overcome challenges and difficulties arising from other norms and ideas. (4) The environment is seen as an important contributor to GNH because, in addition to providing essential services such as water and energy, the environment is believed to contribute to aesthetic and other stimuli that can be directly healing for people who enjoy bright colours, light, pristine breezes and the silence of nature's sounds (Zangmo - Wangdi & Phuntsho, 2018).

The GNH indicator covers 9 areas, which are: (1) Psychological well-being measures how people feel about their quality of life. This includes their level of life satisfaction and spirituality. (2) Health describes people's physical and mental health. A healthy lifestyle describes the absence of unnecessary fatigue and stress from daily activities. (3) Time management describes the importance of work-life balance for a harmonious life. This includes work time, sleep time and leisure time. (4) Education assesses knowledge, values and skills acquired informally in addition to knowledge acquired through formal education. (5) Cultural diversity and resilience assess the resilience of the diversity of cultural heritage. (6) Community vitality describes the strengths and weaknesses of community relations and social interactions. It collects information on social cohesion and volunteering. (7) Good governance measures how people value different functions of government. It examines the existence of individual rights and freedoms. (8) Ecological diversity and resilience measure how people value their immediate environment and their attitudes towards environmentally friendly activities. (9) Living standards focus on financial security, measured by income, financial security and housing, among other things. (Bencsik, 2023)

The GNH indicator can also be used for companies. The nine domains covered in the GNH certification of business entities remain unchanged, but 49 modified indicators are used instead of the original 33 indicators. The seventh international conference on GNH was held in 2017, where the organisational GNH certification tool was further developed, taking into account previous research findings and recommendations, and expanded to 56 indicators. The 56 indicators are summarised in Table 3.

A sustainable organisation is a formal entity that operates on earned income and is able to sustain its own activities while contributing to the development of the socio-ecological system of which it is an integral part. Its objectives focus on economic, social and environmental issues. It prefers a transactional management style. The organisational culture includes values, norms and principles aimed at raising awareness of social and environmental issues among stakeholders (Leon, 2013).

The GNH framework encourages sustainable development by building on Buddhist economics, which is based on temperance. In addition to material benefits, the well-being of people is an equally important factor. If employees are happy, trust will be built up in the organisation, knowledge transfer will not be hindered, and sustainability will be systemic in the organisation (Bencsik - Busánszki & Simon, 2023).

3. RESEARCH METHOD

In our research we used the GNH certification questionnaire prepared by the Centre for Bhutan Studies. The questionnaire is divided into two parts. One part measures the enterprises from the employer's perspective, while the second part of the questionnaire asks the employees. The questionnaire was designed for the Bhutanese cultural context, therefore the content of the questionnaire was adapted to the Slovak cultural context.

The GNH survey is carried out in four steps for the companies participating in the research, which are outlined below:

1. Screening: In order to obtain relevant data for the GNH assessment, companies must meet five pre-defined criteria: (1) it has been in business for at least two years to ensure that working conditions and business processes are mature, (2) the company is autonomous in terms of management, review of procedures and allocation of its resources, (3) it has at least 10 employees, (4) at least 50% of employees are permanent, which is required because casual workers are not necessarily as affected by company decisions as full-time employees, (5) a company that causes significant damage to its environment, community and other stakeholders during its existence cannot be included in the assessment, as this would be contrary to the philosophy of the GNI system.

2. Data collection: A structured questionnaire is used to collect data separately from employees and employers. The area of psychological well-being is based entirely on data from the employee questionnaire, while the areas of quality of life, good governance, cultural diversity, community life and environmental diversity are based on data from the employer questionnaire. For the dimensions of health, time use and education, data from both questionnaires are used. The employer questionnaire was completed by employees working in the human resources department of the company, while the employee questionnaire was completed by employees working in the company who wished to take part in the survey. Two questionnaires for employers and 351 questionnaires for employees were processed during the research.

3. Analysis consists of four steps. (1) Selection of indicators: a selection of different indicators is made to determine which are applicable and feasible in the given business context. An indicator is applicable if it can generate debate among decision-makers and stakeholders. Feasibility means that the indicator can be influenced by changing the internal processes and rules of the company. In our research, the indicators public shareholding, board of directors, insurance and cultural participation are excluded as they are not applicable to the specific business contexts. The indicators of public shareholding and board of directors are not applicable to limited liability companies, insurance indicator is not applicable in the Slovakian legal environment as all employees are obliged to have health insurance and the indicator of cultural participation is not applicable due to the different nationality/ethnicity of the employees as the research is carried out in Hungarian communities. (2) Sufficiency thresholds are determined using statistical methods based on national and international standards. The thresholds are also evaluated based on the study by Zangmo, Wangdi & Phuntsho (2018). Two types of thresholds are identified. One is the individual, subjective employee satisfaction and the other is the organisational level satisfaction. (3) Weighting scheme: the weight of the total index, which is 100, is equally distributed among the 9 domains, i.e. 11.111. At indicator level, different indicators are given different weights depending on the number of indicators associated with each domain (see formula 1). The weights assigned to different domains and indicators under each domain are presented in table 1.

$$DW_t / N_i \quad (1)$$

Where,

DW_t – is the domain weight

N_i – is the number of indicators

Table 1: Domains, number of indicators and their weights

Domains	Domain weight	No. of indicators	Indicator weight
Psychological wellbeing	11,111	8	1,388 each
Health	11,111	8	1,388 each
Time use	11,111	7	1,587 each
Education	11,111	6	1,852 each
Living standards	11,111	5	2,222 each
Good governance	11,111	6	1,852 each
Cultural diversity	11,111	2	5,555 each
Community vitality	11,111	7	1,587 each
Ecological diversity	11,111	7	1,587 each

Source: Authors' calculation

4. Aggregating and scoring: The score for each indicator is computed by multiplying the indicator value with their respective weights (see formula 2). The domain scores are computed by simple aggregation of the weighted scores of indicators under each domain (see formula 3). The overall assessment score can be computed by aggregating the domain scores across d domains (see formula 4).

$$Indicator_i = w_i \times x_i \quad (2)$$

Where,

Indicator_i – is the score of ith indicator

w_i – is the weight of an ith indicator

x_i – is the value of an ith indicator

$$Domain_d = \sum_{i=1}^n w_i \times x_i \quad (3)$$

Where,

Domain_d – is the score of dth domain

n – is the number of indicators under the dth domain

i – is the ith indicator under the dth domain

w_i – is the weight of an ith indicator under the dth domain

x_i – is the value of an ith indicator under the dth domain

$$H = \sum_{i=1}^n d_i \quad (4)$$

Where,

H – is the overall assessment score

n – is the number of domains

i – is the ith domain

d_i – is the value of the ith domain

The rating is important in two main ways. On the one hand, it recognises the efforts of companies to operate in line with the values set out by GNH in business life and, on the other, it encourages other companies to volunteer to be assessed. Evaluation is not an end in itself, but a starting point for change, where organisations can improve the effectiveness of their operations based on the results obtained. The evaluation ratings are shown in table 2.

Table 2: Gradations of assessment score and corresponding

Score	Category	Remarks
≥90	GNH- A+	The values of a business almost perfectly aligned with the GNH values.
80 – 89.99	GNH- A-	The values of a business is extensively aligned with the GNH values.

60 - 79.99	GNH- B+	The values of a business is moderately aligned with the GNH values.
40 - 59.99	GNH- B	The values of a business is somewhat aligned with the GNH values.
<40	GNH- C	The values of a business is remotely aligned with the GNH values.

Source: Zangmo, Wangdi & Phuntsho, 2018, 78 p.

4. FINDINGS AND DISCUSSIONS

For our research, we chose two companies operating in the same sector and geographical location. Although the two companies have similar profiles, the results show different levels of satisfaction. Both are foreign-controlled industrial companies in the automotive sector. However, it is important to note that current economic trends and externalities caused by the coronavirus pandemic may distort the results. Our research results are summarised in Table 3. The characteristics of each company are described below.

4.1. Company A

Psychological wellbeing: 33% of employees surveyed were satisfied with their organization, and 41% were satisfied with their job. For additional information, we asked employees how happy they were at work to get a more nuanced picture. The difference between organisational satisfaction and job satisfaction can be explained by the fact that employees may not be fully aware of the internal workings of the company when they join, but they have chosen their jobs freely. On a scale of one to ten, the average employee satisfaction score is 5.8, which is not outstanding. The workplace trust indicator shows interesting values. The negligence of management is reflected in its inability to listen to employees' comments and suggestions. On the question of trust, 62% of employees trust their colleagues, and 54% trust their immediate superiors, while only 11% believe in the credibility of management. For the job security indicator, the result meets the sufficiency threshold, but it is important to note that the enterprise is facing a severe labour shortage. The job security indicator is not necessarily a reflection of security but rather a result of severe labour shortages. The company takes action against discrimination and harassment. The most frequent indicators are age discrimination (3 people) and verbal harassment (7 people). As regards the emotional indicators, people in the company rarely feel positive emotions, negative emotions predominate, with disappointment and frustration being the most frequent.

Health: The negative emotions indicator predicts that people in this company are also more likely to experience occupational stress. 73% of people are exposed to excessive stress, which has a negative impact on their health in the long term. In terms of health risks, musculoskeletal disorders dominate. This is due to the fact that 81% of employees work long hours with repetitive movements, and 70% of employees work with forceful movements or uncomfortable postures. The company is adequately equipped with safety equipment, but the use of protective equipment is not monitored. Work-related illnesses and injuries are rare in the company, but this is mainly due to the nature of the work. There have been no fatal accidents at work, but there has been one case of disability due to a vehicle accident. The internal investigation found that the disability was due to the employee's inattention. The return to work policy is inadequate. No compensation is given to injured workers, but there is a possibility to change working conditions if supported by medical documentation.

Time use: The average working week is 40 hours, but the overtime rate is very high. It is common to work 12 hours instead of 8, and people often work weekends. Flexible working hours have not been introduced in the company, everyone starts and finishes at fixed times, but it is not difficult to take time off work for personal or family reasons. Work also has an impact on personal life due to high-stress levels and overtime. Workers only get the legally required breaks, which are half an hour after working more than 6 hours. The average sleep time is 7 hours, which is less than the minimum required by the GNH framework.

Education: The company does not provide any long-term paid training or education, only short-term training for specific job positions, which the company reports that 48 employees have participated in over the past five years. A significant number of employees do not feel that their performance appraisal is free from bias; if they had to assess their own performance, they would rate themselves differently. The company has an elaborate performance appraisal system that covers everyone except managers. Employee engagement is low, people's ideas and opinions are not listened to, and they are left out of important decisions that affect them.

Living standard: The wage is less than 1.5 times the minimum hourly wage. Although the hourly wage is accompanied by various other mobile bonuses, these may not be paid to the workers. The company has not commented on the wage tension, so it is assumed to be significant. The company also provides non-wage benefits such as contributions to the third pillar pension scheme, travel allowances, meal allowances, and gift

vouchers. Beyond the statutory requirements, the company does not provide any holidays. There are no awards or recognitions.

Good governance: The company has written processes and rules in all areas. There are two reporting channels. The staff turnover rate is 28.10%. In the last five years, the company has not admitted any wrongdoing for which it has had to pay a fine. The company has both external and internal audits. Customer satisfaction is measured annually by the company. Regarding public spaces, the company does not have green areas where employees can relax or other places where they can meditate or engage in other retreat activities.

Community vitality: The company does not participate in volunteer work or corporate donations. The company contributes to the creation of local businesses. There are no local suppliers. 98% of employees are local residents. The company has not caused any damage to community infrastructure, either during its establishment or its operation. The company is not involved in solving social problems.

Ecological diversity: There are no renewable energy sources on the site, but energy use is monitored. The main priority is to reduce energy consumption. The focus is only on solid waste, which is collected separately. The company also has liquid and hazardous waste. The company does not support any environmental initiatives.

Culture: None of the company's products/services can be linked to the cultural sphere. The company has not caused any damage to cultural heritage, either in its creation or in its operation.

4.2. Company B

Psychological wellbeing: 37% of employees surveyed were satisfied with their organization, and 39% were satisfied with their job. For additional information, we asked employees how happy they were at work to get a more nuanced picture. The difference between organisational and job satisfaction can be explained by the fact that employees may not be fully aware of the internal workings of the company when they join, but they have chosen their job voluntarily. The average score for employee happiness is 6.1. For the job security indicator, the result does not meet the sufficiency threshold, the company is facing financial difficulties, which also affects the sense of job security. As a company with a strong hierarchical culture, the company is effective in combating discrimination and harassment. In terms of emotion indicators, people in the company experience positive emotions at least once a week. On the indicator of trust in the workplace, 64% of employees trust their colleagues, 54% trust their immediate supervisors, and only 23% believe in the credibility of management.

Health: 61% of people are exposed to excessive stress that has a long-term negative impact on their health. Musculoskeletal disorders dominate the list of health risks. This is due to the fact that 67% of employees perform repetitive movements for long periods of time, and 76% of them work in positions that require forceful movements or uncomfortable postures. In terms of safety equipment, the company is adequately equipped, and the correct use of equipment is monitored. The company has a low rate of work-related injuries, but this is mainly due to adequate safety equipment. There have been no fatalities or disabilities at work. Again, the return to work policy is inadequate. No compensation is paid to injured workers and there is no possibility of changing working conditions.

Time use: The average working week is 40 hours, but overtime can be worked. Overtime usually means working 10 hours or working on Saturdays. The company does not have flexible working hours, everyone starts and finishes work at fixed times. It is difficult to take time off work for personal or family reasons. Workers only get the legally required breaks, which are half an hour after working more than 6 hours. The average sleep time is 7.4 hours, which is below the acceptable level.

Education: The company does not provide training, but it does provide short and long term learning. Long-term learning is provided by the parent company and is only available to people at higher levels of the hierarchy. Short-term learning involves learning specific job positions, mainly at the management level. In the last 5 years, 13 people have participated in long-term learning and 103 in short-term learning. Employee engagement is low, people's ideas and opinions are listened to, but change never happens as a result. Employees have more confidence in the credibility of management and therefore perceive the performance appraisal system as fairer, but there is still bias at a systemic level. The company has a well-developed performance appraisal system that covers everyone.

Living standard: The wage is less than 1.5 times the minimum hourly wage. Although the hourly rate is accompanied by various other mobile bonuses, workers may not receive these, such as performance bonuses. Company B did not comment on the wage tension, so it can be assumed that it is significant. The company also

provides non-wage benefits such as contributions to the third pillar pension scheme, travel contributions, meal contributions, gift vouchers and leisure vouchers. The company does not grant any leave beyond the statutory requirements.

Good governance: The company has written processes and rules in all areas. There are two reporting channels. The turnover rate is 25.97%. In the last five years, the company has not reported any incidents for which it had to pay a fine. In terms of audit, the company has external and internal audits and a mandatory rotation policy for external audit. The company conducts an annual customer satisfaction survey. The data obtained is used by the company to improve the quality of its products, so it can be assumed that the score meets the minimum threshold. In terms of common areas, the company has all the common areas that employees need.

Community vitality: The company does not participate in voluntary work, but corporate giving is present. No information was provided on the level of support. The company contributes to the creation of local businesses. There are no local suppliers. 89% of employees are local citizens. The company has not caused any damage to the community infrastructure, neither during its establishment nor during its operation. The company is not involved in solving social problems.

Ecological diversity: Although there are renewable energy sources on the site, they are below the minimum threshold. Energy consumption is monitored. The focus is on solid and liquid waste, which is collected separately where possible. The company also produces hazardous waste. The company does not support any environmental initiatives.

Culture: None of the company's products/services can be linked to the cultural sphere. The company has not caused any damage to cultural heritage, either in its creation or in its operation.

4.3. Overall results

The companies participating in the survey performed poorly in the GNH assessment (see table 3). One company received a GNH - C rating, while the better performing company received a GNH - B rating.

Table 3: GNH certification results

	Name of the indicator	Company A		Company B	
		Indicator _i	Domain _d	Indicator _i	Domain _d
Psychological wellbeing	Job satisfaction	0,000		0,000	
	Workplace trust	0,000		0,000	
	Job security	1,587		0,000	
	Discrimination	1,587		1,587	
	Harassment	1,587		1,587	
	Positive emotion	0,000		1,587	
	Negative emotion	0,000		0,000	
			Σ 4,761		Σ 4,761
Health	Occupational stress	0,000		0,000	
	Health risk exposure	0,000		0,000	
	Safety equipment	0,000		1,587	
	Illness/injury incidence rate	1,587		0,000	
	Disability incidence rate	0,000		1,587	
	Fatal injury incidence rate	1,587		1,587	
	Return to work policy/procedure	0,000		0,000	
			Σ 3,174		Σ 4,761
Time use	Working hours	1,852		1,852	
	Work pressure	0,000		0,000	
	Flexi-time	0,000		0,000	
	Work-life interaction	0,000		0,000	
	Adequate break	0,000		0,000	
	Sleeping hours	0,000		0,000	
			Σ 1,852		Σ 1,852
Education	Paid long-term study	0,000		2,222	
	Paid short-term study	2,222		2,222	
	Training	0,000		0,000	
	Performance appraisal system	0,000		0,000	
	Worker engagement	0,000		0,000	
			Σ 2,222		Σ 4,444

Living standards	Adequate pay	0,000	Σ 4,444	0,000	Σ 4,444
	Retirement benefit	2,222		2,222	
	Adequate leave	0,000		0,000	
	Fringe benefit	2,222		2,222	
	Pay gap	0,000		0,000	
Good governance	Regulation	1,852	Σ 7,408	1,852	Σ 9,260
	Whistleblowing channel	1,852		1,852	
	Turnover rate	0,000		0,000	
	Compliance	1,852		1,852	
	Customer/Client satisfaction	1,852		1,852	
	Common space	0,000		1,852	
Community vitality	Corporate volunteerism	0,000	Σ 4,761	0,000	Σ 6,348
	Corporate donation	0,000		1,587	
	Local business	1,587		1,587	
	Local suppliers	0,000		0,000	
	Local employment	1,587		1,587	
	Community infrastructure	1,587		1,587	
	Social venture design	0,000		0,000	
Ecological diversity and resilience	Renewable energy	0,000	Σ 3,174	0,000	Σ 4,761
	Energy	1,587		1,587	
	Emission	0,000		0,000	
	Solid waste	1,587		1,587	
	Hazardous waste	0,000		0,000	
	Liquid waste	0,000		1,587	
	Eco-design	0,000		0,000	
Culture	Culture design	0,000	Σ 5,555	0,000	Σ 5,555
	Cultural property	5,555		5,555	
H			Σ 37,351		Σ 46,186

Source: Authors' calculation

The similarity in the area of psychological wellbeing is due to the fact that the two companies operated on the same site until the economic crisis. Although several years have passed since the separation, changing the deep layers of corporate culture is a long-term task. However, the research showed that this process had begun, as Company B scored higher on the positive emotions indicator.

The living standards domain is intended to represent material goods. As the two companies are located in the same geographical region and in the same sector, neither company would fare well in the case of strong wage rivalry. This is also the reason why there are differences in monetary and non-monetary rewards, but these differences are minimal and cannot be represented at the level of the indicators.

Only two indicators were used in the area of cultural diversity. The two companies do not create cultural assets in the scope of their activities, but neither do they destroy them in the course of their establishment or in the course of their activities.

5. CONCLUSION

The GNH framework is also a very simple but effective tool for identifying potential problems in a corporate environment. However, using the GNH framework requires a lot of preparation, as it is necessary to define the sample and the indicators to be used, to prepare both the employee and the employer questionnaires, and to evaluate and summarise the data at the end of a lengthy process. The research has shown that the GNH framework can be used in the Slovak business environment with appropriate adaptations.

A number of problems have been identified in the companies surveyed. In the selection process, we made sure that the two companies were in similar industries and under similar conditions, and we were able to achieve this in our research. In the selection process, we chose the two companies in the research because they were

companies operating in the same geographical area and in the same sector, and were therefore able to provide relevant information for comparison. The evaluation showed that the two companies are almost identical in terms of the problems they face, with minimal differences. This is due to the fact that they operate in the same geographical area and have a similar company profile. In neither company are employees satisfied, and trust in the workplace is almost non-existent.

A closer look at the two companies reveals that people in the better performing company are happier, less stressed, trust each other more and are able to create a more supportive working atmosphere as a collective than in the poorer-performing company, which is already facing a severe labour shortage due to management negligence and a flawed value system. However, improvement is expected and desirable for both companies, as they have only managed to achieve the last two places in the five-tier GNH certification system. Companies should pay more attention to their employees and listen to their valuable comments and suggestions for improvement. Several studies have shown that even the act of listening to employees at the management level, without taking any action, can significantly increase productivity.

The GNH framework encompasses all aspects of life that are worth addressing. It can be useful not only for existing businesses and organisations but also for the founding of new firms. It encourages companies and entrepreneurs to adopt alternative economic models that promote sustainability and social well-being.

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The Challenges Of Green Marketing In Business Culture In Albania

Aurela BRAHOLLI¹

¹European University of Tirana, UET, Albania, aurela.braholli@uet.edu.al, ORCID ID: 0000-0002-6499-0686

Abstract: In recent years, society is emphasizing and giving more and more importance to the idea of "going green" which means correct promotion of the environment and sustainable practices in everyday life. Green Marketing is one of the strategic efforts to create a business based on the environment and health, popular in the late 80s and early 90s. Green marketing is developed in accordance with public attention to environmental issues so that society demands responsibility from business people in carrying out business activities. To achieve the aims and objectives of this study, the method of observational analysis was used, intertwined with secondary data to find out the challenges faced by Albanian companies and businesses in developing the Green Marketing strategy in the products and services they offer. The objective is to understand how useful this new strategy is in the business culture of our country and how the consumer reacts to the implementation of this new approach. Through this study we intend to understand what benefits this strategy has on the environment and the consumer, as well as the challenges and opportunities encountered in the local market. At the end of this study, we come to the conclusion that some companies in our country, are developing the Green Marketing strategy to help develop brand identity, increase sales and gain market share.

Keywords: Green Marketing, culture, Albanian companies, consumer, strategy, benefits, environment.

1. Preface

Recently, the concern for the topic of environmental sustainability has been raised in all national and international political issues and has been recognized as a key factor of innovation. Now everyone is becoming more informed about the main characteristics of green products, discovering and finding the leading ones for increase or decrease their price and consumers' willingness to pay more for them, sales channels and promotional tools would be very useful for companies aiming for design, development and marketing. green products Growing international concerns about environmental sustainability and climate change are forcing all companies to face the challenge of integrating environmental issues into corporate strategy and activities Nidumolu (2009). This challenge involves most of the company's functional areas, design, manufacturing and marketing. The development and production of environmentally sustainable products or services is essential to reduce the environmental impact of industrial activities and promote cleaner production. Marketing is essential to this process as marketing inputs are essential to determining the concept and design of the product. Recently the concern for environmental sustainability has been raised in all national and international policy issues and has been recognized as a key driver of innovation. In this way, the number of companies developing eco-friendly products has increased rapidly and consumers have shown an ever-increasing interest in these products. Now everyone is more informed about the main characteristics of green products, discovering and finding those that lead to an increase or decrease in their price.

According to Dangelico Rosa Maria (2017) a deep understanding of Green Marketing would promote the creation of cleaner production through the development of green products and, in turn, bring sustainability to the consumer, thus making the marketing that utilized this successful. The aim of this study is to gain theoretical and practical observation in the development and effectiveness of this relatively new form of marketing strategy in Albania used by various production companies. Like any other article, this study have some limitations such as: the lack of literature and studies for our country regarding Green Marketing, the difficulties in finding companies that currently use this strategy but were willing to be part of the study, without creating a probability sample that would help generalize the data. However, through the results obtained, we will be able to present concrete recommendations for the design and correct functioning of this strategy by companies operating in Albania.

2. LITERATURE REVIEW

Green Marketing is a strategy that can help marketers sell their goods and services and achieve key business objectives by focusing on creating recognized environmental benefits (Firdiansyah and Saputra, 2021). Green Marketing deals with products, services and consumer awareness of greenery. products (Gleim, 2013). Green marketing is a process by which individuals and groups satisfy their demands and desires through a principled

approach that minimizes negative impact on the environment. The growth of green marketing activities can occur as a result of internal or external factors. Among external factors, factors such as: response to consumer demand and increased environmental pollution can be caused (Syafri, 2020).

In the company's practice, the green marketing strategy aims to educate consumers to be aware of the environmental condition based on the product or services consumed. Consumers also play an important role in protecting the environment by changing their purchasing habits (Edeh, 2020). From these, marketing strategies need to be developed in new and innovative ways to practice green marketing. Sanker and Janani (2020) studied customer motivation towards green marketing with various awareness programs such as green marketing tools, eco-labelling, and packaging that should be based on eco-friendly features. While Tiwari (2019) explored various themes of green marketing, describing it as a phenomenon of particular importance in the modern market and specifically in India. He focused on key issues such as: adoption of green marketing practices, the current Indian market scenario and challenges arising from the use of green marketing.

Green marketing is one of the most important initiatives of companies and is showing fruitful results across the world (Sharma, 2020). Green marketing strategy is a neo-concept in marketing and is gaining momentum in most countries like India (Singh, 2011). Many times customers gets confused in identifying the green product in the market. To reduce this confusion among consumers, eco-labelling was introduced in Germany in 1978 (Kirchhoff, 2000 Brecard, 2014). Ecolabels are the symbol or logo on the product that describes that the product is safe for the environment and can be considered an eco-friendly product. There are different types of eco labels available according to their environmental standards and these manufacturers claim that the products are safe for the environment with the help of eco labels (Simi, 2009). Eco labels are designed to make the consumer aware of the product and its difference from other products. Ecolabels help consumers make purchasing decisions (Bratt, 2011). Eco-labels seem to be just a logo, but their responsibility is much greater than others as they reflect the image of the product (Clinton, 2014). There are dark clouds in eco-labels, such as consumer skepticism, lack of awareness among consumers, fake eco-labels, lack of reliable eco-labeling agencies and lack of monitoring agencies (Simi, 2009).

The application of green marketing today faces many difficulties because many companies do not understand the practice of green marketing. As a result, consumers' perception regarding the green marketing strategy practiced by the company is confusing. There is a gap between marketing perceptions and consumer perceptions of the products offered. The lack of adequate consumer knowledge on environmental issues creates problems for companies in representing their products in that market where consumers do not believe that the promoted product is environmentally friendly (Tanwari, 2020; Burhan, 2020; Kayalvizhi and Raghuram, 2020). International concerns about environmental sustainability and climate change are forcing all companies to face the challenge of integrating environmental issues into corporate strategy and activities Nidumolu (2009). The development and production of environmentally sustainable products or services is essential to reduce the environmental impact of industrial activities and promote cleaner production. Furthermore, the development of green products/services would be useless for the purposes of environmental sustainability if they were not widely distributed on the market. Marketing is of great importance in creating the so-called green market by creating relationships with consumers, thus influencing their awareness of environmental sustainability and informing them about the benefits of environmentally sustainable products.

Economic development leads to numerous environmental problems including: resource depletion, deforestation, coastal reclamation, desertification, climate change, pollution and excessive use of energy. According to (Zhu and Sarkis, 2016; Feher et al., 2021), these problems endanger economic sustainability, public health and social stability. Therefore, global economic growth has also led to environmental concerns that have produced significant social changes, embodied in the emergence of green markets and green consumers. Industrial organizations are important in influencing consumer choices through green marketing strategies. Globally due to social changes, consumers have put pressure on organizations to make their products and processes greener, thus influencing green markets and innovation (Zhu and Sarkis, 2016). In recent years, green issues have been discussed more by business and industry, the financial and financial sector. institutions and the general public. Environmental damage is caused by continuous consumption, marketing, production, processing and pollution, along with some environmental disasters. As a result of changes in the market demand pattern, it can be estimated that the market for green products and services has become attractive for both the business sector and the consumer, as well as business to business. There are so many limits to growth that any ambitious company will face in the competitive market: it is necessary to adapt to the constraints and anticipate the risks and opportunities of the business (Zayan, 2020).

The circular economy is the basis of the green economy, which is joined by the common objective of uniting economic, environmental and social objectives. For this reason the concept "green" has become a common concept in developing countries, as well as in Albania. Other studies conducted in our country have highlighted the impact of environmental aspects on the decision to purchase food products (Kokthi, E.; Kruja, D., Guri, F.; Zoto 2021). The concept of circular economy is defined as a way to address sustainability, without impeding current economic benefits and opportunities for future generations, serving as an alternative business model and a way to create additional job opportunities (Kusa, A.; Fasiang, T., Gezik, P. ; Gregus, M. 2020) . There is a vast literature emphasizing all dimensions of green products, from design, manufacturing, packaging and other attributes (Liu, Y.; Hong, Z.; Zhu, J.; Yan, J.; Qi, J.; Liu, P.2018), but very few of them have the level of consumer acceptance and benefits of circular change that green products can offer. Consumer decisions to purchase green products are likely to be influenced by increased awareness and the growing trend towards sustainable consumption (Vargas, A. M.; de Moura, A. P.; Deliza, R.; Cunha, L. M. 2021). In his study (Panda, T. K.; Kumar, A.; Jakhar, S.; Luthra, S., Garza-Reyes, J.; Kazancoglu, A.; Nayak, S. S.2020) he also adds that policy makers and actors supply The supply chain must understand consumers' preference for green products. Fraccascia et al.,2018i define green products as products that provide the same performance as other products and that minimize damage and effects on the environment. Recently, green products have attracted attention and are more environmentally friendly: among their characteristics there is the concept of recycling, correct production and care for human health (Kokthi, Canco, Topulli, 2021).

3. METHODOLOGY

To achieve the aims and objectives of this study, a method of observational analysis, intertwined with secondary data, was used. To provide better quality information and to achieve the objectives of the study, the closed-question questionnaire tool was used for the collection of quantitative data. The closed and concise questions served to better understand the information, development and future premises from two perspectives for this marketing strategy. The questionnaire included a sample of 200 people and water and milk companies to achieve broad population involvement. The primary data are those obtained from the distribution of closed-question questionnaires distributed to consumers in Google format and to companies that have implemented this strategy or intend to use this strategy. Therefore, the consumer questionnaire consisted of 11 questions, while the other company-related questionnaire contained 14 closed questions to further explore the study. Secondary data is data obtained from other studies related to this field. The target group of the study is consumers and individuals employed in companies that use green marketing or not in places where there is movement, near universities, shops, other activities. The survey was conducted through the Google forms platform, while the data was analyzed and restructured into tables and graphs using Excel, where the classification was made using the ordinal and nominal scale.

3.1 DATA ANALYSIS

This part of the study involves the analysis of the data collected from the questionnaires distributed to consumers and in some companies and their interpretation by first extracting those data considered demographic, i.e. gender, age, professional training and more. A confidence level of 95% is set, with a margin of sampling error of 5%.

Demographic and general characteristics of the consumers interviewed

Chart 1: Gender

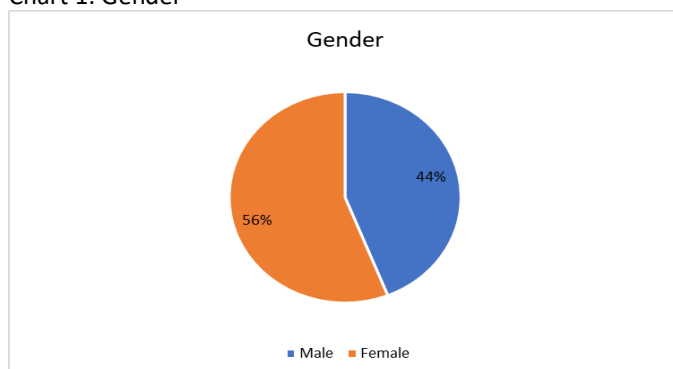


Chart 2: Age

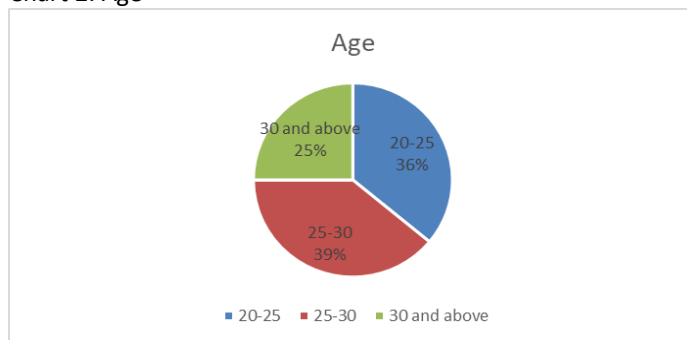
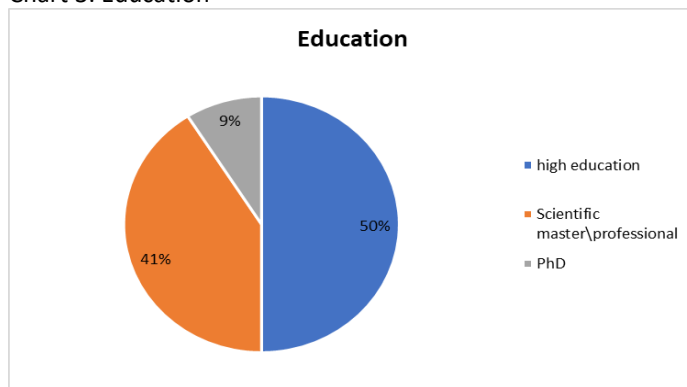
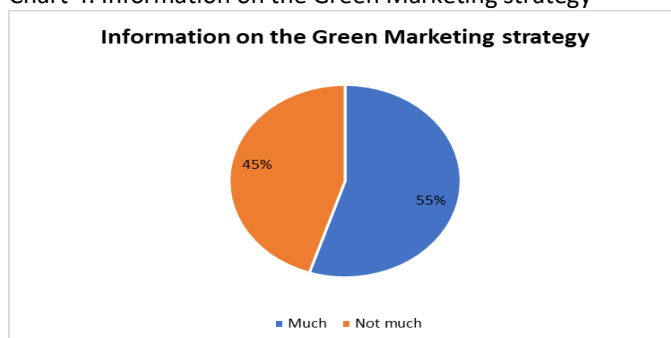


Chart 3: Education



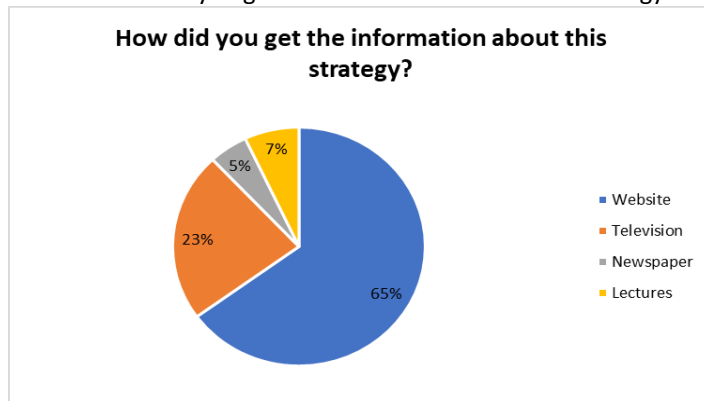
From the demographic data above (graphs 1, 2 and 3), we note that women are the participants with the highest percentage in the study. The age group with the highest number of study participants for the consumer questionnaire is 25 to 30 years old with 39%. This is also related to the fact that having a business probably takes time and therefore this age is more inclined towards business than someone younger. For the consumer, the lowest participation percentage is that of those aged 30 and over with 25%. As regards the level of education, according to the data obtained from the questionnaire, these are high-level participants with a scientific or professional master's degree, respectively among consumers 41%. It is also worth noting that the educational level of all participants was quite high, more than 50% had a bachelor's degree.

Chart 4: Information on the Green Marketing strategy



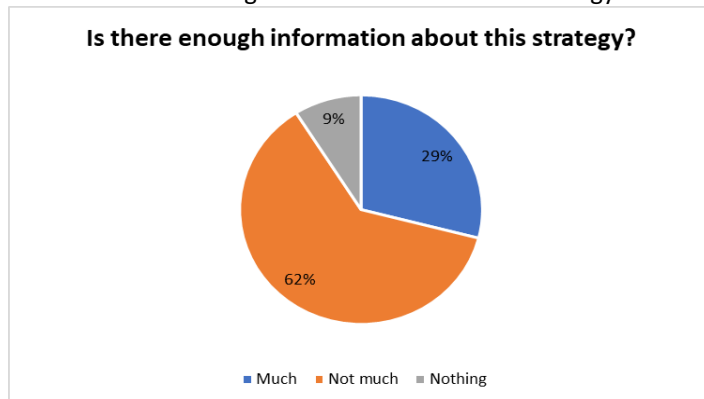
A marketing strategy refers to a company's overall plan to attract potential customers and turn them into potential customers of the products or services offered by the company. The importance of green marketing strategy refers to the practice of promoting and selling environmentally friendly products and services. Today, green marketing is no longer an unknown concept to consumers and businesses. According to the data obtained from graph no. 4, 55% of consumers have information on green marketing and this has also influenced their professional training. Meanwhile 45% were those who did not have much information on this marketing strategy.

Chart 5: How did you get the information about this strategy?



As graph 5 shows, the Internet is a good medium for spreading information about this strategy with 65%, followed by television with 23%. Few are the consumers who have been asked and received lessons on Green marketing with 7% or those who read about this strategy in the newspapers with 5%.

Chart 6: Is there enough information about this strategy?



The majority of consumer subjects who participated in the study, i.e. 62%, believe that in our country there is little information regarding Green Marketing. Only 9% think there is no information and 29% think there is a lot of information. This is demonstrated by the lack of literature and studies on green marketing in our country.

Table.1: How do ecological products work in the reality of the Albanian consumer?

The increase in the use of ecological products also increases their price	Much 37%	Not much 55%	Nothing 8%		
How much are you willing to pay for these products?	Much 51.5%	Not much 46.5%	Nothing 2%		
Why should you pay more for these products	Environmental responsibility 36%	Increase product quality 23%	Increase quality of life 41%		
Which factor influences you the most in their use and purchase	Packgaging 28%	The Product 20%	Place of sale 0%	The Marketing 15%	All 37%

Why shouldn't you pay more for these products?	It doesn't cover the cost	There are no benefits for the environment	I'm not ready to pay more	I would pay for it
	59.6%	5%	24.5%	10.9%

The data presented in the table above presents an overview of the reality of Albanian consumers regarding the adoption of green products. Products that should protect the environment and bring a different spirit to Albanian marketing. If we talk about the product-price ratio, 55% think that the increase in the use of these products, consequently, also leads to an increase in their prices, 8% think that this does not influence at all, and on the other part, 37% of them think it has a great impact. Would Albanian consumers be willing to pay for these products, for the benefit of society? On this aspect, 51.5% are very available, 46.5% are neutral and only 2% would not pay for these products.

Those who choose to pay more for these products, are because these products increase the quality of their life by 41%, while others think that we should be responsible for the environment with 36% and others think that the quality of the product increases with 23%. About the question of which factor influences most in their use and purchase, they asked that they would be more influenced by the packaging for 28%, the product for 20%, the marketing for 15% and 37% summarize all these points as good influencers. On the other hand, they would not pay if they could not afford the cost of the product 59.6%, there are cases where they are not willing to pay extra for these products with 24.5%, while others because they think they have no positive benefits for the environment 5% and finally 10.9% would always pay.

Referring to the questionnaire for companies, we note as in the case of the questionnaires for consumers that in both cases the participants with the highest percentage in the study are women.

Chart 7: Gender

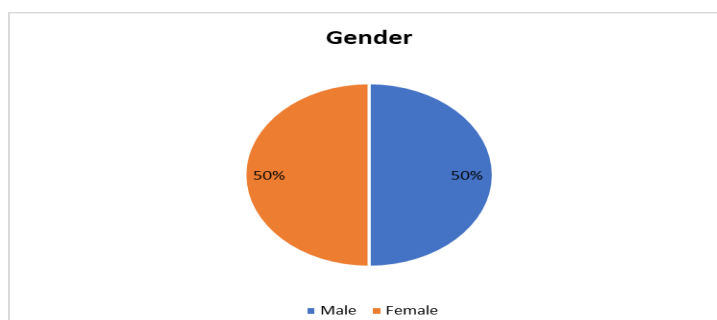
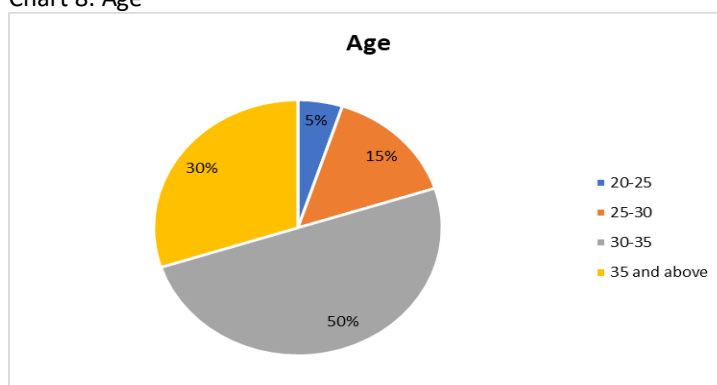
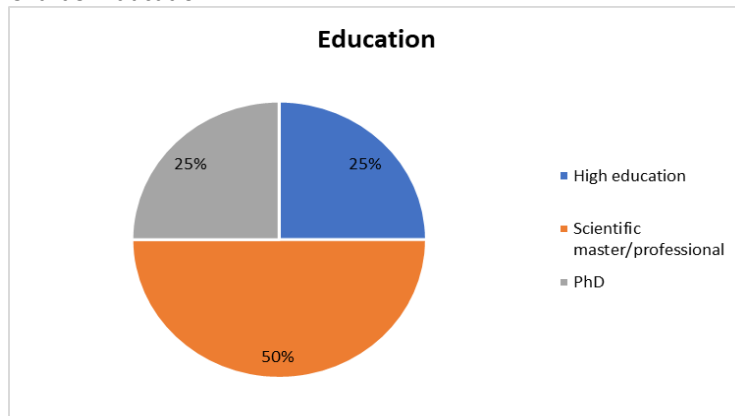


Chart 8: Age



The age group with the highest number of participations in the company questionnaire is that of 30-35 years old with 50%, while the one with the lowest percentage is that of 20-25 years old with 5%.

Chart 9: Education



Regarding the level of education, 50% of the companies interviewed are high-level participants with a scientific or professional master's degree. This demonstrates the high level of education of the subjects who participated in this study.

Table 2: Evolution of the Green Marketing strategy in Albanian companies

• The evolution of the strategy since the beginning of its implementation	Much 75%	Not much 25%	Nothing 0%
• How effective green marketing is for your business	Much 75%	Not much 25%	Nothing 0%
• How much positive impact does this marketing strategy have on the environment, in your experience?	Much 80%	Not much 20%	0%

Companies are starting to apply Green Marketing strategy to help developing brand identity, increase sales and gain market share. Applying these marketing strategies it will help them better position their company in the market. Over the years, the global evolution and beyond, this strategy in our country, according to the data, has evolved and found application in different sectors with 75%, while 25% are neutral in the response. The same percentages also apply to the question of how effective green marketing is for your company with 75% very much while 25% are neutral in their response. When asked if this strategy had a positive impact based on experience, 80% responded a lot and 20% a little.

Table 3. Which of the green marketing strategies is most used by your company?

Create Sustainable Products	10%
Use of Sustainable Materials	20%
Waste Disposal	5%
Electronic Marketing	3%
Use of Environmentally friendly Transport	20%
Promotion of the Green Alliance	40%
Investing in your Community	2%

There are several strategies most used in the case of applying green marketing, which the most used is the Promotion of the Green Alliance with impact in the community in which these companies operate, contributing to improving the quality of health by 40%. The Use of Sustainable Materials by 20%, which will influence the creation of more sustainable products that have a number of implications while minimizing their environmental impact. The Use of Transport which contributes to the environmental impact of 20%. Creating

10% Sustainable Products, and Investing in your Community 2% that help find a balance between economic growth and environmental protection.

Table 4: How many years have you been implementing the green marketing strategy in your company?

0-2 years	45%
2-5 years	30%
5 years and above	25%

In Albania the majority of companies, around 45%, have been implementing this strategy for 0-2 years, demonstrating once again that not much time has passed since companies started applying this type of strategy. Meanwhile, only 25% are over 5 years old, and 30% of them are 2-5 years old. These results shows that in Albania companies have not yet managed to create belief in the actual results of applying this strategy.

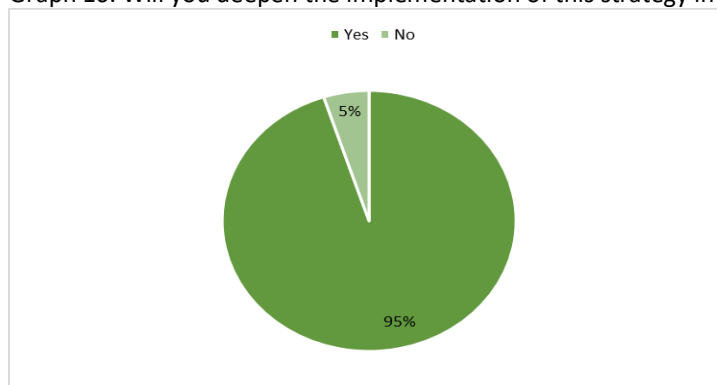
Table 5. Level of information on the strategy

How much information did you have about this strategy at the time you decided to implement it in your business?	Much 60%	Not much 35%	Nothing 5%
How much this strategy is used by companies as camouflage, worsening the damage to the environment	Much 18%	Not much 68%	Nothing 14%
How much information do you have on the Software as a Service platform created for the protection of the environment	Much 30%	Not much 65%	Nothing 5%

The table above shows the level of information that companies had at the beginning when they started implementing this strategy, of which 60% had a lot of information, 35% not much information and only 5% of them had never had information on the implementation of this strategy.

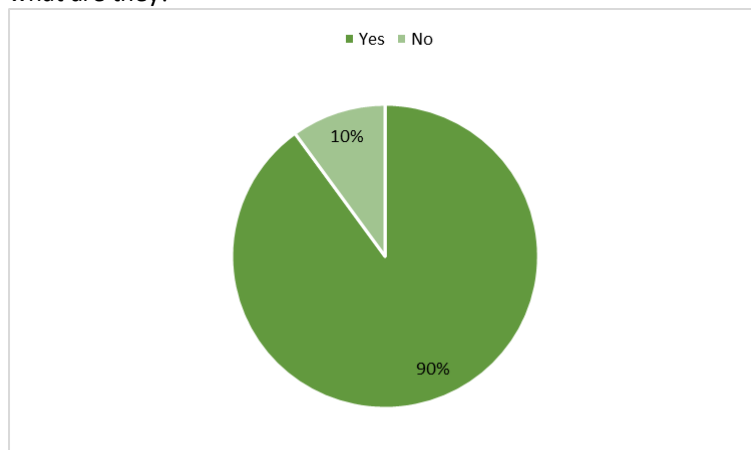
There are some companies that think that this strategy is used as a deception to damage the environment more, 18% think very much, 68% not much and 14% not at all. Some of companies had information about the software “as a service” platform, which was created for environmental protection. 30% of them knew it very well, 65% knew not much and only 5% still had no information about this platform.

Graph 10. Will you deepen the implementation of this strategy in your company?



It is important for a company to establish a stable and competitive position in the market. Organization of various activities such as increasing the number of training courses and meetings with customers and employees to assess their needs; find opportunities for new studies to look for other ways to preserve the environment; add innovative elements to the product presented to the consumer; participating in various training courses with successful companies that have implemented this strategy. The data reported above states that the majority of people to whom the questionnaire was addressed will further delve into the implementation of this strategy in their business by defining the forms of the activities mentioned above.

Chart 11. Do you have undergone training on implementing and using this strategy in your company. If yes, what are they?



From graph no. 11 it can be seen that, 90% of the customers interviewed regarding the forms of training followed for the implementation and use of this strategy in their business stated that they had been trained on: software as a service platform, on effects of packages on the consumer and how to use it to protect the environment, for the functioning of green marketing, on the preservation of the environment for biodegradable products and their impact on the environment; on understanding green marketing and its strategies.

4. CONCLUSIONS

1. Green marketing is defined as the coherence of all activities that design services and objects to satisfy human needs and desires without affecting the natural environment, there is a discrepancy between market and consumer perceptions, the existence of uncertain competitive pressures in the market, even though the government has enacted laws to enable consumers to make better decisions and motivate them to be environmentally friendly. It is consumers' lack of knowledge about environmental issues, which pushes companies to represent products or services in a market where consumers do not believe that the product or services promoted are environmentally friendly.
2. Through theoretical and practical observation of the development and effectiveness of this relatively new marketing strategy in our country used by various companies, the use of this strategy has been proven effective and this has been observed in maximizing information especially in recent years as well as the results obtained from the questionnaire.
3. The results obtained from the developed questionnaire demonstrated that for our decision this form of marketing had an impact using the elements of the environment, its quality, its conservation.
4. Some of the companies operating in our country have begun to combine environmental issues with business culture by starting to practice the green strategy and using alternative resources for the production of goods to preserve natural resources from degradation.
5. Albanian consumers changed their opinion on green products and started to demand more products and as a result companies started to put the green strategy into practice.
6. This study was one of the few studies conducted in the Albanian business context, thus covering a broad panorama of the benefits, requirements and problems of this strategy for businesses and consumers.
7. Using the elements of this strategy has greatly influenced the growth, development and use of environmentally friendly products in our country, causing these products to increase in size and the consumer to have greater purchase demand.
8. The consumer tends to purchase by paying more for the quality of these products associated with the green elements they contain.
9. The greatest increase in the use of this strategy by Albanian companies has occurred especially in the last 5 years, introducing many elements into use
10. The company places the preservation of the environment at the center of every decision made.

5. RECOMMENDATIONS

1. In the challenging global market, it is necessary to evolve this branch of marketing by combining customer perception and green marketing.
2. More importance should be given to the development value of green marketing in terms of trends, customer behavior, added value of products and services.
3. Companies should invest in and develop more green practices to have a better impact on the market and appear as a more environmentally responsible company.
4. In the academic field, it is recommended to carry out other studies in the same field, since it is important to know the problems of this marketing strategy. There are very few studies that focus on this target of marketing, consumers, businesses and employees.
5. Training should be developed focusing on this strategy requested by the employees themselves, but not only discussions with consumers for the improvement of this strategy would be very effective to increase the level of information of consumers, different enterprises in this field regarding the behavior of the most innovative elements.

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An Analitik and Structural Look at The Needs Og Labor Market In The Republic Of Kosovo

Besmir SALIHU¹

¹South East European University, bs29099@seeu.edu.mk

Abstract: Labor market is a dynamic and complex dimension that includes lots of segment economic and social life of a country who have their significant impact in the way this entire report functions in harmony with policies and resource requirements for employment and the labor market. Dependence between key segments with the state structure and mechanisms is vital in correctly addressing the needs of the labor market. In this context – the systematic follow up of the dynamics and the demand of the labor market and the tendency to adapt them to the curricula of all educational levels to prepare staff for these needs it is a very effective and correct way drafted public employment policies in the most efficient way , which can create stable and easily measurable results in the labor market, as the involvement of industry/employers in these processes also has it own importance. For this purpose, this paper aims and contains the basic elements of information for specific fields which are evaluated as current trends of the demand that the labor market has in the Republic of Kosovo, but also presents the gapes that the system faces in general as a part of many challenges which the labor market actually has.

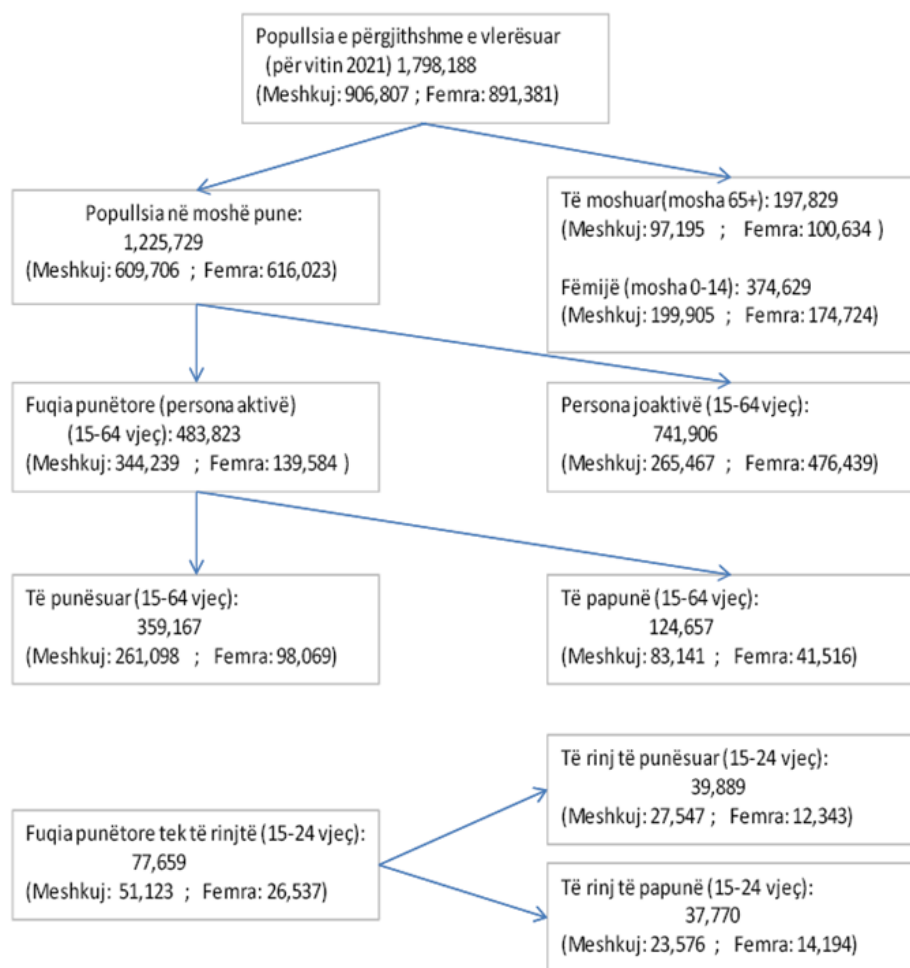
1. INTRODUCTION

Kosovo's GDP per capita is the lowest in the region, with 3.566 Euros in nominal terms in 2017, which is about 26.3% of the EU average (the regional average Euros) (EU 2019). Economic activity has grown steadily since 2015, but is being limited from a narrow production base and significant under-utilization of the workforce. Real GDP growth reached 3.9% in 2018 (Central Bank of Kosovo 2019). In recent years, the economy has been driven by public investment in infrastructure and private consumption (the latter financed by large remittances from abroad and strong growth in wages and credit).Kosovo is the youngest country in Europe with the youngest population. However, with all the potential of the labor force, Kosovo and its economic potential cannot currently provide employment for everyone. Based on official estimates, the population of Kosovo in 2021 was 1.798.188 of which 906,807 were males and 891,381 were females. There are 197,829 elderly people over 65, of which 97,195 are men and 100,634 are women.

While according to the Labor Force Survey for 2021, the unemployment rate in Kosovo was around 20.7%.Where in this percentage, the most pronounced unemployment was among women with 25.0% compared to man, 19.0%. The most pronounced rate of unemployment is among the 15-24 age groups with 38.0% (Workforce Survey- AFP 2021). So, the basic reason to analyze, research and study the part related to the impact on employability of active employment policies is precisely the fact that these overviews ,reports ,reports, data and statistics in relation to unemployment make this area of research encouraging and very current.

While the working age population is calculated at 1,225,729. Employed between the ages of 15-54 are 359,167 of whom 261,098 are men and 98,069 are women, while unemployed 15-64 are 124,657 of whom 83,141 are men and 41,516 are women. The young age group of 15-24 years as employees make up 39,889 of which 27,547 are men and 12,342. From the data, it can be observed that in 2021 the unemployment rate is 25.8% and unemployment dominates in the young age group, which also constitutes the highest level of unemployed within the age structure. While the female gender also has a high gap or a low participation in employment, also in the group of inactive persons, where out of 741,906 at the national level, 265,467 are men and 476,439 are women. The classification of the labor market in Kosovo is presented below in figure 4.

Figure1. Classification of the Labor Market for the population of Kosovo - 2021



Source: ASK. Based on Labor Force Survey, 2021.

Table 1. The main indicators of the labor market in Kosovo, 2021.

Indikatorët kryesorë të tregut të punës (%)	Meshkuj	Femra	Gjithsej
Shkalla e pjesëmarrjes në fuqinë punëtore	56.6	22.0	39.3
Shkalla e joaktivitetit	43.4	78.0	60.7
Raporti punësim ndaj popullsisë (shkalla e punësimit)	45.9	16.5	31.1
Shkalla e papunësisë	19.0	25.0	20.7
Shkalla e papunësisë tek të rinjtë (15-24 vjeç)	33.7	46.5	38.0
Pjesëmarrja e të rinjve NEET në popullsinë e re (15-24 vjeç)	31.8	32.4	32.1
Pjesëmarrja e punësimit të paqëndrueshëm në punësimin e përgjithshëm	14.9	6.8	12.7

Source: ASK. Based on Labor Force Survey, 2021.

Kosovo has a very low activity and level of employment and the marginal presence of women in the labor market is one of the most striking challenges, together with widespread informal employment and the poor quality of work in the private sector. According to some studies and recommendations of responsible institutions such as the Ministry of Trade and Industry, it results that the sectors that have the most potential for development and employment generation are: **1. ICT sector and services, 2. Agriculture , 3. Food processing , 4. Production and processing ,5. Energy and electricity supply.** While in reality the employment rate according to activities and gender expressed as a percentage in Kosovo is presented in table 2, as follows

Kosovo (age 15 and over)	Male	Female	Gjithësej
Employment participation by activity	(%)	(%)	(%)
A – Agriculture,forestry	3.4	1.1	2.8
B – Mining and ores	1.3	05.	1.1
C - Production	11.5	7.2	10.3
D – Supply of electricity,gas,steam and air conditioning	2.8	0.9	2.3
E – Water supply,waste water,waste managment	1.2	0.3	1.0
F - Builder	13.8	1.3	10.5
G – Wholesale and retail trade,repairs of vehicles and motorcycles	16.5	17.6	16.8
I – Acommodations and food service activities	7.2	4.2	6.4
H – Transport and storage	4.4	1.0	3.5
J – Information and communication	3.3	2.9	3.2
K – Financial and insurance activities	2.3	2.2	2.3
L – Real estate activities	0.2	0.0	0.2
M – Professional,scientific and technical activities	2.8	4.1	3.2
N – Administrative activities and support servies	4.9	6.1	5.2
O – Public administration and protection,compulsory social insurance	6.2	7.0	6.4
P - Education	6.3	20.7	10.1
Q – Human health and social work activities	3.6	13.5	6.2
R – Art,entertainment and recreation	1.4	1.1	1.3
S – Activities of other services	3.0	5.0	3.5
T – Activities of family economies as an employer,production activities of undifferentiated goods and services of family economies for their own use	2.2	1.7	2.1
U – Activities of extra territorial institutions and organizations	1.5	1.4	1.5
Overall:	100.0	100.0	100.0

¹ <https://data.consilium.europa.eu/doc/document/ST-8546-2019-INIT/en/pdf>

¹ B.Krasniqi (2019) IESB Institute: Analysis of labor market needs and skills: Prospects for the future. Kosvo : Publication of the project “ Harmonization of Education and Training with the Needs of the Labor Market 2”. Page 30. ISBN : ISBN 978-9951-8990-0-0.

2. METHODOLOGY

For this research, secondary data have been applied from sources that have published statistics, evaluation reports and similar analyzes that deal with this topic for the field in the questions, so the secondary data sources are: Eurostat, Kosovo Statistics Agency – Survey of Labor Force, Central Bank of Kosovo, Employment Agency of the Republic of Kosovo and the rest is from various literature which in the prism of the analysis presents more specific information with in the sectors that have increasing/promising potential for the labor market but also the percentage of employability in specific sectors. The focus of this research is on the most accurate, structural and analytical identification of the needs of the labor market in Kosovo in order to identify

the actions and mechanisms that must be undertaken to create the fastest and most stable integration in the labor market.

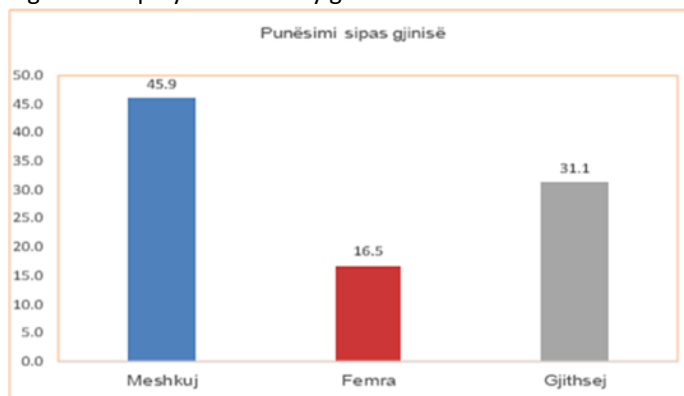
3. RESULTS AND DISCUSSION

Unemployment as mentioned in the part of the theoretical definition refers to an individual or group of individuals who during the covered (reference) week were unemployed or were not paid or self-employed but are ready for work and are actively seeking work with concrete and specific steps. According to the 2015 global Human Development Report (HDR) "Work for Human Development) work affects human development in numerous ways, including:

- 1) increase in income enabling individuals and family economies to reach a suitable standard of living;
- 2) enabling individuals and family economies to build a secure base for their lives, making it possible for them to have solutions for long term periods;
- 3) empowering women through greater autonomy and decision-making power in the family and community
- 4) increase participation and enabling the voice individuals to be heard through interaction with others at work and participation in collective decision-making
- 5) granting dignity on an individual basis and recognition through the assessment of achievements, self-respect and social identity, and
- 6) Increasing creativity and innovation by providing individuals with opportunities to use creativity.

Of the entire population of working age, 31.1% are employed. Gender differences are pronounced where only one in five women of working age are employed (or 22%) compared to three fifths of men (or 56.6%). The employment rate among women of working age is only 16.5% compared to 45.9% for men. This very low female unemployment rate stems from a combination of a very low labor force participation and high unemployment. Women were mainly employed in the education, trade and health sectors (51.8% of employed women). Men were mainly employed in the trade, construction and production sectors (with 41.8% of employed man).

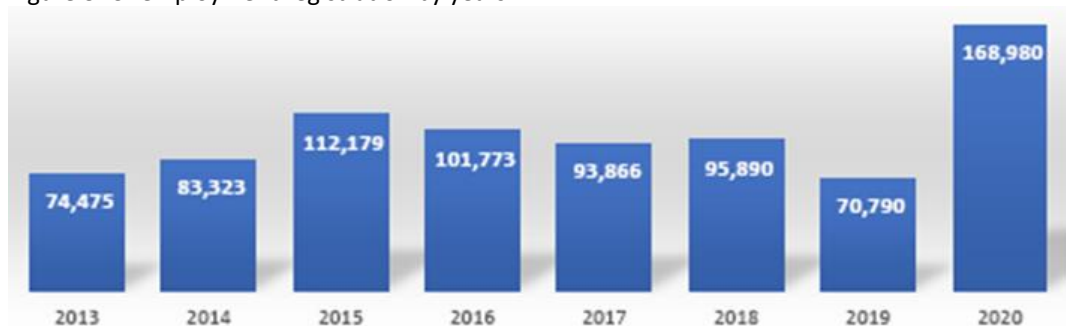
Figure 2. Employment rate by gender-2021



Source: ASK. Based on Labor Force Survey, 2021.

Unavoidable in recent years have been the consequences caused by the increase in unemployment as a result of the effects caused by the Covid-19 pandemic, directly hitting the labor market, causing the loss of jobs and shrinking opportunities for a new jobs works. According to the data of the Employment Agency of the Republic of Kosovo, the year 2020 has marked the highest number of unemployed registered in the Employment Offices, compared to the previous years.

Figure 3. Unemployment registration by years



Source: Employment Agency of the Republic of Kosovo (2020). Employment and Vocational training annual report.

So, the increase of unemployment in 2020 was a consequence of the covid-19 pandemic, whereas the response the government of the Republic of Kosovo launched several measures to support certain groups of the unemployed with a special focus with those who have remained unemployed as a result of the pandemic, also marking the periods of April and May as a months with the largest registrations of the unemployed.

Figure 4.Registration of new job seekers



Source: Employment Agency of the Republic of Kosovo (2020). Employment and Vocational training annual report.

From the total number of unemployed, a high percentage of them are held among unqualified people and those with low level of education, namely people with primary and secondary education. These categories of 86.60% of the number of unemployed. The high increase in the number of unemployed according to qualification has also been evidenced among people with primary school, having had 80.7%, the increase in the number of people with high school was 61.7%. In terms of gender, women with higher qualifications (Bachelor and Master) have higher levels of unemployment than men. While the unemployment rate among women with lower level of education (primary and secondary), or among those without a qualified education, is lower compared to men.

Table3. Registration of unemployment according to qualifications -2020

Niveli i kualifikimeve	Papunësia	(%)	Ndryshimi te 2019	Femër	Meshkuj
Pa kualifikuar	83,317	49.3%	356.3%	38,880	44,437
Klasët I –IX (Shkolla fillore)	31,088	18.4%	80.7%	13,126	17,942
Arsim i mesëm profesional	31,987	18.9%	57.7%	11,353	20,634
Shkollë e mesme gjimnaz	10,579	6.3%	61.4%	4,709	5,870
Bachelor	11,089	6.6%	41.3%	7,075	3,994
Master	980	0.6%	42.6%	558	402
Doc. i Shkencave	-	-	-	-	-
Total	168,980	100%	138.7%	75,701	93,279

Source: Employment Agency of the Republic of Kosovo (2020). Employment and Vocational training annual report.

Table 4. Registration of unemployment according to qualifications -2019

Niveli i kualifikimeve	Papunësia	(%)	Ndryshimi te 2018	Femër	Mashkuj
Pa kualifikuar	18,260	25.8%	-17.0%	9,175	9,085
Klasët I –IX (Shkolla fillore)	17,190	24.3%	-29.3%	7,475	9,715
Arsim i mesëm profesional	20,280	28.6%	-35.6%	7,238	13,042
Shkollë e mesme gjimnaz	6,554	9.3%	-0.6%	3,083	3,471
Bachelor	7,833	11.1%	-27.4%	5,036	2,797
Master	673	1.0%	-3.3%	375	298
Doc. i Shkencave	-	-	-	-	-
Total	70,790	100%	-26.2%	32,382	38,408

Source: Employment Agency of the Republic of Kosovo (2020).Employment and Vocational training annual report.

Regarding the number of unemployed according to age, the statistic of Employment Agency show that the highest level of unemployment is found among people aged 25-39,who although with the highest number of unemployment, compared to other age groups, have the highest number low rise compared to the previous year. The highest increase in unemployment is evident among people aged 55+, who although they have the lowest number of unemployment, have had the highest increase compared to other age groups.

Table 5. Registration of unemployment according to age groups:

Grup-mosha	Papunësia	(%)	Ndryshimi te 2019	Femër	Mashkull
15 - 24	28,130	16.6%	121.3%	12,799	15,331
25 - 39	67,844	40.1%	94.2%	30,431	37,413
40 - 54	50,950	30.2%	183.9%	23,200	27,750
55+	22,056	13.1%	324.7%	9,271	12,785
Total	168,980	100%	138.7%	75,701	93,279

Source: Employment Agency of the Republic of Kosovo (2019).Employment and Vocational training annual report.

Table 6. Registration of unemployment according to age groups:

Grup-mosha	Papunësia	(%)	Ndryshimi te 2018	Femër	Mashkull
15 - 24	12,709	18.0%	-32.2%	5,935	6,774
25 - 39	34,943	49.4%	-27.8%	15,698	19,245
40 - 54	17,945	25.3%	-19.1%	8,279	9,666
55+	5,193	7.3%	-21.3%	2,470	2,723
Total	70,790	100%	-26.2%	32,382	38,408

Source: Employment Agency of the Republic of Kosovo (2019).Employment and Vocational training annual report.

Explanation : In contrast to the data/unemployment rate presented by the Statistic Agency of Kosovo, where it is observed that the female gender leads the number and percentage of unemployment compared to the male gender, in the data presented by the Employment Agency of the Republic of Kosovo is the opposite. Males are the gender group with the highest number (and %) of registrations. The data from EARK are data that are updated depending on entries (registrations) and passivation after 3months and present only the active number of unemployed, unlike KAS which also provides the unemployed rate at the country level.

Until 2021 we have again a decrease in the number of unemployed, since the Information System for Employment Management (ISEM) automatically puts the unemployed who are not notified for 6 (six) months into passive status and the services of employed offices do not have access for the administration for these data except the information about the passive number of unemployed. The following are tables 10 and 11 that present registered of unemployed according to qualification and age group for the year 2021 and the changes in number and percentage for the year 2020 (exponential period of the Covid-19).

Table 7. Registration of unemployment according to qualification -2021

Niveli i kualifikimeve	Papunësia 2021	(%)	Ndryshimi te 2020	Femra	Meshkuj
Pa kualifikuar	37,410	45.6%	-55.1%	18,269	19,141
Klasët I –IX (Shkolla fillore)	15,800	19.3%	-49.1%	7,070	8,730
Arsim i mesëm profesional	17,098	20.8%	-46.5%	6,533	10,565
Shkollë e mesme gjimnaz	5,282	6.4%	-50.1%	2,453	2,829
Bachelor	5,919	7.2%	-46.5%	3,915	2,004
Master	533	0.6%	-44.5%	328	205
Doc. i Shkencave	-	-	-	-	-
Gjithsejte	82,042	100%	-51.4%	38,568	43,474

Source: Employment Agency of the Republic of Kosovo (2021).Employment and Vocational training annual report.

Table 8. Registration of unemployment according to age groups -2021

Grup-mosha	Papunësia 2021	(%)	Ndryshimi te 2020	Femra	Meshkuj
15 - 24	13,621	16.6%	-51.6%	6,576	7,045
25 - 39	35,117	42.8%	-48.2%	16,092	19,025
40 - 54	22,669	27.6%	-55.5%	10,840	11,829
55+	10,635	13.0%	-51.8%	5,060	5,575
Total	82,042	100%	-51.4%	38,568	43,474

Source: Employment Agency of the Republic of Kosovo (2021).Employment and Vocational training annual report.

The young people in this group (NEET) include the young people that are not employed, not in school, not in training that means they are completely disconnected from the labor market and do not even participate in the education system. The high percentage of this group in the youth population rise concerns about future youth employment, as it indicates disengagement from the labor market. Except this, a large number of unemployed in countries with high youth unemployment, such as Kosovo, may cause earning to decrease due to increased competition, and may contribute to social problems. According to the 2021 Labor Force Survey, more than a third (32.1%) of persons aged 15 to 24 in Kosovo were not in education, employment or training (NEET). This figure is 32.4% for young women compared 31.8% for young men. As of the year 2018 there have been notable changes in NEET rates by educational attainment, with the NEET rate for those with primary education leveling off at below 30% the rate for youth with secondary education increasing at a moderate rate to less than 40% while the NEET rate for young people with university education increased from around 30% to over 50%. In addition, the probability estimates show that the risk of becoming a NEET in Kosovo increases – at least in the last three years as the level of educational attainment increases.

Table 9. NEET youth by gender -2021

Kosovo	Male	Female	Oveall
NEET youth (in thousands)	53.851	51.281	105.132
Participation of NEET youth in the young population (%)	31.8	32.4	32.1
Participation of NEET youth in the young population (%)	31.8	32.4	32.1

Source: Kosovo Statistics Agency, based on labor force survey,2021.

Table 10. APRK performance indicators by year in the main indicators.

Indicators :	2016	2018	2019	2020	2021
I. Total number of registered unemployed :	101,773	95,890	70,790	168,980	82,042
The women's part (%)	44	45	45.7	44.8	47
The minority part (%)	14.4	16.4	18.6	22.1	24.5
The youngs part (%)	16.2	19.5	18	16.6	16.6

II. The number of registered vacancies:	14,137	14,847	15,647	11,166	10,743
Coverage rate in relation to the total number of registered unemployed (%)	13.9	15.4	22	6.6	13
III. Employment mediation (without PATP)	4,022	3,764	4,160	1,330	2,955
The women's part (%)	38.5	41.7	43.1	43.2	50
The minority part (%)	7.9	8.9	8.4	8.4	8.5
The youngs part (%)	23	19.2	26.4	20.6	30
Coverage rate in relation to the total number of registered unemployed (%)	4	3.9	5.9	0.8	3.6
IV (ii) The number of persons trained in vocational training	4,678	5,117	6,603	3,436	2,923
The women's part (%)	27.2	35.1	34.3	26.2	29.6
The minority part (%)	8.8	4.2	3.3	1.8	8.2
The youngs part (%)	36.5	37	37.8	37.8	40.8
Coverage rate in relation to the total number of registered unemployed (%)	4.5	5.3	9.3	2	3.5
V. Other active labor market measures (PATP) ¹	2,732	3,000	4,611	3,525	3,525
The women's part (%)	34.7	39.8	47.7	51.8	62.6
The minority part (%)	15.7	0.8	8.7	11.6	11
The youngs part (%)	34.7	22.9	27.6	40.4	30.8
Coverage rate in relation to the total number of registered unemployed (%)	2.6	3.1	6.5	2	4

The indicators of performance and the number of those involved in the active measures of the labor market also constitute a financial cost for the EARK, so every time is aimed to increase the effectiveness in the implementation and realization of the projects, but also the sustainability after their completion as a return value for this investment. In this context the total budget expenditures for these programs and services of employment and professional training at the level of Kosovo for the year 2022 had reach the value of 29 million euros, which is much higher as support for the public employment service in the budget category subsidies and transfers than the previous years. In this budget category of subsidies and transfers according to EARK, the following payments are included: Maternity leave, active labor market measures, the "youth guarantee" scheme and the part of the professional training service.

The aim is that with the increase of financial opportunities within the budget for active labor market measures (MATP) efficiency and sustainability in employment will also increase as a return value of this investment made by the state (Ministry of Finance, Labor and Transfer, Employment Agency of the Republic of Kosovo). Certainly in this aim, the evaluation that is done on each scheme after their completion is very important, regarding the rate of employment of those unemployed in those beneficiary entities, but also with the process that should precede the programs by making the most professional evaluations and precise on the need of industries and businesses for the profiles they need for the activities they carry out and in this way harmonizing the process of

¹ Burimi bazë i të dhënave është Raporti Vjetor i Performances së APRK, Punësimi dhe Aftësimi Profesional 2021, ndërsa tabela me krahasim dhe përpunim të këtyre të dhënave është marr nga koncept dokumenti: Rregullimi i fushës së Regjistrimit dhe Ofrimit të Shërbimeve për punëdhënësit, të papunët dhe punëkërkesit, mars 2023.

² Which includes measures such as : on-the-job training, on-the-job training, wage subsidies, self-employment and public works.

drafting public employment policies with the direct demands of employers as the main pillar for operation and economic development market work anyway.

Table number11 present the economic categories and budget allocation for MATP for the years 2019, 2020, 2021 and 2022

Table 11.Budget 2019-2022 employment services

According to years	Economy Category				
	Salary/allowances	Goods/services	Municipal expense	Subsides/transfers	Non-financial assets
2019	1,086,848.00 €	286,400.00 €	94,700.00 €	7,800,000.00 €	100,000.00 €
2020	1,117,729.05 €	272,580.00 €	71,528.00 €	7,800,000.00 €	640,000.00 €
2021	1,057,723.13 €	204,770.00 €	96,800.00 €	7,800,000.00 €	375,616.00 €
2022	1,017,827.30 €	168,810.00 €	97,100.00 €	28,800,000.00 €	671,000.00 €

Source: Employment Agency of the Republic of Kosovo

4. CONCLUSIONS AND RECOMMENDATIONS

Asymmetrical results and with unchanged trades through the reference years between vacancies and (regular)placements in employment, give an indication that the public employment service (EARK) has operational difficulties and ineffective methodological approaches in achieving the objectives which is not simply the filling of vacancies (employment) but also the strengthening of cooperation with employers and private sector and above all it has to do with increase of trust in the institution oh Employment Office through the credibility and quality of the services it offers. Special investment and focus is needed in the mythological approach and in the alignment/harmonization of these two objectives so that the gab is not to high but also affects the overall improvement of the system for providing employment services by the Public Employment Service. Because according to the data for three (3) years in a row, this was the report:

Year 2019 - The total number of unemployed registered by the public employment service until the end of 2019 was about 70.790 people, of which 32,382 are women, while 38,408 are men. Vacancies from Employment Offices during this reporting year (2019) have registered 15,647 vacancies. If we compare the data of the current year with the previous year (2018), an increase of 5.4% is reflected. The total number of employment mediations carried out during 2019 is about 8,711 mediations. Mainly employment mediations were done through active measures in the labor market with 4,611 employment mediations and through the regular form with 4,161 employment mediations.

- *Result: Regular vacancies: **15,647***
- *Regular mediations in employment : **4,161***
- *Gap: **11,486** unfilled places*

Year 2020- It marks an exponential increase in the number of registered unemployed compared to the decreasing trend that was noted in previous years. In 2020, 168,980 people were registered as unemployed, a figure that represents an increase of 138.7% from 2019. Of these people 75.701 are women, while 93.279 are men. The Public Employment Service during this reporting year (2020) has registered 11.166 job vacancies. Compared to last year's data, a decrease 28.6% was recorded. During 2020 due to the Covid-19 pandemic, from March to June 2020, the economy was closed. The total number of employment mediations carried out during 2020 is about 6.961 mediations. Most mediation are done through active labor market measures which 5,631 people were mediated during 2020, which is a significant increase compared to 2019 while only 1,330 were mediated in employment through the regular form.

- *Result : Regular vacancies: **11.166***
- *Regular mediations in employment: **1,330***
- *Gap : **10,159** unfilled places*

Year 2021: During this year, there was a decrease in the number of job seekers registered in the Public Employment Service compared to the previous year. Until 2020 we had a high increase in registrations, during 2021 the number of registered people is 82,042, a figure that represent a decrease of 51.4% from 2020. Of these registered people 38.568 are women while 43.474 are men. During this reporting year (2021) the Employment Offices have registered 10,743 job vacancies. Compared to the last year's data a decrease of 3.8% was recorded. The total number of employment mediations carried out during 2021 is 6,252 mediations. Most of the mediations were done through active measures of the labor market which 3,297 people were mediated during 2021, which compared to 2020 a decrease of 41.4% was noted. However, in regular mediations the opposite of MATPs occurred, in this category a significant increase was noted, which is quite positive for the public employment service. So, through the regular employment 2,955 people were mediated or 122.2% more than the previous year.

- *Result:* Regular vacancies : **10,743;**
- *Regular mediations in employment :* **2,955;**
- *Gap:* **7,788** unfilled places.

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Systemic Approach And Educational Innovation: The Case Of Military Academies

PhD Cand Olga KAPOULA^{1*}

Ass. Prof. Dr. Konstantinos PANITSIDIS²

Prof. Dr. Sotiria TRIANTARI³

Assoc. Prof. Dr Konstantinos SPINTHIROPOULOS⁴

Prof. Dr. Labros SDROLIAS⁵

¹Department of Management Science & Technology, University of Western Macedonia, Kozani, Greece, e-mail: dmst00032@uowm.gr

²Department of Management Science & Technology, University of Western Macedonia, Kozani, Greece, e-mail: panitsidisk@gmail.com

³Department of Management Science & Technology, University of Western Macedonia, Kozani, Greece, e-mail: striantari@uowm.gr

⁴Department of Management Science & Technology, University of Western Macedonia, Kozani, Greece e-mail: kspinthiropoulos@uowm.gr ,

⁵Department of Business Administration, University of Thessaly, Larissa, Greece, e-mail: lsdrolias@teilar.gr

* Corresponding author: Olga.kapoula@gmail.com

Abstract: The central negotiating aim of this article is the exploration of the process of designing and implementing innovation in higher education, using the "systemic approach" of businesses and organizations, and by extension, the examination of their applicability in the Military Academies. Education reforms worldwide have focused on curriculum innovation to improve the content and quality of teaching and learning outcomes. The implementation of innovation is appropriately modified to meet the needs of the individual educational institution and in line with recognized challenges. This fact highlights the need to use the systems approach, since the Military Academies, as well as the Greek ones, are productive "systems" that are influenced and interact with their external and internal environment. In particular, they constitute a distinct organization - formation which has its own characteristics, culture, interests, concerns, challenges and needs, which gives particular importance to the education and training of their students, as this affects the successful performance of their future mission.

This article adopted the qualitative research method and in particular the literature review tool. The purpose is to take a holistic approach and analysis of the topic under investigation. The dual requirements of studying both military academy courses and military skills make the dual role of military academies in integrating innovation into their curricula particularly important. The planning and implementation of training programs are focused on the requirements and needs of the Army and the introduction of innovation in these programs follows the strategy of developing its own technologies and services.

In conclusion, through a systems approach to military academies, it is intended to create an integrated and interconnected framework that promotes innovation collaboration and effective management to meet the evolving educational needs of students, the military in general.

Keywords: Education, Innovation, Systemic Approach, Military Academies

1. INTRODUCTION

Systemic approach to Educational Institutions

Through the systemic approach, organizations in general are allowed to analyze their internal and external environment to identify their needs and objectives, including the competences and skills they need to achieve their goals. In particular, the systemic approach to universities assumes that these educational institutions are treated as complex, interconnected systems involving various elements, interactions, and stakeholders. This approach focuses on developing a comprehensive understanding of how educational systems work and the dynamics that affect them and the interaction between these elements. In addition, emphasis is placed on understanding the interdependencies and interactions between the various elements of the university ecosystem, such as students, faculty, administrators, curriculum, facilities, funding sources, research, and engagement in the academic community. Overall, the systemic approach to universities aims to create an integrated and interconnected framework that promotes collaboration, innovation, and effective management to meet the evolving needs of students, society and the academic landscape. Investments in the education system reflect the potential growth, innovation and, by extension, the culture of every country in the world.

Over the past centuries, innovative efforts in higher education have produced impressive achievements in that messages have emerged that the education sector needs to innovate in its programs in order to keep pace with the rapidly changing demands of society (Aparicio et al., 2021).

In addition, the systemic approach drives the design of a coherent system of education and innovation: Once the key elements are identified, the systems approach allows educational organizations to design a coherent system that integrates all elements to achieve desired outcomes and introduce innovation. Overall, the systemic approach provides a framework that can help businesses, organizations, and in particular training organizations, to design and implement innovative training programs and processes that align their goals with those of the global training community (Krassadaki, 2013).

2. LITERATURE REVIEW

2.1 Education

It is commonly accepted that education is one of the most basic institutions in modern society and serves the needs for education and learning at the individual and collective level, but also at the level of various productive units (e.g., enterprises, organizations, institutions, etc.). The educational process is constantly evolving and adapting to the needs, demands and challenges of an ever-changing globalized environment. At the same time, the rapid development of technology and science is spreading through all fields of human activities and has a drastic impact on education. The knowledge society is emerging as a dominant demand and objective of the new era, as it is the basis for the development of innovation and entrepreneurship and indirectly, organizational change (Friedman & Deek, 2003).

Higher education is based on the development and increased opportunities generated by technological innovation, adopting changes in pedagogical and operational models of education. Also, the range of services that include the engagement of information technology in academic environments, which are necessary to fulfill evolving statutes and missions that respond to current trends and future requirements of educational innovations. In the digital age we are living in, education and business - in their operating models, it is possible to manage comparable strategies (Friedman & Deek, 2003).

2.2 Innovation

Social changes, technological developments, globalization and even the achievement of sustainable development goals require the adoption of new business models in which innovation is considered a cornerstone for achieving and maintaining competitive and social advantage. The importance of continuing to promote open innovation programs and cooperation between businesses and institutions and actions that increase the level of professional maturity, as its development is an indicator of employability and therefore makes it possible to achieve higher levels of success in terms of obtaining employment. Studies show how, based on university programs that promote the development of professional maturity and innovation, higher employability rates are achieved, resulting in a greater likelihood of accessing a job or internship in a company. Both the ability to look for a job or internship and the ability to obtain one are factors that can be measured as indicators of the relative level of professional maturity for employment. New technologies are increasingly supporting innovative initiatives. In a direct way, new technologies allow teachers to ensure improvements in the content, method, and organization of education. The large-scale introduction of learning technologies could be an avenue for the introduction of innovation. Even more fundamental is the far-reaching impact of technology on society.

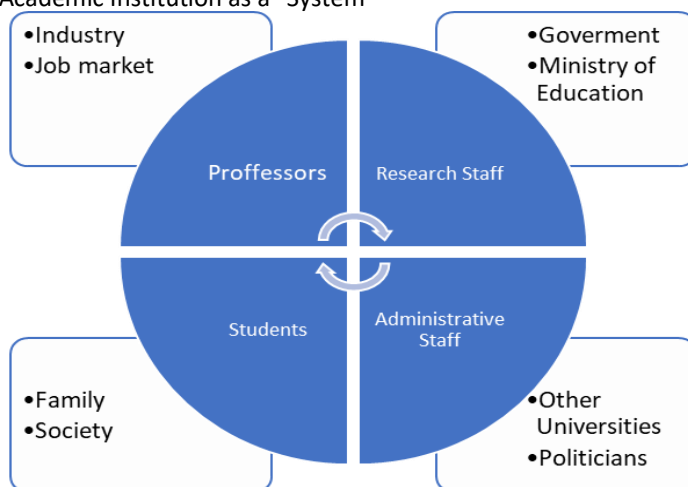
According to Drucker, 2004 knowledge is critical in innovation because knowledge-based innovation affects society and helps firms to earn good income. Inspired by this view, knowledge, and by extension higher education, is key to social innovation. Indeed, an effective pathway for knowledge diffusion and absorption stems from the knowledge bastion. For example, in university-community partnerships, the university has an advantage in promoting social participation (Portuguez Castro & Gómez Zermeño, 2020) and thus co-producing knowledge and action towards a more sustainable society. This finding suggests that the university or higher education catalyzes social innovation (Groulx et al., 2020).

Studies show how innovation and entrepreneurship support universities to contribute to regional socio-economic development while maintaining their sustainability. Through studies it is clear that the main findings point to a system consisting of individuals (students) and artefacts at the micro level and an academic and administrative organization at the macro level. The structure of systems is defined at the individual, organizational and interaction level. The mechanisms are related to the functions of teaching, research, extension, and management, which contributes to the implementation of innovation.

2.3 Process of implementing innovation in Higher Education, through the systemic approach

The process of designing and reforming curricula is not standardized for every educational institution. Each institution aims to design its curricula according to its priorities, which are based on different approaches, needs, strategies, social and national priorities (Krassadaki, 2013).

Figure 1: Academic Institution as a "System"



Therefore, the appropriate training of teaching staff, both at the level of initial studies and in-service, can contribute both to equipping them with the necessary theoretical and practical knowledge regarding the field of innovative teaching approaches and their implementation, and to the formation of generally positive attitudes and perceptions towards the latter, elements that guarantee their correct and effective implementation in the educational field.

Educational innovation can be achieved through the introduction of modern digital technologies and their application in the field of education or, on the other hand, it can also be related to the way certain lessons are carried out and even to the fact that digital technology itself is a new innovation. At the same time, the concept of innovation in higher education can also be realized as a course of practical innovation with the contribution of enterprises in academic research. The combination of teaching and research under the same theoretical umbrella is the key to success in forming the new practical model in teaching and innovation adoption. According to this combination, a new approach to teaching and learning innovation is introduced, which understands innovation as 'practice'. The practice-oriented view of innovation refers to a model whereby educational innovation is performed by innovation practitioners in a web, activities, knowledge, and material artefacts. From this view, the main task of innovation teaching and learning is to provide practical competence, which is based on an understanding of how and with whom innovation practitioners' work.

By focusing on the current problems of business education, debate and research encourages business, so that academics are more interested in what professionals "do" in everyday life, i.e., how they perform, how they work, how they achieve something. At the same time there is a growing interest in the concept of 'practice' in the organization, strategic management studies. Students perform activities, tasks and practices that aim to innovate and adopt knowledge, skills, rules and values embedded in them that are needed to enable them to perform various tasks (Montonen & Eriksson, 2013).

For the more effective implementation of innovations in education, training programs are of major importance, making teachers more qualified and ready to facilitate the development, the process they will have to follow,

more informed about the objectives they will have to achieve and ultimately about the potential innovation they will introduce in the educational environment in which they find themselves.

Furthermore, educational innovations are also linked to the action and role of educational leadership, which in the context of higher education has a leading role in terms of promotion and promotion efforts. This is, for example, linked to processes such as convincing teachers and students to embrace and implement these innovations.

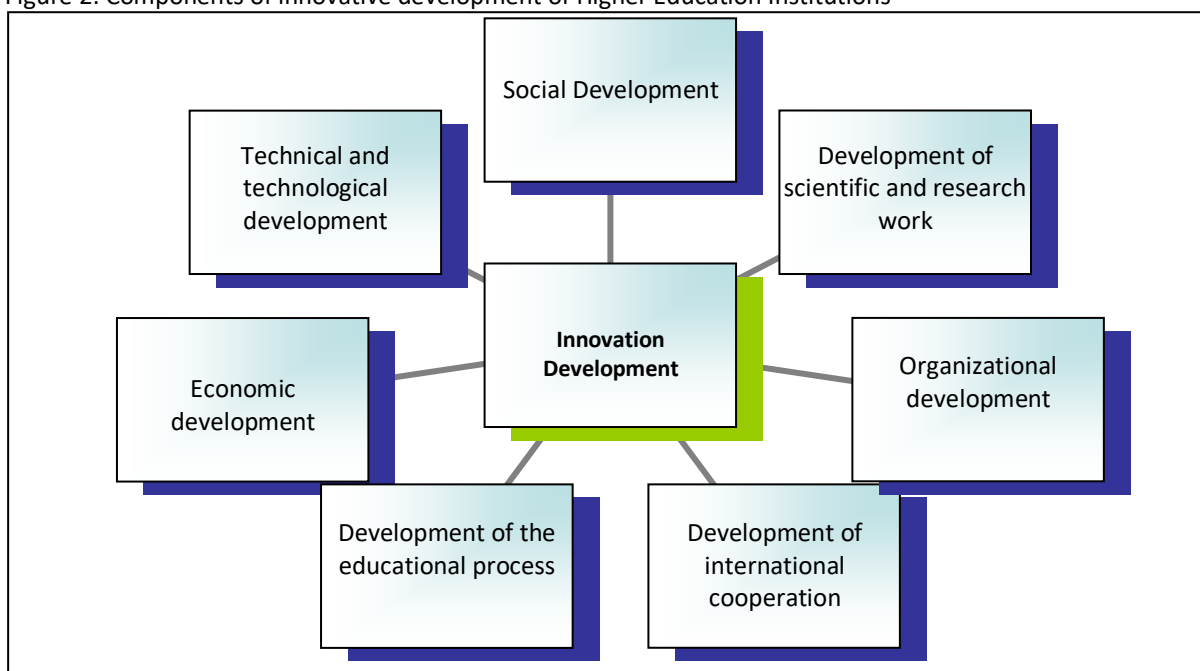
Educational innovation in education therefore includes educational, scientific, and technological achievements, infrastructure, economic, social, social, legal, administrative and other innovations. Scientific and technological innovations are the result of research and development, for example, of intellectual property and are transferred for application in production. Social innovations include social support for students and university teachers, creating safe conditions for studying, and may also include extracurricular activities for students (Peleman et al., 2018).

The need for educational innovation has become acute. "There is a widespread belief that the social and economic prosperity of countries will increasingly depend on the quality of education of their citizens: the emergence of the so-called 'knowledge society', the transformation of information and media and the increase in specialization on its side have resulted in all organizations demanding high skill profiles and knowledge levels. In today's knowledge society, education systems are required to be both effective and efficient, or in other words, to achieve the objectives set for them by making the best use of the available resources." According to a report by the Organization for Economic Co-operation and Development (OECD), "Pressure to increase equity and improve educational outcomes for students is growing around the world." In the U.S., underlying pressure for innovation comes from political, economic, demographic, and technological forces both from within and outside the nation.

A national education system is usually the product of a distinct set of historical, political, social, cultural and economic influences. As it is a complete system, its different sectors are not only interrelated and interdependent but also act together.

Teacher education and professional development is now seen as a key driver for improving the educational process and its outcomes, with research on teacher learning increasing. Educational innovation has an important role to play in the above-mentioned challenges to the extent that it is framed by a culture of scientific research and the kinds of knowledge it produces. The application of research-based innovation in education is not an abstract promise but a very concrete process whose criterion is articulated in relation to the fruitfulness of the research outcome for the participants and the learning environment in general.

Figure 2: Components of innovative development of Higher Education Institutions



Therefore, summarizing the reviewed scientific approaches, the main components of an innovative Higher Educational Institution (HEI) can be described as follows:

- Introduction of innovative technologies in the educational process
- Student-centered educational process
- Improving the system of organization and management of the higher education institution.
- Increasing the qualifications of the potential staff of higher education.
- Development of research capacity of each student, implementation of scientific research and production
- Scientific and innovative products
- Development of an appropriate economic mechanism that will make it possible to obtain
- Carrying out marketing activities to expand the education market and meet the needs of consumers.

The extent to which an institution supports pedagogical innovation can have a significant impact on its development, maintenance, and sustainability. Technology transfer, close cooperation with the business sector, the translation of research results into production and vital community activity are essential prerequisites for successful innovative HEIs. Rapid developments in knowledge concepts, the role of educational technologies and the needs of students suggest that innovation is important in higher education (Gilbert et al., 2021).

3. RESEARCH METHOD

3.1 Systemic Approach to Military Academies

In general, it is known that the educational programs of military academies are a mixture of strictly military subjects and other more specialized for university studies. For students of military academies, the period of study in academies marks the beginning of their military life, so ideological and political education is the key to the implementation of the fundamental task of moral education and talent cultivation. The policy of the curriculum in military academies must go hand in hand with the ideological and moral formation of students so that they consciously embody their patriotism and ambition to realize the national revitalization and strengthening of the armed forces and the building of a world-class army in the new era (Li-juan et al., 2021).

Research on military education and psychology has long focused on critical issues such as school adjustment and training (Caforio, 2018). The goal of military academies is to prepare cadets to become outstanding officers. The dual demands of studying both the academic courses of the military academy and military skills can present challenges for cadets as they attempt to adjust to military life. Military cadets differ substantially from regular students. Studies have revealed that courage has a decisive influence in the military. Fierceness strongly influences military cadets in terms of their psychological and environmental adjustment, academic and physical performance, as well as their psychological and behavioral performance, and directly reduces suspension and dropout rates.

The evaluation of the degree of development of military academies is the key content of the evaluation of military development institutions and has an important role in promoting science, innovation and sustainable development of military academies. The judgment of the degree of achievement of the qualitative objectives of military academies, the calculation of the incremental value of military colleges and universities, the calculation of the efficiency of the inputs and outputs of military academies, the comparative evaluation of the degree of development of military academies and the degree of development of military academies The evaluation strategy is carried out to provide some inspiration for the evaluation of colleges and universities (Yun et al., 2019).

3.2 Introducing innovation in the academic education provided by the Military Academies

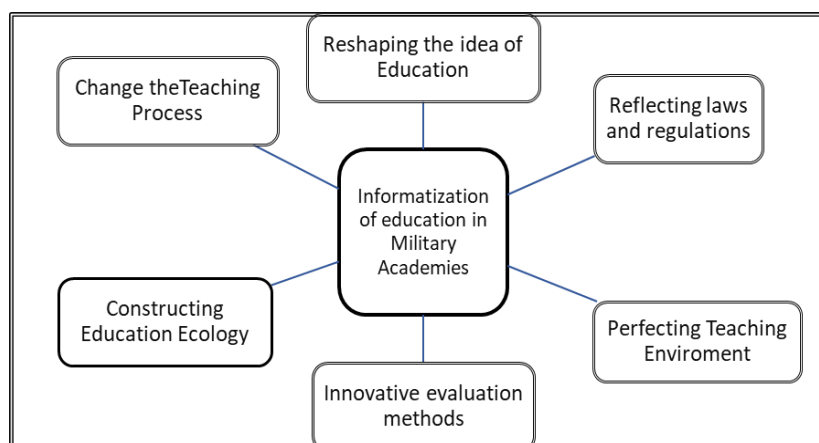
In order to achieve innovation in education through a systems approach, the strategic planning of military educational institutions is important to take into account the functions and conditions surrounding military academies as organizations.

In summary, the introduction and implementation of innovations in military academies is a factor in renewing the learning routine of both students and teachers- instructors. Besides, it is also an important kind of helper in the part of connecting the educational institution with society, as it turns it into a creative, living space in which military cadets prepare for their entry into it and the Armed Forces. Finally, innovation has the potential to offer solutions to specific problems through the experience already gained from previous innovative actions or from other partner educational units that have faced similar problems with other military institutions.

For strategy planning, decision making and subsequently appropriate action, SWOT analysis in military academies is recommended, as it is a tool that focuses on the key points that can affect the development of an organization, as well as those academies that may exert an influence on a company's strategy and potential success. SWOT analysis is considered one of the most widely used tools in modern management and is an established practice for all leading companies around the world. Training is required to be engaging for the trainee, fully integrating new technologies and focusing on one's knowledge, skills and experiences. The new conditions that are emerging in the business environment and the ever-increasing impact of technology on it, makes it necessary to 'fundamentally' review training programs and the way subjects are taught. In this context, the development of the instructor's initiative and the encouragement of innovative training methods are essential.

Military instructors strive to inspire, create positive habits and ultimately instill character in students that will allow for increased lifelong learning and success. Instructors also play a key role in ensuring that students attribute success and failure appropriately, demonstrate productive help-seeking behavior, and ultimately follow the path of learning with the best possible chance of success. The military environment and culture is undoubtedly different from a typical college. In addition, it is widely recognized that Information and Communication Technology (ICT) is penetrating and transforming the education sector. It also provides realistic conditions and unprecedented opportunities for educational reform and innovation in military academies. Based on the analysis of the logical significance of information education in military academies and in view of the practical difficulties in development, it is possible to describe the course of realization of education in military academies from six dimensions: "reconfiguration of the educational idea, optimization of laws and regulations, improvement of the teaching environment, transformation of teaching process, innovation of evaluation methods and construction of the ecology of education" in order to provide theoretical research and provide reference for practical operation (Xiao-shuang et al., 2019).

Figure 3: Framework of Educational Informatization Development in Military Academies



Based on the above framework of information-based education development in Military Academies, we should follow the logical connotation and development path of information-based education, gradually overcome the dilemma of conceptual recognition, laws and regulations, infrastructure and other aspects, and actively carry out theoretical exploration and practical efforts of information-based education in the light of our own reality, advantages and characteristics, which is the right law.

3.3 SWOT analysis for Military Academies

The effectiveness of SWOT analysis is attributed to the fact that it helps to draw reliable conclusions that determine the formulation of the business strategy, during the internal and external environment of an

organization is examined. For military academies in particular, which play a particularly important and decisive role in the functioning of the Armed Forces of each country, SWOT analysis is applied as follows:

When examining the internal environment, the strengths and weaknesses of an organization are identified, i.e., those elements that make an organization more effective and efficient compared to its competitors, as well as the activities of an organization that make it less effective and efficient. Regarding an organization's external environment, the opportunities and threats identified in its competitive environment, which are beyond the organization's control, are considered.

Strengths

- High level of training and high level of expertise
- Confirmed job placement for all students and 100% absorption rate.
- Technological specialization and modernization of curricula in each study cycle
- Effective organization and development of strategies. In this context, military institutions can exploit their competitive advantage in terms of the specialized techniques they have developed. To this end, an action plan is proposed based on the SMART criteria.

Specific: Measurable: Achievable/Attainable: Realistic: Time bound:

Weaknesses

- Lack of competitiveness in relation to the labor market
- Specific culture and nature of education
- Innovation is limited to the application of specialized knowledge and

Opportunities

- Ability to exploit technological specialization
- Cooperation between military academies and exchange of know-how

Threats

- Limitation of the dissemination and transfer of knowledge with other universities, due to the specific nature of these type of academies

Through the application of SWOT analysis, there is a predominance of strengths over weaknesses, opportunities, and threats, which justifies the high position of military institutions in the preferences of young people. However, the existence of weaknesses, opportunities and threats proves that there is perspective for further improvement of their capabilities.

4. RESULTS AND PROPOSALS

In conclusion, the paper advances current knowledge according to factors that influence higher education institutions in their efforts to introduce innovation in the educational process. Based on the above literature review, in implementing innovation in higher education, a key role is played by educational policy makers, businesses, students as well as the administrations of higher education institutions with their subordinates. Also, military academies have a high level of quality of students and instructors, satisfactory infrastructure with comprehensive care for students, high performance and success rates and, in general, are characterized by quality educational work and services. Based on the findings, major challenges related to innovation in higher education are discussed and relevant practical recommendations are presented; a comprehensive description and classification of the modes and drivers of innovation is provided. Particularly in military academies, the implementation of innovation is part of their targeting and focuses on introducing innovative ideas into modern military action environments. The need of innovating in military academies becomes even more urgent under the prevailing conditions of variability, multiculturalism, developments and specific and increased educational needs, high performance and success rates and, in general, are characterized by quality educational work and services basis of the many studies, research and training courses that have been carried out in this scientific field.

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The Concept of Empathy in the Context of Leadership in Education

Christos KANAVAS¹

Sotiria TRIANTARI²

¹Corresponding author, Phd candidate Department of Management Science and Technology University of Western Macedonia, Greece

²Professor of Department of Management Science and Technology University of Western Macedonia, Greece

Abstract: The present paper investigates the concept of empathy in the context of leadership in education. The paper discusses the concept of empathy and its usefulness, as a trait of a school leader. The empirical part of the paper examines the responses of 70 primary education teachers to 15 questions regarding empathy in leadership. Descriptive statistics showed that 94.3% of the participants believe that an emotional identification requires the understanding of the emotional state of the interlocutor. Moreover, 100% of the participants stated that the school manager is obliged to perceive their feelings, while 91.5% stated that the manager's emotional intelligence had a great effect on their actions. Furthermore, the responses of the teachers highlighted the necessity of emotional proximity between the school manager and the staff in order to provide functional solutions in various problematic situations, which may arise within a school context. In conclusion, the results showed that teachers recognized the contribution of empathy to school management.

Keywords: education; leadership; school administration; empathy; teachers

1. Introduction

The term empathy was introduced in 1858 by the German philosopher Rudolf Lotze, as a translation of the ancient Greek words *en* (in) + *pathos* (passion) "emotion". A man's emotions and psychological reactions are discussed in Aristotle's work, "Nicomachian Ethics". In particular, Aristotle argues for the concept of empathy by means of his theory of mediocrity. The terms of "exaggeration", "ellipse" and "mediocrity" are found in a man's feelings and actions. The essence of moral virtue is in the mediocre that happens, where a person experiences in the right way the feelings for the things needed, right timed, reason wise, for the appropriate people (Triantari, 2020 pp. 235). Nowadays, scholars have attempted to define empathy either in terms of emotion, or by adopting a more cognitive approach (Baron-Cohen & Wheelwright 2004, pp.163). This emotional approach focuses on the emotional response of the observer and the emotional state of the other, while cognitive theories argue about empathy as understanding the emotions of others. According to Goleman (2001), empathy is considered as a key dimension of emotional intelligence and consists of three stages. In the first stage, the person reads the emotions of others. In the second stage, the person feels and assesses the emotions of others and reacts to them. During third stage, the person understands in practice, by applying his own feelings, the concerns and anxieties behind the feelings of other people. Coleman (ibid) points to the harmony and balance between the emotional and the logical mind. Emotion shapes the functions of logic, which affect emotions.

According to Feshbach (1984), empathy presupposes the following conditions: a) the ability to detect and recognize other emotional states, b) the ability to capture the role of the other, c) the provocation of a common emotion by a similar event. It is of fundamental value to develop empathy in school, as it facilitates, in addition to lesson performance, the maintenance of specific characteristics and virtues (self-knowledge and self-discipline), while creating understanding and respect for marginalized students (Bialystok & Kukar, 2017, pp.23). According to Carl Rogers, a high degree of empathy in the teacher-student relationship is probably the most powerful factor in learning (cited in Meyers, Rowell Wells & Smith, 2019). In particular, emotional intelligence constitutes the most basic skill of a leader, and in fact of the leadership leader, whose behavior and personality serves as the starting point of cooperation, motivation, conflict management, team building and inspiration between teachers and students.

2. Literature Review

Leadership is one of the most fundamental factors that determine the success or failure of an educational organization and is inextricably linked to the existence of an effective educational organization (Bush, 2005). According to (Starratt, 2017), a leader needs to be involved in the educational process and his duty to create a healthy school environment that promotes quality learning. Empathy and moral solidarity, especially during or,

after a crisis, are linked to leadership, Ciulla (2010) argues that leaders have an obligation to care for others and that this kind of obligation is teachable. The emotional intelligence of the school leader is a key factor that leads to more effective administration, as those having it are superior in their ability to overcome obstacles, stay focused on their goals, and empathize with others (Kösterelioğlu, 2021).

2.1 Leadership in the context of education

In the works of the ancient Greek philosophers, it was pointed out that the leader must have the appropriate education and experience in line with the nature of the role he is called to take part, as leadership is the power to manage or influence a team and your subordinates (Triantari, 2020, pp. 61). In the 21st century, a leading teacher is the key to ensure high quality and effective educational administration in schools. The main requirement is the possession of the theoretical knowledge, skills and responsibilities to be able to adapt to the current educational management conditions. (Tipsrirach et al. 2021), especially during and after the COVID-19 pandemic (Gürol, 2022). The five (5) main aspects of a leader's personality are: self-knowledge, self-respect, respect for the perceptions of others, confidence and maintaining calm in the workplace (Triantari, 2020). Leadership constitutes the cornerstone of the failure or success of a social organization, in this case an educational organization (Saitis, 2012). School life is directly or indirectly affected by it. Good school leadership is based on self-control, confidence, competence and responsibility, risk-taking and decision-making, emotional intelligence and social awareness (Gultom, Fibriasari, 2021). Social awareness, to which empathy belongs, related to the leader's ability to understand others and perceive the point of view of subordinates (Triantari, 2020, pp. 237).

Effective leadership is essential to achieving positive school results. When principals convey their vision and are committed to maintaining school goals, then school results are positively impacted by these efforts (Ertem, 2021). Problem solving among teachers is affected by the attitude of the school principal. The moral values of the leader are the driving force in the promotion and improvement of the teachers in the school environment, strengthening the cohesion, teamwork, cooperation, development of communication skills and the improvement of aesthetics (Triantari, 2020).

2.2 Leadership and emotional intelligence

Goleman (2001, pp. 39) defines emotional intelligence as the ability of a person to understand their own feelings, as well as the feelings of others, to feel, evaluate, and apply the power of their emotions as a source of energy, trust, and influence. According to Salovey and Mayer (1989), emotional intelligence is the ability, according to which one can monitor and manage both their own and others' emotions and use them as a guide for thought and action. The connection between emotional intelligence and leadership should be sought in the context of a leader's communicative interaction with both himself and others (Triantari, 2020). The leader who communicates, when they want to predetermine the desired result, must, through consecutive thoughts of the perceptual and emotional grid, connect the recipient's feelings with their moral values, in order to achieve the identification of views and beliefs (Triantari, 2020, pp. 107). According to Ryback (1998), self-knowledge and consciousness are key elements of a leader who has emotional intelligence and determines their personality. Berkovich and Eyal (2019) correlated educational leadership with leaders' emotional experiences, their behavior, and the impact of their emotions on their listeners' emotions. Ferres & Connell (2004) argue that cultivating the emotional intelligence of leaders can lead to an emergence of a competitive advantage, as well as to the creation of a positive attitude of subordinates towards change. According to Bass (1990), leadership is most effective when the leader uses emotional influence to lead his subordinates.

2.3 Models of educational leadership

Aristotle defined the personality and the behavior of a leader through social ethics. The models that reflect the social ethics of Aristotle are the following: (Triantari, 2020).

1. The model of the leading personality: emphasis is placed on the characteristics and qualities that distinguish the leader from the non-leader. Conscientiousness is a key characteristic of the leader in this model and it is a result of the trust the leader derives from his subordinates.
2. The model of leadership behavior. In this model, the recognition of the characteristics of a leader enables us to understand which person could exercise leadership. This model answers the question of what

exactly a leader does and how they can influence the situation by using persuasion and also what they achieve with their behavior.

Currently, In modern times the main educational models are the following:

1. Fiedler's (1967) contingent model (Altmae, Turk & Toomet; 2013). This model is based on the communicative interaction between the leader and the staff, aiming to improve and increase the leader's influence. In this model, the leader is distinguished by good interpersonal relationships with other team members, while those show trust and respect for other team members and the leader.
2. Robert House's leadership goal-oriented model: This model emphasizes in motivating the subordinates through the organization's desires and goals (Robbins & Coulter, 1999). According to Saiti (2012), typical models are hierarchical systems, which managers usually use to pursue agreed goals with the subordinates.
3. Peer models focus on teachers' involvement in decision making.
4. Culture models state that values and ideology of organizations are more important than the formal structure of an organization. As the school principal-authority model gradually degrades, more attention is paid to the participatory forms of leadership (Benoliel & Barth, 2017). The concept of participatory and democratic leadership describes the administrative approach to joint decision-making (Poo & Hoyle, 1995).

Moreover, teacher involvement in administration creates more effective schools, although teachers need guidance from the leader to participate in decision-making. The participatory management model helps teachers recognize the problems of the school unit as their own, contributing to the solution of the problems (Kousoulos et al., 2004, pp. 35). The leader, who is driven by wisdom and emotional intelligence, achieves cooperation and communication interaction with his subordinates, ensuring the proper functioning of the educational organization (Triantari, 2020, pp. 249).

2.4. The impact of a leader's influence on teachers

Teachers' values, perceptions, beliefs and attitudes cannot be changed based on instructions. However, they can be cultivated, strengthened and assisted in creating appropriate conditions by the leader, while the relationship between the leader and the teachers is a model for all relationships within the school (Day; 2003). The most important role of a school leader is to become the driving force that maintains the balance between the students and the teachers who make up the school. Also, the role of the leader is social as it includes all the expectations of teachers, students and other members of the school (Saitis, Saiti; 2012). According to Cheng (1996) the leader influences the behavior of his subordinates to set and achieve goals. Renata et al. (2018) also concluded that leader-principal supervision is crucial in solving the problems and difficulties faced by teachers, as well as in achieving predetermined educational goals. The leader's duty, then, is to manage the situations that arise, provided he manages his own emotions and understanding of the emotions of the rest of the group. This can be achieved effectively by utilizing emotional intelligence, which is the core competency of the modern manager. The enhancement of his emotional intelligence is achieved by the leader through the participatory model of transformational leadership, in which the leader is distinguished, as he brings elements of a negotiator in critical and unpredictable situations. From this position the leader can feel and understand the thoughts and feelings of others, interacting with teachers.

Moreover, a leader's emotional intelligence has two main dimensions that concern: a) the individual abilities of the leader, which include emotional self-awareness and self-control of his emotions, b) social skills, ie managing relationships with his subordinates inspiration to them and empathy (Triantari, 2020, pp. 220). According to Burns (1978), transformational leadership occurs when one or more individuals interact in such a way as to increase motivation for cooperation and morale between leaders and their subordinates. Transformational leadership has been considered an extremely popular method of school administration in recent decades (Hallinger, 2003). Transformational leaders are a source of inspiration for others and are characterized by their commitment to their partners, their commitment to goals, their willingness to take risks and their strong desire to succeed, through their ability to diagnose, satisfy and to individually raise the needs of each of their partners (Onorato; 2013). The leader's emotional health results from his behavior towards his subordinates, as manifested in the workplace. Furthermore, according to the research of (Kamiv et al. 2010), teachers' moral empowerment is an important strategy regarding the effectiveness of schools, as well as a way

to increase the attractiveness of the school as a place of professional engagement. In the context of transformational leadership, the modern leader-manager of the 21st century must exercise leadership, which is based on empathy, awareness, self-management and self-control for decision making, having a broader realistic vision (Triantari,2020,pp.245) In summary, for the development of a common line of action by the principal and teachers, and the consistency in it, the emotional intelligence of the leader is the key point for achieving the goals. Transformational leadership, utilizing empathy, paves the way for fruitful negotiations, inspiration, focus and common orientation among all members of the school community.

3. Empirical Part: The present study

The study tested the responses of 70 primary school teachers of Western Macedonia region. The questionnaire included 15 questions, which are presented below in the form of tables, through the statistical package SPSS.

Table 1: Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Man	19	27,1	27,1	27,1
	Woman	51	72,9	72,9	100,0
	Total	70	100,0	100,0	

In Table 1, we observe that 27.1% of the people who answered the questionnaire are men and 72.9% are women.

Table 2: Academic Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bachelor degree	35	50,0	50,0	50,0
	Master degree	33	47,1	47,1	97,1
	Phd	2	2,9	2,9	100,0
	Total	70	100,0	100,0	

The largest percentage of the sample, 50% hold a university degree, 47.1% hold a master's degree and only 2.9% hold a doctorate.

Table 3: To what extent do you think you are familiar with the concept of empa-thy?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very much	27	38,6	38,6	38,6
	much	22	31,4	31,4	70,0
	enough	15	21,4	21,4	91,4
	relatively	3	4,3	4,3	95,7
	a little	2	2,9	2,9	98,6
	least	1	1,4	1,4	100,0
	Total	70	100,0	100,0	

Teachers answered 38.6% that they are very familiar with the concept of empathy, very familiar with 31.4%, enough answered 21.4%, relatively 4.3%, a little 2.69% while slightly 1.4%. No teacher replied that he was not at all familiar.

Table 4: Years of teaching experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-5	23	32,9	32,9	32,9
	6-10	10	14,3	14,3	47,1
	11-20	18	25,7	25,7	72,9
	20+	19	27,1	27,1	100,0
	Total	70	100,0	100,0	

From 1 to 5 years of teaching experience are 32.9% of the respondents, from 6 to 10 years 14.3%, from 11 to 20 years 25.7% and over 20 years 27.1%.

Table 5: To what extent do you think that in order to identify with one person's feeling, one needs to perceive the other person's emotional state?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very much	38	54,3	54,3	54,3
	much	28	40,0	40,0	94,3
	enough	3	4,3	4,3	98,6
	relatively	1	1,4	1,4	100,0
	Total	70	100,0	100,0	

A total of 94.3% of respondents believe that in order to identify with a person's emotion, it is necessary to understand their emotional state. To a lesser extent they answered enough or relatively, while no teacher answered that one does not need to understand the other's emotional state to identify with his or her feeling.

Table 6: To what extent do you consider it obligatory for a school headmaster to understand the feelings of teachers?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very much	25	35,7	35,7	35,7
	much	31	44,3	44,3	80,0
	enough	14	20,0	20,0	100,0
	Total	70	100,0	100,0	

All teachers responded positively to the fact that the headmaster is obliged to understand their feelings.

Table 7: To what extent do you think empathy can help emotionally marginalized students join groups?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very much	50	71,4	71,4	71,4
	much	14	20,0	20,0	91,4
	enough	5	7,1	7,1	98,6
	relatively	1	1,4	1,4	100,0
	Total	70	100,0	100,0	

The vast majority of respondents, 71.4% believe that empathy can help emotionally marginalized students to join groups, too. At the same time, 20% answered a lot, 7.1% a lot, while only 1 answered whether it is relevant whether empathy benefits their inclusion.

Table 8: To what extent do you think leadership influences the effective operation of a school?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very much	39	55,7	55,7	55,7
	much	24	34,3	34,3	90,0
	enough	7	10,0	10,0	100,0
	Total	70	100,0	100,0	

According to the participants' responses, leadership greatly influences the effective operation of a school at 55.7%, very much at 34.3% and quite at 10%.

Table 9: To what extent do you consider a school headmaster emotional intelligence to affect his actions?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very much	27	38,6	38,6	38,6
	much	37	52,9	52,9	91,4
	enough	4	5,7	5,7	97,1
	relatively	1	1,4	1,4	98,6
	a little	1	1,4	1,4	100,0
	Total	70	100,0	100,0	

A manager's emotional intelligence greatly influences his actions according to 52.9% of respondents. At the same time, 38.6% consider it very influential, while smaller percentages do not consider it extremely important.

Table 10: To what extent do you think emotional intelligence is not cultivated?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very much	4	5,7	5,7	5,7
	much	1	1,4	1,4	7,1
	enough	6	8,6	8,6	15,7
	relatively	20	28,6	28,6	44,3
	a little	16	22,9	22,9	67,1
	least	14	20,0	20,0	87,1
	not at all	9	12,9	12,9	100,0
	Total	70	100,0	100,0	

In contrast to the previous questions, teachers believe that emotional intelligence is cultivated and only 15.47% cumulatively claim the opposite, so they answered in the affirmative.

Table 11: To what extent do you consider that teachers' attitude towards change is influenced by the presence of emotional intelligence in the headmaster?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very much	7	10,0	10,0	10,0
	much	23	32,9	32,9	42,9
	enough	26	37,1	37,1	80,0
	relatively	10	14,3	14,3	94,3
	a little	3	4,3	4,3	98,6
	not at all	1	1,4	1,4	100,0
	Total	70	100,0	100,0	

Teachers believe that the principal's emotional intelligence influences their attitude toward change. We understand the power of the leader and how he can control any change in a school. 80% of teachers believe that they can be influenced by their headmaster.

Table 12: To what extent do you consider that teachers' trust in the headmaster affects the conscientiousness of the headmaster himself?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very much	12	17,1	17,1	17,1
	much	23	32,9	32,9	50,0
	enough	19	27,1	27,1	77,1
	relatively	12	17,1	17,1	94,3
	a little	3	4,3	4,3	98,6
	not at all	1	1,4	1,4	100,0
	Total	70	100,0	100,0	

At the same time, teachers believe that by trusting their headmaster, they can influence him to be conscientious. 32.9% answered this question a lot, 27.1% answered enough and 17.1% either very much or relatively.

Table 13: To what extent do you think the quality of the principal's decisions is better when the teachers are also involved?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very much	26	37,1	37,1	37,1
	much	27	38,6	38,6	75,7
	enough	13	18,6	18,6	94,3
	relatively	4	5,7	5,7	100,0
	Total	70	100,0	100,0	

All respondents believe that teachers should be involved in the decision-making process and not just the principal.

Table 14: To what extent do you consider the interpersonal relationships between the headmaster and the teachers to lead to better school management?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very much	31	44,3	44,3	44,3
	much	20	28,6	28,6	72,9
	enough	10	14,3	14,3	87,1
	relatively	6	8,6	8,6	95,7
	a little	2	2,9	2,9	98,6
	not at all	1	1,4	1,4	100,0
	Total	70	100,0	100,0	

The majority of teachers believe that there should be interpersonal relationships with their principal because that is how best school management is achieved. At the same time, a small percentage of 4.3% do not consider it necessary.

Table 15: To what extent do you think a teacher's behavior can change after the headmaster's motivation?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very much	13	18,6	18,6	18,6
	much	17	24,3	24,3	42,9
	enough	18	25,7	25,7	68,6
	relatively	18	25,7	25,7	94,3
	a little	4	5,7	5,7	100,0
	Total	70	100,0	100,0	

Teachers find it neither certain nor impossible that their behavior can be changed by the headmaster's motivation. 51.4% of them answered enough or relatively, some- where in the middle, which means that it depends on the character of the person.

Table 16: To what extent do you think that a good relationship between head- master and teacher can modify a non-functional teacher behavior?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very much	13	18,6	18,6	18,6
	much	19	27,1	27,1	45,7
	enough	27	38,6	38,6	84,3
	relatively	8	11,4	11,4	95,7
	a little	3	4,3	4,3	100,0
	Total	70	100,0	100,0	

In contrast to the previous question, here we see that if a headmaster comes closer to anon-functional teacher, the latter can be influenced and change behavior, for the bene-fit of the whole.

Table 17: To what extent do you think that the relationship between the teacher and the headmaster can affect the relationship between the teacher and the stu- dents?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very much	4	5,7	5,7	5,7
	much	17	24,3	24,3	30,0
	enough	24	34,3	34,3	64,3
	relatively	10	14,3	14,3	78,6
	a little	5	7,1	7,1	85,7
	least	9	12,9	12,9	98,6

not at all	1	1,4	1,4	100,0
Total	70	100,0	100,0	

The teacher's relationship with the students seems to be influenced by the teacher's relationship with the headmaster. This is easily interpreted given our work environment. If there are no tensions and the employee - in this case the teacher - is satisfied, he will have a similar attitude towards the students.

Table 18: To what extent do you consider that the achievement of teachers' teaching and administrative goals is influenced by the headmaster's behavior?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very much	10	14,3	14,3	14,3
	much	21	30,0	30,0	44,3
	enough	25	35,7	35,7	80,0
	relatively	3	4,3	4,3	84,3
	a little	6	8,6	8,6	92,9
	least	3	4,3	4,3	97,1
	not at all	2	2,9	2,9	100,0
	Total	70	100,0	100,0	

Teachers consider 80% cumulatively, that the achievement of their teaching and administrative goals are greatly influenced by the behavior of their headmaster. Only 2.9% of them believe that their goals are not influenced by their manage.

Table 19: To what extent do you think that problem solving among teachers is influenced by the attitude of the headmaster?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very much	15	21,4	21,4	21,4
	much	22	31,4	31,4	52,9
	enough	22	31,4	31,4	84,3
	relatively	7	10,0	10,0	94,3
	a little	2	2,9	2,9	97,1
	least	2	2,9	2,9	100,0
	Total	70	100,0	100,0	

Problem solving among teachers is influenced by the attitude of the principal to a great extent according to the respondents. Specifically, 21.4% answered very much, and 31.4% answered very much. A total of 84.3% consider the attitude of the manager in solving problems between colleagues to be crucial.

Independence check χ^2

H0: The variables "Gender" and "To what extent do you think leadership influences the effective operation of a school?" are Independent

H1: The variables "Gender" and "To what extent do you think leadership influences the effective operation of a school?" are Dependent

Table 20: Gender * To what extent do you consider leadership to influence the effective operation of a school? Cross-tabulation

			To what extent do you consider leadership to influence the effective operation of a school?			
			very much	much	enough	Total
Gen	Male	Count	9	8	2	19
der		% within	47,4%	42,1%	10,5%	100,0%

Total	Female	Gender				
		Count	30	16	5	51
		% within	58,8%	31,4%	9,8%	100,0%
		Gender				
		Count	39	24	7	70
		% within	55,7%	34,3%	10,0%	100,0%

Table 21: Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	,798 ^a	2	,671
Likelihood Ratio	,790	2	,674
Linear-by-Linear Association	,451	1	,502
N of Valid Cases	70		

a. 1 cells (16,7%) have expected count less than 5. The minimum expected count is 1,90.

There was no statistically significant correlation between "gender" and "To what extent do teachers consider leadership to affect the effective operation of a school" (χ^2

$= 0.798$, $df = 2$, $p = 0.671 > 0.05$). This is also shown in the intersection table, in which the distribution of answers between men and women do not differ. For instance, 55.7% of the teachers, and in particular 58.8% of the women and 47.4% of the men, consider that the leadership influences the effective operation of a school.

Moreover, 34.3% of the teachers, and in particular 42.1% of the men and 31.4% of the women, consider that the leadership influences the effective operation of a school (they do not differ from total). Finally, as "enough" he considers that the leadership affects the effective operation of a school 10% of teachers and specifically 10.5% of men and 9.8% of women. The answers may seem different visually, but there is no statistically significant dependence between the two variables.

H0: The variables "Years of service in education" and "To what extent do you think that a teacher's behavior can change after the motivation of the headmaster?" are Independent

H1: The variables "Years of service in education" and "To what extent do you think a teacher's behavior can change after the headmaster's motivation?" are Dependent

Table 22: Years of teaching experience * To what extent do you think a teacher's behavior can change after the headmaster's motivation? Cross-tabulation

			To what extent do you think a teacher's behavior can change after the headmaster's motivation?					
			very much	much	enough	relatively	a little	Total
Years of	1-5	Count teaching	3	6	6	8	0	23

ex- perience		% within Years of teaching ex- perience	13, 0 %	26,1 %	26,1%	34,8%	0,0%	100,0 %
	6-1 0	Count	1	2	1	4	2	10
		% within	10, 0 %	20,0 %	10,0%	40,0%	20,0 %	100,0 %
	11-2 0	Count	4	5	4	4	1	18
		% within Years of teaching expe-rience	22, 2 %	27,8 %	22,2%	22,2%	5,6%	100,0 %
	20+	Count	5	4	7	2	1	19
		% within Years of teaching ex- perience	26, 3 %	21,1 %	36,8%	10,5%	5,3%	100,0 %
Total		Count	13	17	18	18	4	70
		% within Years of teaching expe- rience	18,6 %	24,3 %	25,7%	25,7 %	5,7%	100,0 %

Table 23: Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11,969 ^a	12	,448
Likelihood Ratio	12,414	12	,413
Linear-by-Linear Association	1,545	1	,214
N of Valid Cases	70		

a. 17 cells (85,0%) have expected count less than 5. The minimum expected count is ,57.

Table 24: Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Academic level	1,53	70	,557	,067
To what extent do you think that problem solving among teachers is influenced by	2,50	70	1,189	,142

the attitude of the headmaster?
ter?

Table 25: Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	99,9% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Academic level - To what extent do you think that problem solving among teachers is influenced by the attitude of the headmaster?	-1,971	1,372	,164	-1,535	-,408	-5,923	69	,000

4. Results

There was no statistically significant correlation between "Years of service in education" and "To what extent do you consider that a teacher's behavior can change after the motivation of the principal" ($X^2 = 11,969$, $df = 12$, $p = 0.448 > 0.05$). This is also shown in the cross-tabulation table, in which the distribution of answers according to years of service does not differ. E.g. in the total of the answers, as "too much" he considers that the behavior of a teacher can change after the motivation of the principal 18.6% of the teachers and in particular 13% with 1 to 5 years of service, 10% with 6 to 10 years of service, 22.2% with 11 to 20 years of service and 26.3% with more than 20 years of service.

Furthermore, in all the answers, as "very" considers that the behavior of a teacher can change after the motivation of the principal 24.3% of teachers and in particular 26.1% with 1 to 5 years of service, 20% with 6 to 10 years of service, 27.8% with 11 to 20 years of service and 21.1% with more than 20 years of service. As "enough" he considers that the behavior of a teacher can change after the motivation of the principal 25.7% of teachers and in particular 26.1% with 1 to 5 years of service, 10% with 6 to 10 years of service, the 22.2% with 11 to 20 years of service and 36.8% with more than 20 years of service.

Finally, "relatively" considers that the behavior of a teacher can change after the motivation of the principal 25.7% of teachers and in particular 38.4% with 1 to 5 years of service, 40% with 6 to 10 years of service, 22.2% with 11 to 20 years of service and 10.5% with more than 20 years of service.

Finally, as far as the control of mean values of two populations (sample dependent) is concerned, the results showed that there was a statistically significant difference in the level of studies ($t = -0.971$, $df = 69$, $p = 0.000 < 0.001$). Specifically, the educational holders of only a degree ($M = 1.53$, $TA = 0.557$) compared to the educational holders of a postgraduate degree ($M = 2.50$, $TA = 1.189$). That is, at a significance level of 1 % we can claim that the first group believes that the attitude of the principal can affect the solution of problems among teachers. Otherwise with 99.9% confidence we can claim that Postgraduate teachers do not believe that problem solving among teachers can be solved by the attitude of the principal.

5. Discussion

The participatory model of transformational leadership is the one that focuses most on the empathic ability of the leader. It is widely used as a method of school administration and allows the headmaster to interact

appropriately and to be able to negotiate situations satisfactorily. Such a headmaster increases the motivation for ethical collaborative relationships between himself and the staff, inspires with his integrity in collaborative commitment and achievement of goals, risk-taking and belief in the desired outcome, always in a realistic context. Another important component of this type of leadership is the moral empowerment of teachers through the individualized elevation of their needs and positive characteristics. A leader, then, who perceives and regulates their emotions is emotionally a pole of attraction for themselves and others (Triantari, 2020, pp. 251). The Aristotelian literature points out the way in which the leader interacts as a "part" of a "whole", which consists of their subordinates and without it there can be no "part" (ibid).

Interpreting Aristotle's theory in the context of the current global crisis caused by the SARS-CoV-2 pandemic, what a leader needs is strength and ability for valuable actions aimed at happiness. These actions result from a complex of intellect and ethics that utilize emotion through logic so that behaviors are governed by wisdom and consciousness in relation to emotional intelligence. This type awareness involved the observation of experience and thoughts without emotional over-analysis and evaluations that cause panic and spasmodic movements, and helps to make dynamic decisions with flexibility and emotional intelligence. A total of 70% of the teachers stated that they are well familiarized with the concept of empathy, proven from their answers to the question on what extent they believe that in order to identify with a person's emotion, one needs to perceive the emotional state of the other: a total of 94.3% believe that in order to identify with one's emotion, one needs to perceive one's emotional state.

Moreover, 100% of the participants responded positively that the principal is obliged to perceive their emotions, a fact that shows that teachers recognize the importance of empathy in management, while in total 91.5% believe that the emotional intelligence of a principal influences much or too much their actions. The same conclusion is provided by Sowiyah (2016, pp. 185–211), who finds that in order to create co-operation between leadership and staff in decision-making, there must be empathy and communication activated by emotional intelligence and self-knowledge. With regard to the participatory leadership model, all respondents believe that teachers should be involved in the decision-making process and not be taken only by the principal. Moreover, regarding participants' gender, there was no statistically significant dependence between them, and the view on the degree of influence of leadership on the effective operation of a school. Teachers find it neither safe nor impossible for their behavior to change after headmaster's instigation. 51.4% of them answered enough or relatively, somewhere in the middle, which means that it depends on the character of the person. In the next question we see that teachers believe that if a principal comes closer to a non-functional teacher, the other can be influenced and change behavior, for the benefit of the whole.

Finally, the aforementioned conclusions complement each other, indicating that teachers consider the emotional closeness between management and staff necessary in order to produce functional solutions. This belief is outlined by another question, in which teachers consider 80% cumulatively, that the achievement of their teaching and administrative goals are greatly influenced by the behavior of their principal. In this case, too, there was no statistically significant correlation between years of service in education and the degree to which it is considered that a teacher's behavior can change at the instigation of the headmaster. A statistically significant difference was observed in the level of education of the participants: university bachelor holders, believe that the attitude of the principal can influence the solution of problems between teachers. On the other hand, teachers who hold a master's degree, do not believe that problem-solving among teachers can be solved by the attitude of the headmaster.

6. Future Studies

The research was geographically limited in the region of Western Macedonia, Greece. It would be interesting to conduct a similar study on a much larger sample in the future on a nationwide level. Additionally, a qualitative study is required to show the nature of the relation between the headmaster empathy and decision-making in educational administration.

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What Is The Impact Of Public Spending On Education On Economic Growth? Evidence From Central and Eastern Europe

Desislava Stoilova, Associate Professor, PhD¹

¹South-West University „Neofit Rilski“ – Blagoevgrad, Bulgaria, e-mail: dstoilova@swu.bg

Abstract: Public spending on education is generally considered a driver of economic growth due to its positive impact on human capital development, innovation, labor force quality, and overall productivity. At the same time, the effectiveness of education spending can vary widely depending on various contextual factors and the quality of the education system. The main purpose of this paper is to study the impact of public spending on education on economic growth in eleven EU member states located in the region of Central and Eastern Europe (CEE), namely Bulgaria, Czech Republic, Croatia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia. The methods used are descriptive and comparative analysis, as well as correlation and regression analysis of panel data. The study covers the period 2000 – 2021. The results indicate a negative impact of total government expenditure on the growth rate. Both government consumption and investment spending have a detrimental effect on growth, suggesting low efficiency of public spending. Government spending on education has a negative impact on economic growth, which calls into question the quality of education systems. The conclusion is that public spending on education is not an effective tool for fiscal impact on the economic development in the selected CEE countries.

Keywords: public spending, education, economic growth, Central and Eastern Europe.

1. Introduction

In general, public expenditure on education is expected to have a significant positive impact on economic growth. While the relationship between these two factors is complex and multifaceted, there are several key mechanisms that illustrate how investments in education can contribute to economic development. First of all, public spending on education helps develop the human capital of a nation. An educated workforce is more productive, innovative, and adaptable, which can lead to higher levels of economic growth. Skilled workers are better equipped to perform a wide range of jobs, from manual labor to highly specialized roles in technology and innovation. In addition, education investments improve the overall quality of the labor force. A well-educated workforce is more likely to engage in high-value-added activities, resulting in increased competitiveness in the global market. This can attract foreign investment and stimulate economic growth.

Also, education fosters innovation and technological advancement by providing individuals with the skills and knowledge necessary to develop new technologies and improve existing ones. This innovation can drive economic growth through the creation of new industries, products, and services. In addition, education equips individuals with the skills and knowledge needed to adopt modern technologies and work efficiently. This, in turn, can boost productivity at both the individual and societal levels, leading to higher economic growth.

Moreover, it is often pointed out that public spending on education can help reduce income inequality by providing access to quality education for all segments of society. When education is accessible to a broader range of people, it can lead to a more equitable distribution of opportunities, ultimately benefiting economic growth by increasing social mobility and reducing social tensions. Also, when individuals have access to education and training, they are more likely to be employed or engaged in entrepreneurial activities, which can contribute to economic growth through increased workforce participation. It is generally accepted that a well-educated population is better prepared to adapt to economic changes and challenges. This adaptability can lead to greater economic stability and resilience, reducing the risk of economic crises, thus supporting the long-term economic growth.

In summary, public spending on education is generally considered a driver of economic growth due to its positive impact on human capital development, innovation, labor force quality, and overall productivity. At the same time, it is important to note that the relationship between public spending on education and economic growth may vary depending on several factors, including the quality of education, the efficiency of the education system, and the broader economic and social context.

Having in mind these assumptions, the purpose of the study is to examine the impact of public spending on education on economic growth in a sample of eleven EU member states located in the region of Central and

Eastern Europe (namely Bulgaria, Czech Republic, Croatia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia) for the period 2000 – 2021.

This paper tests the following two hypotheses:

H1: Total government expenditure has a positive impact on economic growth.

H2: Public spending on education has a positive impact on economic growth.

The paper is structured in five sections. After this brief introduction, the second section provides a literature review. The third section described the methodology used for the purposes of the study. The fourth section presents and discusses the main findings from the descriptive, comparative, correlation and regression analysis. The last section concludes.

2. Literature review

There are numerous studies on the relationship between government spending and economic growth covering different samples of countries, research methods and periods. In general, they look for evidence of the effects of the total amount of government spending and/or individual expenditure items on economic performance. At the same time, neither the classical nor the modern economic literature provides unanimous and conclusive empirical evidence on the strength and direction of the impact of total public spending and/or individual expenditure items on growth.

Several authors have found confirmation of the negative impact of total government spending on growth. For example, Engen and Skinner (1992) use data from 107 countries over the period 1970-85 and argue that increases in government spending reduce output growth rates. This is confirmed by a paper by Folster and Henrekson (2001), who conduct a regression analysis on a panel of rich countries covering the 1970-95 period and conclude that there is a strong negative relationship between the size of government and economic growth. Esener and Ipek (2018) also report significant decreasing effects of public expenditure on economic growth on the base of dynamic generalized method of moments (GMM) techniques applied on a panel data for 33 upper and lower middle-income countries over the period 1999-2014. A recent study by Chindengwike (2023) applies the Vector Error Correction Model (VECM) and Granger Causality test to time series data covering the period 1970-2021 and also concludes that government expenditure has a negative short-and long-term impact on economic development in Sub-Saharan Africa.

At the same time, there is a number of studies that challenge these results, such as the works of Attari and Javed (2013), Al-Fawwaz (2016), Leshoro (2017), Alzyadat and Al-Nsour (2021), who argue that government expenditure has positive and statistically significant growth effects. Attari and Javed (2013) use time series data for Pakistan for the period 1980-2010 and report a positive relationship between government expenditure and economic growth in the long run. Al-Fawwaz (2016) studies the impact of government spending on economic growth in Jordan over the period 1980-2013 and finds a positive impact of both total government spending and current government spending on growth, while the relationship between capital government spending and growth is insignificant. This is further confirmed by a recent study by Alzyadat and Al-Nsour (2021), who apply the vector auto regression (VAR) and vector error correction models (VECM) on annual data for the period 1970-2019 and conclude that public expenditures have a positive effect on economic growth in Jordan. Leshoro (2017) uses the autoregressive distributed lag (ARDL) technique on annual data for South Africa covering the period 1976-2015 and claims that both government consumption and investment spending are positively related to economic growth in the long term, as well as in the short term.

Another set of studies reports mixed positive and negative effects of disaggregated public spending on growth. For example, Devarajan, Swaroop and Zou (1996) use data from 43 developing countries over a 20-year period and find that an increase in the share of current expenditure has a positive and significant effect on growth, while the relationship between the capital component of public expenditure and growth is negative. This is further confirmed by Ghosh and Gregoriou (2008), who apply generalized method of moments (GMM) technique on a panel data for 15 developing countries over a 28-year period and detect that current spending has significant positive effects on the growth rate, while capital spending has significant negative impacts.

In contrast to these findings, Chu, Hölscher and McCarthy (2018) apply ordinary least squares (OLS) and generalized method of moments (GMM) techniques to panel data from 37 high-income and 22 low- to middle-income countries for the period 1993–2012 and show that a shift in government spending from non-productive

to productive forms of expenditure is associated with higher levels of growth in both high-income and low- to middle-income economies.

An influential work by Barro (1991) analyzes data for 98 countries for the period 1960-1985 and concludes that growth is inversely related to the share of government consumption in GDP, but insignificantly related to the share of public investment in GDP. These results are further confirmed by Schaltegger and Torgler (2006), who find a strong negative relationship between government size and economic growth in Switzerland over the period 1981-2001, but unlike public spending from operating budgets, there is no significant impact on growth from capital budget spending.

There are a number of empirical studies that focus on the impact of government spending on education on economic growth, but their findings vary widely from a significant positive impact to a negative or no significant impact. For example, Tomić (2015) uses regression analysis of annual data for the period 2002-2011 and shows that there is a positive correlation between public expenditure on education and the value of GDP for the EU-28 member states. This is further confirmed by Mallick, Das and Pradhan (2016), who use panel data from 1973 to 2012 and show a positive impact of educational expenditure on economic growth in 14 major Asian countries. Ahamefule (2018) applies regression analysis and a Granger Causality test on data from 15 West African countries for the period 1990-2016 and also finds that government expenditure on education has a positive and significant impact on economic growth. Similar findings are reported by Mekdad, Dahmani and Louaj (2014) who use OLS method, Johansen Co-integration test and Causality test and argue that public spending on education affects positively economic growth in Algeria over the period 1974-2012.

At the same time, several studies challenge these findings and argue that the impact of education expenditure on growth is not so clear and positive. For example, Zeira (2009) claims that the cost of education affects negatively economic growth and shows that if the cost of education is high, economic growth might be slow and even stop completely, creating the so-called development trap. Trabelsi (2017) uses a threshold regression approach on cross-country data for the period 1980-2010 and proves the presence of a threshold effect on the relationship between education expenditure and economic performance. She finds that spending on education only has a positive effect on growth if the quality of education is good, otherwise the effect is negative. This is confirmed by Churchill, Ugur and Yew (2017), who conduct a meta-regression analysis by using a sample of 237 estimates. They find that the effect of government education expenditure on growth is positive for developed countries, but this relationship is statistically insignificant for less developed countries.

Similar results are reported by Blankenau, Simpson, and Tomljanovich (2007), who use pooled data for 80 countries covering the period from 1960 to 2000 and find a robust positive correlation between education spending and growth for rich countries, but no significant relationship is found for developing countries. Tabar, Najafi and Badooei (2017) apply the ARDL method to annual data on Iran's economy during the period 1981-2012 and find that government expenditure on education has a positive impact on growth in the short run, but this impact turns to negative in the long run.

A recent study by Coman, Lupu and Nuță (2023) analyzes the impact of public education expenditure on economic growth in 11 Eastern European countries using ARDL with a structural break for the period 1990-2020. They report mixed results, as for five of the countries there is no long-term relationship between public education expenditure and economic growth, while for the remaining six countries the relationships are positive for four countries and negative for two. Similar findings are reported by Maitra and Mukhopadhyay (2012) who examine the role of public spending on education in promoting the GDP growth of 12 countries in the Asia-Pacific region over the past three decades. They argue that education spending increases GDP in nine of the countries, in one of the countries education expenditures have a negative impact, while in the remaining two countries education spending shows no significant impact on GDP.

There are several country studies that find no significant relationship between government spending on education and economic growth. For example, Villela and Paredes (2022) apply the instrumental variables method on time series data for Honduras over the period 1990-2020 and argue that there is no correlation between public expenditure for education and economic growth. Similar findings are reported by Suwandaru, Alghamdi and Nurwanto (2021), who use the ARDL approach and time series data for Indonesia over the period 1988-2018, showing that public expenditure on education has no significant relationship with growth in both the long- and short-term.

3. Research methodology and data

This research uses a regression analysis on panel data to study the impact of public spending on education on economic growth in eleven countries located in the region of Central and Eastern Europe (CEE), namely Bulgaria, Czech Republic, Croatia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia. As a basis of the regression model is accepted the endogenous model proposed by Barro (1990) and further developed by Davoodi and Zou (1998), who argue that the long-run growth rate of per capita output is a function of taxation and government spending. Our empirical study follows the common approach applied in some of the studies on this topic. The conventional simple specification tries to explain the economic growth by government spending and tax revenues, so the regression equation (1) has the following simplified structure:

$$y_{it} = b_0 + b_1 TS_{it} + b_2 TR_{it} + \varepsilon_{it} \quad (1)$$

The dependent variable (y_{it}) is the annual growth rate of GDP of country i in year t , measured as a percentage change on the previous period. The independent variables are the government spending to GDP for each country and year (TS_{it}) and the total revenue from taxes and social contributions presented as a ratio to GDP for each country and year (TR_{it}). The parameters of the model are b_0 , b_1 , and b_2 . The symbol of ε_{it} marks the error term.

This simple specification is further extended to take into account two major types of government spending (consumption and investment) as well as disaggregated public expenditure classified according to the functions of government (COFOG), namely general public services, defense, public order and safety, economic affairs, health, education, social protection and environmental protection.

Thus, the variables included in the regression analysis are as follows:

GDP_GRit – growth rate of the real GDP of country i in year t (percentage change on the previous period);

GOV_EXPit – total government expenditure of country i in year t (percentage of GDP);

GOV_INVit – total government investment of country i in year t (percentage of GDP);

GOV_CONSit – total government consumption of country i in year t (percentage of GDP);

GEN_SERit – government expenditure on general public services of country i in year t (percentage of GDP);

DEFit – government expenditure on defense of country i in year t (percentage of GDP);

ORDRit – government expenditure on public order and safety of country i in year t (percentage of GDP);

ECONit – government expenditure on economic affairs of country i in year t (percentage of GDP);

HEALTHit – government expenditure on health of country i in year t (percentage of GDP);

EDUit – government expenditure on education of country i in year t (percentage of GDP);

SOC_PRit – government expenditure on social protection of country i in year t (percentage of GDP);

ENV_PRit – government expenditure on environmental protection of country i in year t (percentage of GDP);

TAXit – total revenue from taxes and social contributions of country i in year t (percentage of GDP);

The ordinary least squares (OLS) method is used to estimate the parameters of the regression model. OLS estimations are reported in Table 1. A correlation matrix of the main variables of the regression model is provided in Table 2. Hypotheses for bilateral causal relations are tested by Pairwise Granger Causality test (Table 3). The study covers annual data for the period 2000-2021 extracted from Eurostat database.

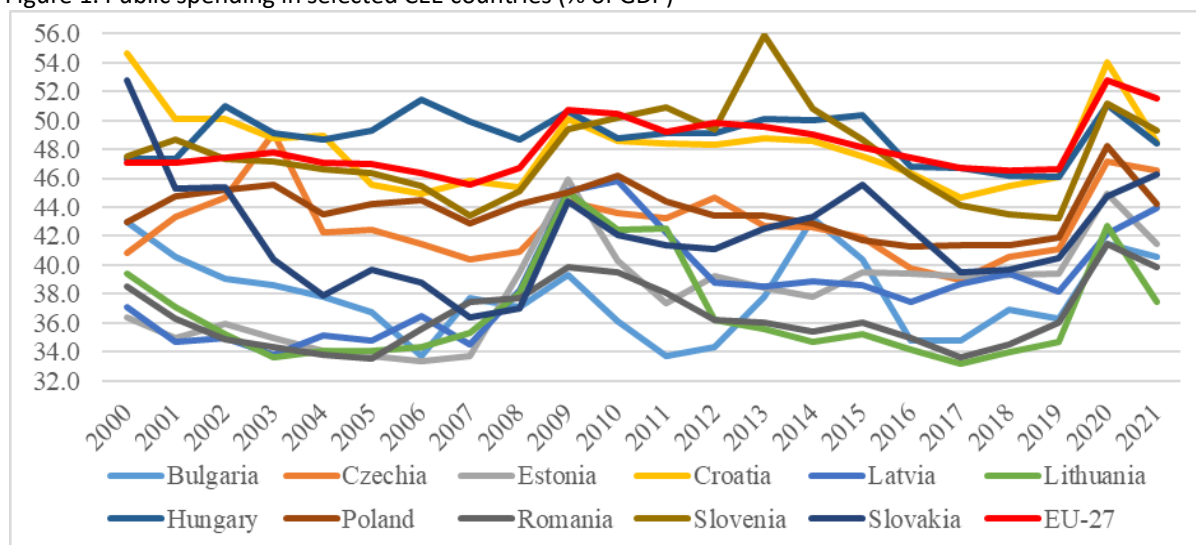
4. Results and analysis

Government expenditures in the selected CEE countries have a clearly expressed cyclical dynamics during the analyzed period (Figure 1). The major crises in the world economy in the past two decades have caused a growing presence of the state in the economy. Obviously, deep global crises lead to increasing government interventions intended to prevent the collapse of economic and social systems.

At the same time, it is interesting to note that the total size of the public sector varies considerably across CEE countries. Bulgaria, Romania, Estonia, Latvia and Lithuania demonstrate quite restrictive fiscal models, with the ratio of government spending to GDP rarely exceeding 40%. Public spending in Poland, Czech Republic and

Slovakia varies in the range between 40% and 45% of GDP. Croatia, Hungary and Slovenia report the largest size of the public sector among the selected CEE countries. The total amount of public expenditure in these countries varies on average within 45%-55% of GDP, which is around the EU-27 average for the analyzed period.

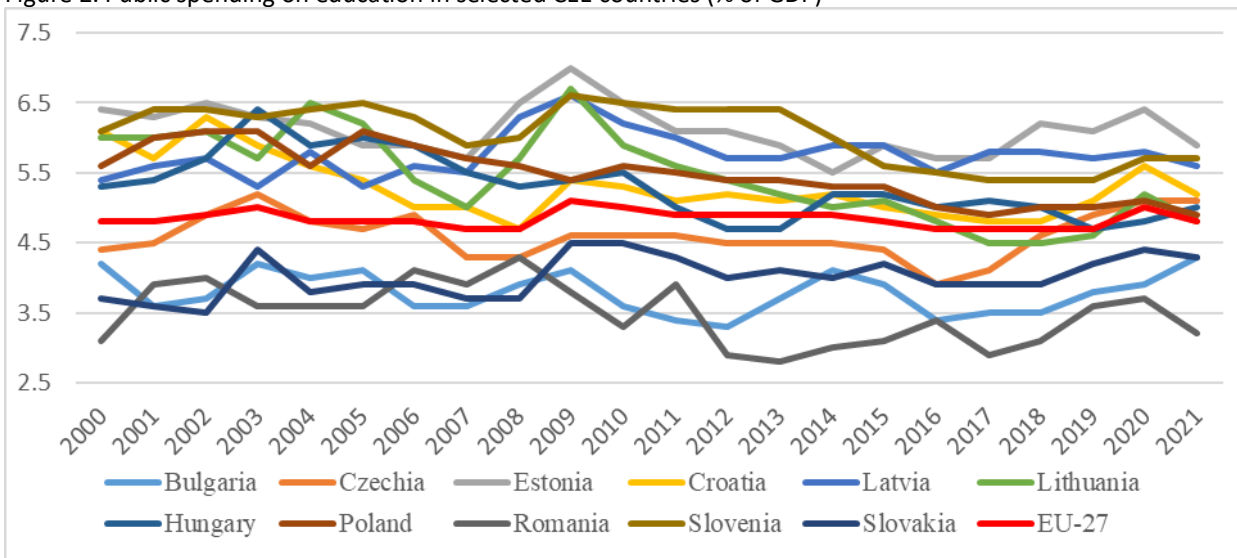
Figure 1. Public spending in selected CEE countries (% of GDP)



Source: Eurostat

Public spending on education in Central and Eastern Europe (CEE) does not demonstrate cyclical dynamics, but differs significantly across the selected countries (Figure 2). Slovakia, Romania and Bulgaria spend around 3.5-4.0% of GDP on education, which is far below the EU-27 average (4.7-5.0%). Public spending on education in the Czech Republic, Poland, Hungary, Croatia and Lithuania varies between 4.5% and 5.5%, which is close to the EU-27 average, while Slovenia, Latvia and Estonia spend around 5.5-6.5% of GDP on education, thereby exceeding the EU-27 average values of this indicator.

Figure 2. Public spending on education in selected CEE countries (% of GDP)



Source: Eurostat

The results from the OLS estimations are reported in Table 1. Separate specifications of the regression equation have been constructed by different combinations of independent variables. As a starting point, the parameters of the regression are estimated under the simplest version of equation (Model 1), which includes total government expenditure and total tax revenue as independent variables. Subsequent models include

disaggregated spending variables. Model 2 estimates the influence of total government consumption and investment spending, while Model 3 examines the impact of government expenditure on education, general public services, defense, public order and safety, economic affairs, health, social protection., and environmental protection. The probability of the F-statistic confirms the adequacy of the applied models. The Durbin-Watson statistic indicates that there is no autocorrelation in the residuals from the regression analysis. The coefficient of determination indicates that around 23% of the variation in the dependent variable can be explained by the variation in the independent variables in the regression models, which is acceptable given the complex nature of GDP.

Table 1. Results from the regression analysis

Variable	Model 1	Model 2	Model 3
(Constant)	8.9680*** (4.1655)	8.8487** (3.9750)	9.9211*** (3.3027)
GOV_EXP	-0.6270*** (-7.9766)		
GOV_INV		-0.5810*** (-2.5660)	
GOV_CONS		-0.6292*** (-7.9240)	
GEN_SER			-0.2481 (-1.3457)
DEF			-0.8343 (-1.4755)
ORDR			-0.3941 (-0.5290)
ECON			0.7327** (4.7257)
HEALTH			-0.3551 (-1.3099)
EDU			-0.6253** (-2.0854)
SOC_PR			-0.7628*** (-5.7015)
ENV_PR			-1.4443 (-1.3360)
TAX	0.5170*** (5.1133)	0.5170*** (5.1039)	0.4401*** (4.2256)
R-squared	0.231958	0.232110	0.234926
Adjusted R-squared	0.225531	0.222431	0.225246
Akaike info criterion	5.390663	5.398729	5.444643
Schwarz criterion	5.433914	5.456398	5.588814
Durbin-Watson statistic	1.929514	1.926394	1.933429
F-statistic	36.09047	23.98009	7.915383
Prob(F-statistic)	0.000000	0.000000	0.000000
Observations	242	242	242

Source: Author's calculations

Notes: t- statistics shown in parentheses below coefficient;

Asterisks (*, **, ***) indicate the significance level (10%, 5%, 1%) of the coefficients.

Contrary to conventional economic theory, the regression results show a significant negative impact of general government spending on the GDP growth rate, while tax revenue has a positive impact. In addition, government consumption and public investment also have a negative effect on the economic development of the selected CEE countries. Government expenditure on education and social protection have a significant negative impact on the GDP growth, while the effects of general public services, defense, public order and safety, health and environmental protection are negative, but not statistically significant. Only government spending on economic affairs appears to promote economic growth. These findings suggest low efficiency of

public spending in the analyzed countries. In this regard, our hypotheses about the expected positive impact of total government expenditure and public expenditure on education on economic growth are not confirmed.

The correlation matrix (Table 2) presents the correlations between each pair of variables, included in the regression model. The correlation analysis confirms that total government spending and economic growth are negatively correlated. There is also a moderate negative correlation between government consumption and growth. It is interesting to note that the correlation between public investment and economic growth is extremely weak. These results confirm that public spending is not an effective tool for fiscal impact on economic development in the selected CEE countries. Education spending is negatively related to growth, as are all other disaggregated expenditure items, except for defense and economic affairs.

Table 2. Correlation matrix of the variables of the regression model

	GDP_ GR	GOV_EXP	GOV_ INV	GOV_ CONS	GEN_ SER	DEF	ORDR	ECON	HEALTH	EDU	SOC_ PR	ENV_ PR	TAX
GDP_GR	1.000	-0.384	-0.075	-0.379	-0.137	0.014	-0.036	0.263	-0.192	-0.114	-0.345	-0.091	0.165
GOV_EXP	-0.384	1.000	0.223	0.980	0.582	-0.173	0.033	0.602	0.558	0.348	0.791	0.255	0.839
GOV_INV	-0.075	0.223	1.000	0.026	-0.081	0.099	0.097	0.451	0.094	0.224	-0.088	0.250	0.185
GOV_CONS	-0.379	0.980	0.026	1.000	0.614	-0.198	0.014	0.526	0.553	0.312	0.829	0.210	0.823
GEN_SER	-0.137	0.582	-0.081	0.614	1.000	-0.192	0.010	0.161	0.036	0.004	0.422	0.207	0.497
DEF	0.014	-0.173	0.099	-0.198	-0.192	1.000	0.108	-0.163	-0.277	0.034	-0.157	-0.255	-0.190
ORDR	-0.036	0.033	0.097	0.014	0.010	0.108	1.000	0.244	-0.119	-0.284	-0.155	0.153	0.060
ECON	0.263	0.602	0.451	0.526	0.161	-0.163	0.244	1.000	0.312	-0.018	0.140	0.160	0.404
HEALTH	-0.192	0.558	0.094	0.553	0.036	-0.277	-0.119	0.312	1.000	0.075	0.430	0.403	0.542
EDU	-0.114	0.348	0.224	0.312	0.004	0.034	-0.284	-0.018	0.075	1.000	0.327	-0.186	0.371
SOC_PR	-0.345	0.791	-0.088	0.829	0.422	-0.157	-0.155	0.140	0.430	0.327	1.000	0.106	0.668
ENV_PR	-0.091	0.255	0.250	0.210	0.207	-0.255	0.153	0.160	0.403	-0.186	0.106	1.000	0.270
TAX	0.165	0.839	0.185	0.823	0.497	-0.190	-0.060	0.404	0.542	0.371	0.668	0.270	1.000

Source: Author's calculations

The results from the Pairwise Granger Causality tests (Table 3) indicate that there is a bidirectional causality between the total government expenditure and the GDP growth rate. Such type of causal relationship also exists between the government consumption and economic growth. The results indicate that total government investment and government expenditure on economic affairs cause economic growth, while the relationships between government spending on education, defense, public order and safety, health and social protection are unidirectional from the GDP growth rate to the expenditure variables. The null hypothesis cannot be rejected for the government expenditure on general services and environmental protection, so it seems that these variables do not have causal relationship to the economic growth.

Table 3. Pairwise Granger Causality Tests

Null Hypothesis:	Obs	F-Statistic	Prob.
GOV_EXP does not Granger Cause GDP_GR	220	2.09624	0.0254
GDP_GR does not Granger Cause GOV_EXP		7.90043	0.0005
GOV_INV does not Granger Cause GDP_GR	220	5.56264	0.0044
GDP_GR does not Granger Cause GOV_INV		1.53573	0.2177
GOV_CONS does not Granger Cause GDP_GR	220	1.18044	0.0091
GDP_GR does not Granger Cause GOV_CONS		9.36353	0.0001
GEN_SER does not Granger Cause GDP_GR	220	0.51864	0.5961
GDP_GR does not Granger Cause GEN_SER		0.35350	0.7026
DEF does not Granger Cause GDP_GR	220	4.54318	0.0117
GDP_GR does not Granger Cause DEF		5.73345	0.0038

ORDR does not Granger Cause GDP_GR	220	0.48422	0.6168
GDP_GR does not Granger Cause ORDR		3.71110	0.0260
ECON does not Granger Cause GDP_GR	220	1.47619	0.0308
GDP_GR does not Granger Cause ECON		1.00951	0.3661
HEALTH does not Granger Cause GDP_GR	220	2.09736	0.1253
GDP_GR does not Granger Cause HEALTH		3.56251	0.0301
EDU does not Granger Cause GDP_GR	220	0.61911	0.5394
GDP_GR does not Granger Cause EDU		7.79727	0.0005
SOC_PR does not Granger Cause GDP_GR	220	0.29417	0.7454
GDP_GR does not Granger Cause SOC_PR		17.3673	1.E-07
ENV_PR does not Granger Cause GDP_GR	220	1.09032	0.3380
GDP_GR does not Granger Cause ENV_PR		2.15185	0.1188
TAX does not Granger Cause GDP_GR	220	0.76214	0.4679
GDP_GR does not Granger Cause TAX		1.54163	0.2164

Source: Author's calculations. Note: lags=2

Although unconventional, our findings are supported by various authors. Confirmation for the negative impact of total government spending on growth is provided by Engen and Skinner (1992), Folster and Henrekson (2001), Esener and Ipek (2018), and Chindengwiwe (2023). At the same time, there is a number of studies that challenge our results, such as the works of Attari and Javed (2013), Alzyadat and Al-Nsour (2021), Al-Fawwaz (2016), and Leshoro (2017), who found that government expenditure has positive and statistically significant growth effects.

Our results for the negative impact of public investment on economic growth are supported by the works of Devarajan et al. (1996), and Ghosh and Gregoriou (2008). At the same time, variety of studies challenge our results and report positive or insignificant impact of public investment on GDP growth. For example, the works of Barro (1991), and Schaltegger and Torgler (2006) argue that the relationship between the capital budget spending and economic growth is not significant. In contrast to these findings, Chu et al. (2018) claim that a shift in government spending from ordinary consumption to productive investment is associated with higher levels of GDP growth.

Our findings for the negative impact of government education spending on economic growth are consistent with the conclusions of Zeira (2009), Trabelsi (2017), Tabar et al. (2017). On the opposite side are the results of Mekdad et al. (2014), Tomić (2015), Mallick et al. (2016), and Ahamefule (2018), who argue that government expenditure on education has a positive and significant impact on growth.

5. CONCLUSION

In summary, public spending on education is generally considered a driver of economic growth due to its positive impact on human capital development, innovation, labor force quality, and overall productivity. At the same time, the effectiveness of education spending can vary widely depending on various contextual factors and the quality of the education system.

The correlation and regression analysis on panel data from the eleven selected CEE countries (Bulgaria, Czech Republic, Croatia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia) show a significant negative impact of total government spending on the GDP growth rate, while tax revenues have a weak positive impact. Both government consumption and investment spending have a detrimental effect on growth, suggesting low efficiency of public spending. Government spending on education has a negative impact on economic growth, which calls into question the quality of education systems.

The conclusion is that tax systems in the selected CEE countries do not hinder economic growth, but public spending in general and government spending on education in particular are not an effective tool for fiscal impact on economic development. Policymakers can support economic growth by limiting the share of the public sector in GDP and increasing its efficiency.

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Inclusion of Children with Developmental Gaps in Kindergartens

Ebtisam Abu Hamad¹

Prof. Dr. Maria Roth²

¹PhD student, Babes-Bolyai University, Cluj, Ebtisam_1@walla.co.il

²Social Work Department, Babes-Bolyai University, Cluj, maria.roth@ubbcluj.ro

Abstract: This research paper delves into the practice and significance of inclusive education in Israeli kindergartens, with a particular emphasis on children with developmental gaps. We explore the underpinnings of developmental gaps, delineate the myriad benefits of inclusive practices for both typically developing children and those with developmental differences, and analyze the challenges and strategies that educational institutions face in implementing these practices. Through extensive research, collaboration, and observation, the study underscores the essential role of parents, community involvement, and interdisciplinary collaborations in fostering a truly inclusive environment. The paper continuous research, more resource allocation, and public awareness campaigns to bolster and sustain inclusive practices in kindergartens across Israel.

This essay aims to explore the inclusion of children with developmental gaps in kindergartens, with a specific focus on the context of Israel. We will examine the principles and policies of inclusive education in Israel and delve into the legal framework and regulations that support the inclusion of children with developmental gaps in kindergartens. Furthermore, we will explore the benefits of inclusion for both children with developmental gaps and their typically developing peers. By analyzing empirical evidence and studies, we aim to shed light on the positive impact of inclusion on the overall development, academic achievement, and social-emotional well-being of all children.

The findings will relate to the attitudes and perceptions of the kindergarteners and parents regarding inclusion in kindergartens, the professional development and skills of the kindergarten staff (the kindergarten teacher and the assistant), the challenges in the work of the kindergarten manager and the sources of assistance and support, and the relationship between the kindergarten staff and parents.

Keywords: Inclusion, Early childhood, Kindergarten, Developmental differences

1. Introduction

Background and Research Significance

In today's diverse and inclusive society, the education system plays a pivotal role in promoting equal opportunities and providing quality education for all children (Dan, 2019). One essential aspect of inclusive education is the inclusion of children with developmental gaps in kindergartens. Developmental gaps refer to differences in cognitive, physical, emotional, or social development that children may experience compared to their peers. These gaps can manifest in various ways, including learning disabilities, speech delays, motor skill impairments, or behavioral challenges (Bowman, 1986; Yahav, 2020).

The inclusion of children with developmental gaps in kindergartens is of paramount importance as it upholds the principles of equality, non-discrimination, and social integration (DEC/NAEYC, 2009). It recognizes that every child has the right to receive an education tailored to their needs, regardless of their unique abilities or challenges. By providing inclusive education from the early years, we set the foundation for a more inclusive and compassionate society (Ahsan et al., 2012).

Purpose of the Essay

This essay aims to explore the inclusion of children with developmental gaps in kindergartens, with a specific focus on the context of Israel. We will examine the principles and policies of inclusive education in Israel and delve into the legal framework and regulations that support the inclusion of children with developmental gaps in kindergartens. Furthermore, we will explore the benefits of inclusion for both children with developmental gaps and their typically developing peers. By analyzing empirical evidence and studies, we aim to shed light on the positive impact of inclusion on the overall development, academic achievement, and social-emotional well-being of all children.

Additionally, we will investigate the concept of inclusive education in Israeli kindergartens using a structured approach similar to the one proposed by Hammond & Ingalls (2003). We will address the challenges faced by kindergartens in implementing inclusive practices. Strategies to overcome these challenges and emphasize the

crucial role of parental and community involvement in supporting inclusive education have been discussed by Malmeskog & McDonnell (1999).

Through this comprehensive exploration, we aim to contribute to the understanding of inclusive education and provide insights and recommendations for promoting the inclusion of children with developmental gaps in kindergartens, ultimately fostering a more inclusive and equitable educational environment in Israel.

2. Understanding Developmental Gaps

Definition and Types of Developmental Gaps

Developmental gaps encompass a spectrum of variations in cognitive, physical, emotional, or social development that children may experience in comparison to their peers (Lerner et al., 2003). These disparities can manifest in different forms, including learning disabilities, speech delays, motor skill impairments, or behavioral challenges.

Understanding the various types of developmental gaps is crucial for effective inclusion in kindergartens (Odom & Diamond, 1998).

Learning disabilities embody a range of distinct challenges that hinder the acquisition and effective application of academic skills. These difficulties are not related to intellectual capacity but rather to the brain's information processing. Among the various learning disabilities, dyslexia stand out for its connection to reading difficulties, dyscalculia for its struggles with mathematical concepts, and dysgraphia for problems in writing. Each of these conditions significantly affects a specific realm of learning, underscoring the intricacy of the issue (Odom et al., 2011).

Speech and Language Delays involve difficulties in articulation, fluency, or language development. Some children may struggle with pronouncing sounds, forming sentences, or comprehending spoken language (Grace et al., 2008). Similarly, motor skill impairments refer to challenges in fine or gross motor skills, which can affect a child's coordination, balance, or ability to manipulate objects. These difficulties may impact a child's ability to write, draw, or participate in physical activities (Bredkamp & Copple, 1997).

In addition to these challenges, behavioral and emotional challenges encompass a broad range of difficulties such as attention-deficit/hyperactivity disorder (ADHD), autism spectrum disorder (ASD), anxiety disorders, or social-emotional regulation issues. These challenges can affect a child's social interactions, emotional well-being, and behavior in educational settings (Gibson & Dembo, 1984).

Challenges Faced by Children with Developmental Gaps

Children grappling with developmental gaps routinely encounter a myriad of challenges within educational environments, including kindergartens. These hurdles can significantly impact their learning, social interactions, and overall well-being (Leatherman & Niemeyer, 2005). Some of the developmental gaps refer to academic challenges. In this case developmental gaps may result in difficulties in acquiring and performing academic skills. These challenges can affect a child's ability to keep up with the curriculum and meet grade-level expectations (Main & Hammond, 2008).

Moreover, these developmental gaps can also contribute to instances of social exclusion or isolation from their peers. This isolation stems from variations in abilities or behaviors and can lead to feelings of isolation, diminished self-esteem, and a deficiency of essential social support (Guo et al., 2011). Notably, children with

Developmental gaps are often at an elevated risk of being subjected to bullying due to their vulnerabilities or differences. This mistreatment can further erode their social-emotional well-being and disrupt their educational journey (Brown et al., 1996).

The absence of personalized support exacerbates these challenges. When children with developmental gaps lack proper accommodations and assistance, their access to and full engagement within the educational environment becomes compromised. This dearth of tailored support functions as a barrier to their advancement and stifles their comprehensive development (Bruder, 2000). Recognizing and grappling with these challenges are integral to implementing efficacious strategies and interventions aimed at promoting the inclusion of children with developmental gaps in kindergartens (Brown et al., 1999).

3. Inclusive Education in Israel

Principles and Policies of Inclusive Education

In Israel, the bedrock of inclusive education rests upon a set of principles intent on furnishing equal educational opportunities for all children, including those with developmental gaps (DEC/NAEYC, 2009). These principles underscore the significance of diversity, equality, and social integration within the educational framework. Central to these principles is the belief that each child merits an education attuned to their individual needs, regardless of their capabilities or challenges.

The Israeli Ministry of Education has laid out comprehensive policies and guidelines designed to foster inclusive practices within kindergartens. These policies underline the creation of an inclusive milieu that nurtures the involvement and participation of all children (Niemeyer & Proctor, 2002). They advocate for the adoption of teaching methodologies and strategies that cater to the varied needs of children with developmental gaps, ensuring their access to high-quality education.

Legal Framework and Regulations

The incorporation of children with developmental gaps into kindergartens finds solid grounding within Israel's legal framework. Numerous laws and regulations uphold the rights of these children and champion their inclusion within the educational spectrum.

Several of these laws form the cornerstone of inclusive education in Israel. They acknowledge the entitlement of children with special needs, including those with developmental gaps, to an education aligned with their unique requisites. These laws mandate the provisioning of pertinent support services and adaptations to facilitate their educational access and accomplishment.

Many of these legal statutes also curtail discrimination based on disability, mandating that educational institutions provide reasonable accommodations and support to students with developmental gaps. To ensure effective implementation, the Ministry of Education has established explicit regulations and guidelines. These regulatory stipulations delineate the responsibilities of schools and educators in establishing inclusive environments and extending fitting support to children with developmental gaps (Florian, 2008).

Examples of Inclusive Practices in Israeli Kindergartens

Throughout Israel, there exists a multitude of instances where kindergartens have effectively integrated inclusive practices. These educational institutions stand as beacons of inclusive education, exemplifying inventive methods and strategies that cater to the diverse needs of all children (Dan, 2019). For instance, a remarkable illustration involves an assessment tool comprised of eleven elements that spotlight essential inclusive classroom practices. These encompass the adaptation of space and materials, adult interactions, and guidance, as well as the customization of group activities, among other factors. Notably, this instrument encompasses qualitative measures, including descriptions of kindergarten teachers' behaviors (Dan, 2019).

Moreover, several kindergartens have embraced a collaborative team approach, where educators, therapists, and support staff work together to design and implement individualized education plans for children with developmental gaps. This collaborative approach ensures a coordinated and holistic support system that addresses the unique requirements of each child (DEC/NAEYC, 2009).

Certain kindergartens have also made strides in cultivating inclusive learning environments through alterations in the physical space. They have seamlessly incorporated sensory-friendly features, assistive technology, and accessible materials to promote the active participation of children with developmental gaps (Niemeyer & Proctor, 2002).

Additionally, some kindergartens have implemented inclusive curricula that emphasize play-based learning, peer interactions, and project-based activities. These curricula not only foster academic development but also encourage social skills, collaboration, and empathy among all children (Avramidis, Bayliss, & Burden, 2000).

Examples of Successful Collaborations in Israel

Within Israel, successful collaborations have emerged as potent drivers for promoting inclusive education in kindergartens, thereby enriching the educational landscape:

Parent Support Networks play a pivotal role in this effort. Parent-led support networks, which encompass parent associations and support groups, have arisen to offer guidance, resources, and emotional assistance to

families with children facing developmental gaps (Gibson & Dembo, 1984). These networks not only provide parents with vital information but also encourage collaboration, advocacy, and the exchange of knowledge among parents, creating a robust and cohesive support system.

Furthermore, Community Integration Programs have been established through partnerships between kindergartens and local community organizations. These initiatives work towards seamlessly integrating children with developmental gaps into various community activities, such as cultural events, sports programs, and community service endeavors (Niemeyer & Proctor, 2002). By engaging in such activities, children encounter social inclusion, cultivating a sense of belonging within the broader community.

In addition, Teacher-Parent Workshops organized by educational institutions across Israel serve as platforms to augment the comprehension of developmental gaps. These workshops and training sessions are designed to equip both parents and teachers with strategies for fostering inclusive practices (DEC/NAEYC, 2009). By facilitating these workshops, institutions nurture collaboration between parents and teachers, foster mutual understanding, and stimulate the fruitful exchange of ideas, thereby fortifying support for children's development within an inclusive framework.

4. Benefits of Inclusion

Positive Impact on Children with Developmental Gaps

Inclusive education in kindergartens has yielded noteworthy positive impacts on children with developmental gaps (Florian, 2008). Through the provision of an inclusive environment that esteems diversity and fosters equitable opportunities, these children reap a multitude of advantages. Inclusive education allows children with developmental gaps to access the general curriculum and receive targeted support tailored to their individual needs. Research has shown that inclusive practices contribute to improved academic outcomes, including enhanced language development, improved literacy, and numeracy skills, and increased overall academic achievement (Brown et al., 1999).

Inclusive kindergartens also provide opportunities for children with developmental gaps to interact and build relationships with their typically developing peers (Bowman, 1986). This social inclusion fosters a sense of belonging, acceptance, and positive self-esteem. Additionally, inclusive environments promote the development of social skills, communication abilities, increased self-advocacy, independence and emotional regulation, leading to improved social and emotional well-being (Malmeskog & McDonnell, 1999).

Benefits for the Overall Development of All Children

Inclusive education within kindergartens yields advantages that extend not only to children with developmental gaps but also encompass their typically developing peers (Odom et al., 2011).

Inclusive classrooms create a setting for typically developing children to interact with and comprehend their peers with developmental gaps, fostering heightened empathy and an enhanced capability for acceptance (Leatherman & Niemeyer, 2005). These interactions nurture empathy, tolerance, and an embracement of individual disparities. This augmented understanding of diversity contributes to the cultivation of inclusive attitudes and behaviors that resonate beyond the confines of the classroom (Hammond & Ingalls, 2003).

Research underscores that inclusive classrooms yield academic benefits for typically developing children (Bredkamp & Copple, 1997). Collaborative learning environments, where children of varying abilities collaborate, encourage peer tutoring and cooperative problem-solving. This collaborative approach not only bolsters academic performance but also hones critical thinking skills and spurs creativity among all children (Grace et al., 2008).

Moreover, inclusive education equips children for thriving within a diverse society (Brown et al., 1996). By engaging with peers of differing abilities and backgrounds, typically developing children cultivate fundamental life competencies such as adaptability, flexibility, and a reverence for diversity. These proficiencies are pivotal in nurturing social unity and fostering the establishment of inclusive communities in the times to come (Main & Hammond, 2008).

5. Challenges and Strategies

Implementation Challenges in Kindergartens

The implementation of inclusive education in kindergartens can pose various challenges that necessitate resolution for the seamless inclusion of children with developmental gaps (Guo et al., 2011). Nonetheless, resource limitations loom over kindergartens, encompassing concerns of funding scarcity, the availability of specialized personnel, and the provision of assistive technology. These constraints can impede the execution of inclusive practices and hinder the provisioning of essential support for children with developmental gaps (Malmskog & McDonnell, 1999).

Certain kindergartens may grapple with physical barriers that constrain access for children confronting mobility challenges or sensory sensitivities. This highlights the imperative of shaping an environment that is truly inclusive and accessible for all children (Brown et al., 1999). Furthermore, the presence of negative attitudes, misconceptions, and a general unawareness surrounding developmental gaps can further amplify hurdles in achieving inclusion. Consequently, addressing these social attitudes and heightening awareness among educators, families, and the broader community becomes imperative in fostering a genuinely inclusive environment (Odom & Diamond, 1998).

Transitioning to the specific challenges faced by Arab kindergartens in Israel, it's essential to consider the intersection of cultural, linguistic, and socioeconomic factors. These factors might lead to unique obstacles in implementing inclusive practices. For example, language barriers could hinder effective communication between educators and support staff (Lawal, 2021), thereby impacting the provision of tailored support. Additionally, cultural norms and attitudes toward disabilities might shape perceptions of inclusion, potentially causing misunderstandings and resistance to adopt inclusive approaches (Maftei, & Gherguț, 2021).

6. Parent and Community Involvement

Importance of Parental and Community Involvement

Parental and community engagement emerges as a pivotal force in advancing inclusive education within Israeli kindergartens. When parents and community members actively participate in the educational process, it engenders a collaborative and supportive milieu that reaps benefits for all children, including those with developmental gaps (Malmskog & McDonnell, 1999).

Empowering Parents: Involving parents in their child's education empowers them to become advocates and partners in the inclusive journey (Hammond & Ingalls, 2003). By sharing information, providing resources, and involving parents in decision-making processes, their knowledge and understanding of developmental gaps increase, enabling them to better support their child's needs (Dan, 2019).

Building Trust and Collaboration: Parental involvement fosters trust and collaboration between families and educators (Florian, 2008). This collaboration ensures that the child's unique needs are understood and met both at home and in the kindergarten setting (Niemeyer & Proctor, 2002).

Community Support: Engaging the wider community in the inclusion efforts helps create a sense of belonging and acceptance for children with developmental gaps (Odom et al., 2011). Community members, including local organizations, businesses, and volunteers, can contribute resources, expertise, and support networks that enrich the inclusive environment of kindergartens (Gibson & Dembo, 1984).

Collaborations for Creating Inclusive Environments

Collaboration between parents, educators, and the community emerges as an imperative for sculpting inclusive environments within kindergartens. Diverse collaborative endeavors synergize to elevate the triumph of inclusion (Grace et al., 2008).

Parent-Educator Partnerships: Building strong partnerships between parents and educators involves regular communication, sharing of information, and collaboration in decision-making processes (Bruder, 2000). This collaboration ensures that the child's unique needs are understood and met both at home and in the kindergarten setting (Center et al., 1985).

School-Community Partnerships: Collaborating with community organizations, such as disability support groups, healthcare providers, and cultural institutions, strengthens the inclusive environment of kindergartens

(Bowman, 1986). These partnerships offer additional resources, expertise, and opportunities for inclusive activities, further enriching the educational experience for all children (DEC/NAEYC, 2009).

Interdisciplinary Collaboration: Effective inclusion requires interdisciplinary collaboration among educators, therapists, and support staff (Florian, 2008). By sharing their expertise and working together, these professionals can develop comprehensive support plans, implement individualized interventions, and provide holistic care for children with developmental gaps (Dan, 2019).

7. Methodology

Research Design:

Quantitative research methods (questionnaires for kindergarteners) and qualitative research methods (focus groups) were used. Below is a description of the quantitative and qualitative research tools used:

Quantitative tools:

Internet self-filling questionnaires for pre-compulsory and compulsory kindergartens: the questionnaires were sent via a link to email addresses and phone numbers. The links were forwarded to 213 kindergarteners. Of these, 146 kindergarten managers filled out the questionnaire (69% response rate).

Qualitative tools:

Protocols for the focus group with the kindergartners, assistants and parents: six focus groups were held, for the kindergarteners, the assistants and the parents. All groups were held online on Zoom. Between 10-16 participants participated in each of the groups.

Data Collection:

The data analysis method:

Quantitative analysis: The analysis of the findings from the questionnaires was carried out using SPSS software, version 24.

Qualitative analysis: the focus groups that took place with the kindergarteners, assistants and parents were recorded, transcribed, analyzed and processed using the qualitative thematic analysis approach (Shakdi, 2011).

Data gathered from the various sources were triangulated, ensuring a holistic understanding of the topic. Key themes were identified, which helped structure the findings and subsequent discussions.

Findings :

In this chapter I will refer to the main findings that emerge from the research. The findings will relate to the attitudes and perceptions of the kindergarteners and parents regarding inclusion in kindergartens, the professional development and skills of the kindergarten staff (the kindergarten teacher and the assistant), the challenges in the work of the kindergarten manager and the sources of assistance and support, and the relationship between the kindergarten staff and parents

The attitudes and perceptions of kindergarten teachers and parents regarding inclusion in kindergartens

Kindergarten teachers' positions and perceptions regarding inclusion in kindergartens

To promote successful inclusion in kindergartens, diverse knowledge, skills, and practices are needed. Successful implementation of inclusive practices depends on the attitudes and perceptions of kindergarteners regarding children with gaps and their willingness to work with them in kindergarten. As mentioned, most kindergartens in the world support the idea of integration and inclusion. Their concerns regarding the implementation of inclusion and integration stem from the lack of knowledge and skills regarding inclusive practices, the lack of appropriate professional preparation, and the lack of sufficient support. The data shows that even among the kindergarteners in the study there is a difference between their value positions towards inclusion and between their positions related to the implementation of inclusion.

Kindergarteners reported positive value attitudes towards inclusion, but at the same time, they expressed concerns and noted that there are various challenges in the implementation of inclusion. The lack of actual experience in inclusion, the lack of training in the subject of inclusion, the lack of resources available to the kindergarten teacher.

The professional development and skills of the kindergarten staff (kindergarten teachers and assistants)

Professional development in the field of inclusion can provide kindergarteners with a lot of knowledge and work practices so that they feel confident working with children with disabilities and form positive attitudes and perceptions towards inclusion. The kindergarteners were asked if they received training on inclusion and integration as part of their professional development. 59% of the roofers reported that they had not received training.

One of the main issues that emerged from the focus groups with the kindergarteners was their desire and need for professional development, training, and skills relevant to the implementation of inclusion in kindergarten.

"We're just reinventing ourselves. It's a lot of trial and error. And I think if we have the professional tools, professionals to guide us, I think first of all it will be more professional and it will also help the inclusion of all the children because it also takes lots and lots of energy." (Kindergarten Teacher).

From the focus group held with the assistants, an experience of burden and pressure emerged following the inclusion of children with disabilities in kindergarten. According to the assistants, there are two main reasons for feeling overwhelmed and stressed. The first reason, the large number of children in the kindergarten (30 to 35) and the second reason, the increased attention that a child with a disability requires from the staff, a situation that in most cases comes at the expense of all the children in the kindergarten.

An assistant shared, "It was very difficult for me. I could not do anything for the other children because I had no help. Until I called the municipality in tears and asked for help, I didn't know what was going on." assistant"

The assistants raised another difficulty in dealing with the parents who refuse to acknowledge their child's difficulty, which creates a challenge in communication between the staff and those parents.

The assistants pointed to a lack of professional training in the field of special education intended for them.

The relationship between the kindergarten staff and the parents:

The relationship between the kindergarten staff and the children's parents has a significant effect on their cooperation as well as on the commitment of the parents to care for their children. The kindergarten teachers reported a positive relationship with the parents, 98% of the kindergarten teachers reported that the parents are informed about the child's condition and functioning, 95% of the kindergarten teachers reported that the parents are in contact with her. A lower rate of kindergarteners 62% reported that the parents are partners in building a work plan for their child.

From the focus group held with the kindergarteners, they noted that there is a need to raise awareness of the issue of inclusion among all parents in the kindergarten (explain to them about the issue, define what is expected of them as parents) so that they know how to explain to their children and help the process of inclusion. One kindergarten teacher shared "We must inform the parents of all the children in the kindergarten that there is a child with a disability, that they explain to their children, know the different concepts (kindergarten teacher). The kindergarten teachers emphasized the importance that parents should be "vigilant" in order to identify their child at an early age and give him a support system. The parents should recognize the problem and mobilize to treat and promote the child.

In the focus group held with the parents, they expressed their views regarding their relationship with the kindergarten teacher. According to them, the staff should know how to have a dialogue with the parents, accept criticism from them, and express their difficulties with the parents.

"Communication between the parents and the staff is very important. The trust that, in my view, must be created between the educational staff and the parents. The cooperation, how safe the parents feel to share and ask for and receive help." (parent)

It also emerged from the focus group that the parents are interested in the possibility of accompaniment and advice from the kindergarten teacher who is with the children most of the day. Also, there were parents who believed that it was important to have continuous contact with all the parents in the kindergarten so that the inclusion would work well and that the climate in the kindergarten would be optimal.

"What's most important to me in this kindergarten is that the kindergarten teacher treats every child. If it's on the phone with the parents, she initiates the conversation herself, she calls and asks. She updates everything...she regularly talks to all the parents" (parent)

Limitations: Despite striving for a comprehensive perspective, the study primarily focuses on kindergartens and does not extensively explore higher age groups. Moreover, the utilization of observational methods introduces a certain level of subjectivity. The study's findings could also be influenced by the limited number of cases involving developmental gaps, potentially affecting the generalizability of the results. In addition, the response rate from parents was not universal, which could introduce a response bias. Furthermore, challenges were encountered in organizing meetings, potentially impacting the depth and quality of the data collected.

8. Conclusions

Summary of Key Points

Throughout this essay, our exploration has centered on the integration of children with developmental gaps into Israeli kindergartens. We have navigated through the principles and policies underpinning inclusive education in Israel, the legal infrastructure bolstering inclusion, and instances of triumph in implementing inclusive practices within kindergartens. Furthermore, we have illuminated the dividends of inclusion for children with developmental gaps and their typically developing counterparts. The journey also encompassed the hurdles encountered during the pursuit of inclusive education and the strategic pathways to surmount these challenges. Lastly, we have underscored the pivotal roles of parental and community participation, showcasing successful collaborative endeavors within Israel.

Importance of Inclusion in Israeli Kindergartens

The integration of children with developmental gaps into Israeli kindergartens holds profound significance. It serves as the vanguard of equality, an antidote to discrimination, and a vehicle for social cohesion. Inclusive education propels children with developmental gaps towards academic progress, nurtures their emotional well-being, and fosters their autonomy. Simultaneously, it grooms typically developing children with empathy, fortifies their academic prowess, and equips them to navigate a diverse world.

Recommendations for Further Advancements

Training Needs for Educators and Support Staff

To effectively promote inclusion in kindergartens, educators and support staff require specialized training and ongoing professional development (Hammond & Ingalls, 2003).

Inclusive Pedagogy: Educators need training in inclusive pedagogy, which includes strategies for differentiating instruction, adapting materials, and creating inclusive learning environments (Bowman, 1986). This training equips them with the knowledge and skills to address the diverse needs of children with developmental gaps (DEC/NAEYC, 2009).

Collaboration and Teamwork: Building effective partnerships among educators, support staff, therapists, and families is essential for implementing inclusive practices (Florian, 2008). Training programs should emphasize the importance of collaboration and teamwork to support the holistic development of children with developmental gaps (Niemeyer & Proctor, 2002).

Understanding Developmental Gaps: Educators should receive training on various developmental gaps, their characteristics, and the appropriate instructional approaches and interventions (Dan, 2019). This knowledge enhances their ability to meet the unique needs of children with different developmental gaps (Center et al., 1985).

Strategies for Promoting Inclusion in Israeli Kindergartens:

To promote triumphant inclusion within Israeli kindergartens, several strategic pathways are recommended:

Individualized Support: Provide individualized support plans for children with developmental gaps, tailored to their specific needs and strengths (Bredkamp & Copple, 1997). This may involve the use of specialized interventions, assistive technology, and accommodations to ensure their active participation in all aspects of kindergarten life (Gibson & Dembo, 1984).

Collaborative Partnerships: Foster collaboration and partnerships among educators, families, therapists, and community organizations (Leatherman & Niemeyer, 2005). By working together, a coordinated support network can be created to meet the diverse needs of children with developmental gaps and ensure continuity of support across different settings (Grace et al., 2008).

Professional Learning Communities: Establish professional learning communities within kindergartens and across schools to facilitate knowledge sharing, collaboration, and ongoing professional development related to inclusive education (Main & Hammond, 2008). These communities provide opportunities for educators to learn from one another and continuously improve their inclusive practices (Bruder, 2000).

Universal Design for Learning (UDL): Apply the principles of UDL, which involves designing learning experiences that are accessible and beneficial for all children, including those with developmental gaps (DEC/NAEYC, 2009). This approach ensures that instructional materials, activities, and assessments are flexible and cater to diverse learning styles and needs (Bowman, 1986).

Future Directions and Conclusion

Looking ahead, it is imperative to sustain research and evaluation efforts to continuously advance inclusive practices in Israeli kindergartens. Ongoing research can provide insights into effective instructional approaches, interventions, and support strategies for children with developmental gaps. Evaluation and monitoring of inclusive programs can help ensure their effectiveness and identify areas for improvement. Additionally, policymakers should consider resource allocation and funding to support inclusive practices, while awareness campaigns can challenge stereotypes and reduce stigma associated with developmental gaps.

Parental and community involvement remains essential in promoting inclusive education. Empowering parents, building trust and collaboration, and engaging the wider community create a supportive environment for all children. Collaborative efforts between parents, educators, and the community contribute to creating inclusive environments in kindergartens and fostering successful inclusion.

In conclusion, the inclusion of children with developmental gaps in Israeli kindergartens is crucial for creating an equitable and inclusive educational system. By addressing challenges, implementing effective strategies, and emphasizing parental and community involvement, we can create kindergartens where every child can thrive and reach their full potential. Through collective efforts, ongoing research, evaluation, resource allocation, and societal awareness, we can foster a society that embraces diversity, empowers all children, and upholds the principles of equality and inclusivity.

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The Role of Leadership Styles in Fostering Innovations and its Impact on Market Share

Edrina Emini¹

¹PhD Candidate, South East European University, Tetovo, North Macedonia

Abstract: The primary purpose of this empirical research is to present the role of leadership styles in organizational innovation and to investigate how organizational innovation affects market share. The sample consists of leaders and managers in leading positions of private sector companies in the Republic of North Macedonia. For the estimating purpose, PLS-SEM is used to find the structural relationship between variables. The findings of this research suggest a positive and significant influence of the democratic style on organizational innovation and a negative but statistically significant influence of the laissez-faire leadership style on organizational innovation. Whereas, the autocratic style has no significant impact on organizational innovation. Moreover, a strong positive impact of organizational innovation on market share was found.

The scientific contribution of this research consists of increasing the added value of the empirical literature on the influence of leadership styles on organizational innovation. Meanwhile, this research may have practical implications for businesses which is especially relevant in today's business era, where innovation is the most crucial and foundational element of every enterprise.

Keywords: leadership styles; innovation; organizational innovation; market share.

1. Introduction

Organizations operate in a competitive environment that is constantly changing. These changes affect all internal organizational processes such as changes in products/services; technology and markets (Agbim, 2013). Today, organizations need effective leaders who have a deep understanding of the complexity and speed in the changing global environment. Changes in business environments challenge the ability of managers to think about and react to different markets in an effective way.

Organizational innovation is an inclusive process that spans a wide range of activities, including the creation and implementation of new concepts and products within an organization (Becker & Whisler, 1967).

A growing body of research shows that leadership plays a critical role in managing such competing priorities. The leadership behavior defined in the leadership style represents a key resource for strengthening the functional relationship between leaders and followers, creating an important factor of driving creativity and innovations Kim et al., 2019. Innovation is present in all organizations and their processes, and to foster innovations, companies must build a flexible environment where the knowledge sharing will be easier to respond to innovative demands (Hana, 2013). According to Wipulanusat et al., 2017 leadership plays an important role in creating an environment conducive to innovation by building processes and structures and inspiring team members to engage in innovative activities.

Various studies have found a strong positive correlation between leadership styles and innovations. However, studies have mainly focused on the transformational and transactional style of leadership, with a notable lack of studies investigating the autocratic, democratic and laissez-faire style of leadership in this context.

In the context of innovation, existing literature consistently asserts that innovation enhances overall business performance. Market share is an important indicator of the overall performance of businesses, especially in the era where businesses are operating today, with high competition and similar products/services.

According to Banbury & Mitchell 1995, businesses who had brought innovations to an industry, the larger the market share they capture, while competitors who had adopted innovations have a small positive relationship with the market-share they hold.

The main purpose of the paper is to provide empirical evidence on the impact of leadership styles on organizational innovation. The leadership styles that have been studied are: autocratic, democratic and laissez faire style. While the second objective of this study is to investigate if innovations have a meaningful and positive impact on market success.

In order to fulfill the objectives, were used research questions about the study variables.

What leadership style proves most effective in fostering innovation?

Does innovation positively affect market share?

This research paper is structured into four sections, starting with introduction, followed by literature review, empirical part and finally the conclusion and recommendations.

2. Literature review

The objective of this section is to provide an overview of the main contributions from the empirical literature on leadership and innovations by critically reviewing studies based on concrete results.

In the existing literature, there are arguments that leadership is important for innovation management (Denti and Hemlin, 2012; Kesting et al., 2015). On the other hand, innovation is seen as a source of long-term sustainability. In these circumstances, leadership plays a strategic role in improving internal organizational processes including organizational learning and innovation and overall business performance (Rexhepi, 2015). According to Deschamps (2005), the failure of innovation projects can come as a result of ineffective management skills. According to Oke et al., 2009 leadership plays a vital role in driving innovation processes and activities in organizations. Although some innovations may be a bottom-up activity, stemming from members of an organization who are not necessarily leaders or at the top

in general, innovations tend to be the result of a strategic response or initiatives in organizations to compete effectively in the market. In other words, for innovations to succeed in an organization, they require the commitment of key and strategic resources that are controlled by top management or leadership of organizations.

Although there are many studies on the relationship between leadership style and business performance, research on how these leader behaviors affect the creation of innovations has recently received much attention, yet few empirical studies exist on this relationship. In this section, we will review the empirical findings of existing studies.

A research on the influence of the transformational and transactional styles on the innovations of SMEs in Turkey, the authors found that the transformational style has a significant positive impact on the creation of innovations but also on increasing the overall business performance, while the transactional style has no impact important in none of them (İşcan et al., 2014)

The findings of another similar empirical study on the influence of transactional and transformational styles on innovations by the authors Xie et al., 2018 show that the transformational leadership style is more effective in building an innovation atmosphere. On the other hand, according to the authors, the transactional leadership style can motivate team members under certain conditions when the transformational leadership style does not work. Leaders must differentiate between transactional leadership style and transformational leadership style and apply them flexibly in different situations.

Another study studied the impact of both transactional and transformational styles on the innovations of manufacturing companies in Indonesia, not separating the styles into separate variables, and the findings show a positive relationship with innovations (Adam et al., 2020)

Wipulanusat et al., 2017 studied the influence of transformational and consideration style on innovations, using survey data drawn from the 2014 APS employee census comprising 3 125 engineering professionals in Australian Commonwealth departments. The findings of the study show that both styles have a significant impact on driving innovations.

Unlike the aforementioned studies, Ahmed et al., 2018 studied the relationship between paternalistic, authentic, and democratic styles in service innovations in Malaysia. The findings of this study show a significant and positive impact on service innovations.

Another study was conducted on the role of leadership styles in organizational innovation in South Africa with a sample of 3180 observations and according to the results, both transformational and transactional styles positively affect the growth of innovations. While, regarding the characteristics of leadership styles, it was found that motivation and inspiration had a greater impact on innovation (Sethibe & Steyn, 2017).

Regarding the relationship between innovations and success in market share, there is a limited number of empirical studies that specifically research this relationship. Nevertheless, within the theoretical literature review, research indicates that innovations contribute to achieving success in the market share.

A study conducted in Slovenia by Snoj et al. 2007, examined the relationship between innovation, market orientation, market success, and overall business performance. Among various variables studied, the authors investigated the impact of innovation on market share and identified a positive impact.

A study on the impact of innovations on the business performance of companies in Vietnam found a positive impact of innovations on market share but not on total return on assets (Canh et al., 2019).

Another study, examining the relationship between innovation and customer satisfaction in Pakistan, found a positive influence of innovations on customer satisfaction (Nemati et al., 2010). From both the business and consumer perspectives, innovations bring positive outcomes. In this section, we tried to review various empirical studies that are related to the variables of this study, concluding with comparisons and insights.

3. Research methodology

The study is based on primary data collected from leaders and managers of companies in the Republic of North Macedonia, with a sample of 140 respondents. The questionnaire is structured in three parts where the first part consists of the demographic data of the leaders. The second part defines leadership styles and the third part helps us identify innovations and market share.

For data analysis, we used the SEM model with the PLS method. PLS (Partial Least Squares) is a structural equation modeling (SEM) technique that is based on an iterative approach to maximize the explained variance of endogenous constructs (Fornell & Bookstein, 1982).

PLS-SEM provides an efficient solution even for small samples when models include many constructs and a large number of items, as highlighted by (Hair et al., 2017).

4. Results

4.1 Reliability and validity

In this section, the results of the research will be presented.

As we can see in Table No. 1 vector inflation factor (VIF) for each variable are presented. The rule of thumb for VIF is to not exceed the value 5, and in our case, all values are below that threshold.

Table no. 2 shows convergent validity values (AVE), indicator reliability such as Cronbach's alpha, and composite reliability such as rho_a, and rho_c. The range for Cronbach's alpha is from 0 to 1, and a value above .60 is considered acceptable Hamid et al., 2017. In this case, our values are above .70. The second criterion is related to AVE, which means that AVE should be considered acceptable if it is above .50 the values of which are in our case over 0.50. Also, the calculated values of composite reliability rho_a and rho_c are at the acceptance level.

Table no. 2 Multicollinearity test (Vector Inflation Factor)

Items	VIF
a1	1.591
a2	1.296
a3	1.516
a4	1.504
d1	1.285
d2	1.672
d3	1.619
d4	1.158
in1	1.528
in2	2.533

in3	2.562
in4	1.755
ls1	1.355
ls2	1.264
ls3	1.618
ls4	1.560
msh1	2.068
msh2	1.440
msh3	1.937
msh4	1.772

Table no. 3 Convergent Validity and Composite Reliability

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
a	0.748	0.858	0.827	0.552
d	0.710	0.729	0.819	0.534
in	0.838	0.843	0.893	0.676
ls	0.735	0.785	0.805	0.511
msh	0.817	0.831	0.879	0.646

4.2. Structural Model Estimation

Based on the PLS-SEM method, as demonstrated in Figure 1, we identified three groups of variables. On the left side, we have the latent constructs formed by leadership styles, which appear as exogenous variables. In our model, innovation appears as a latent endogenous construct related to leadership style, while it functions as an exogenous variable in relation to market share. Finally, the latent construct on the right side or market share is presented as an endogenous variable in our case. The value of R^2 for the relationship between leadership styles and innovation is 0.269, which means that 27% of the variance in innovation is explained by the variance in leadership styles. The second R^2 , for the relationship between innovation and market share, has a value of 0.523, indicating that 52% of market share is explained by innovation.

Table no 3. shows the structural relationship between variables, and path coefficients, followed by t statistics and p values for each relationship. As can be seen from the calculated results, the democratic style has a positive impact on innovation with a path coefficient = .450, $t = 6.167$, $p = 0.000$. The laissez-faire style has a negative impact on innovation (path coefficient = -0.215; t value=2.484; p -value = 0.013). The autocratic leadership style has not shown any impact on innovation. Meanwhile, the impact of innovation on market share is positive and significant with path coefficient = 0.723; t value=17.722 and p value = 0.000.

Figure 1. Structural relationship between variables

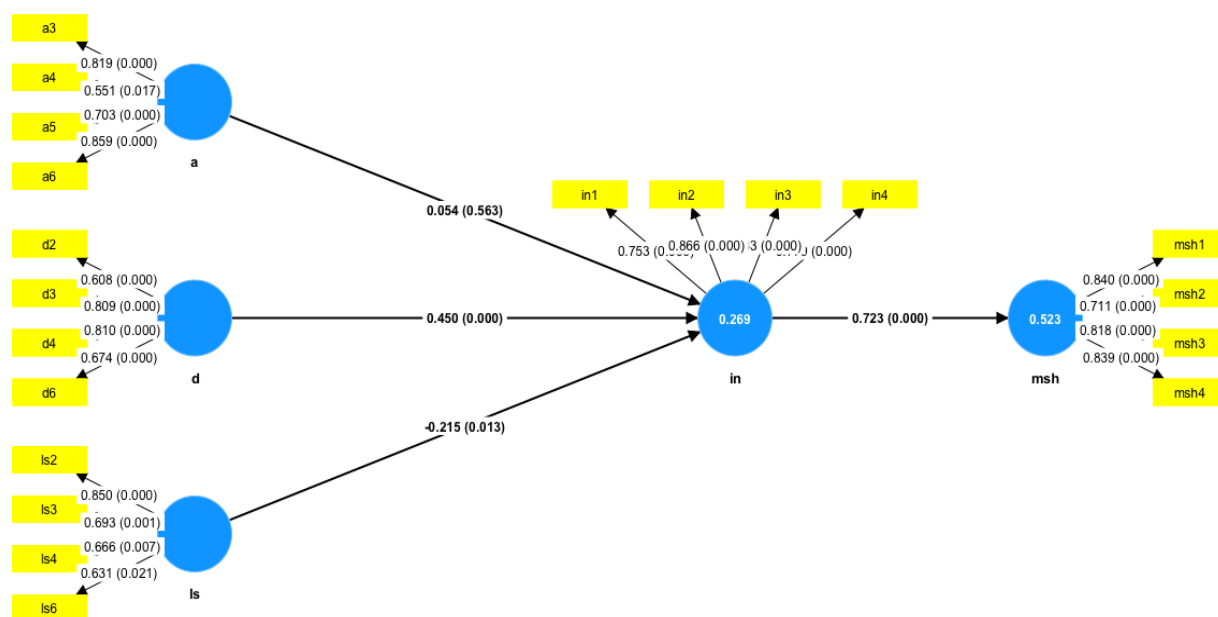


Table no.3 Relationship between variables

Structural relationship between variables	Original sample (O)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
a -> in	0.054	0.093	0.579	0.563
d -> in	0.450	0.073	6.167	0.000
in -> msh	0.723	0.041	17.722	0.000
ls -> in	-0.215	0.087	2.484	0.013

5. Conclusion and limitations

This research aimed to investigate the role of leadership styles in fostering innovation and assess innovation's impact on market share. The results have shown that there is a positive impact of democratic leadership style on innovation, a negative impact of laissez-faire style on innovation, and a strong positive impact of innovation on market share.

Despite the contributions that this study may offer, it is important to note its limitations. Firstly, the study focused only on North Macedonian enterprises, and its utility could be enhanced by including more Balkan countries in the research. Additionally, the market share assessment was conducted from the perspective of the leaders; perhaps the comparison with the companies' sales data would have given more objective results.

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Using Accounting Principles In Internal Controls and External Public Auditing

Elena DOBRE¹

¹Finance and Accounting Department, Economics Faculty, OVIDIUS University Constanta, Romania,
edobre09@gmail.com

Abstract: In the last over 30 years of economic reform in Romania, trying to leave a planned and centralized economy and going to a functional market economy, a series of challenges had arisen for economic and financial professional environment. Appropriate implementation of a new conceptual delimitations and new regulations is difficult and asperity. The aim of the paper is focused on the relevance of accounting principles in practice not only in theory field. We try to show practice solutions for difficulties attached of new changes brought about by economic reform in the financial accounting field and also, for internal controls, internal public audit and external public audit field. The objective of the paper is to show the difference between substance or content of transactions and legal form of transactions and use the principle of prevalence of economic content over legal form of engagements dealing with intricate economic cases seems to be without solution. The data and methodology are based on a case study on how is better to hire a professional in internal audit: (i) outsourcing, mean not only legal form of contractual relation but with good elements for improvement management a patrimonial results in its mandatory activities, or, (ii) employment, mean only legal form (labour contract) but without any kind of improvements of public entities management. In the empirical study case, government audits appreciate that only the form of employment prevails and not the outcome of the engagement through its positive patrimonial effects. The conclusion relive that in the process of economic reforms give by frequent changing of government regulations can provide inconsistencies in professional field, from both sides: internal controls of public entities and external public audits.

Keywords: accounting assertions, substance over form, government regulations, internal controls. .

Introduction

In response to the global financial crisis, several international organizations, including the World Bank and the International Monetary Fund, launched a cooperative initiative to strengthen the global financial architecture and seek a longer –term solution to the lack of transparency in financial information. This effort has been underpinned by unequivocal support for the work of the International Accounting Standards Board (IASB). One of the most important outcome has been the acceleration of an international convergence in accounting standards-in particular the International Financial Reporting Standards (IFRS) promulgated by the IASB and the Financial Accounting Standards (FAS) promulgated by the Financial Accounting Standards Board (FASB). For accountants, financial analysts and other specialists, there is already a substantial technical literature explaining in detail the background and intended application of these standards. This literature should assist national regulators in comparing IFRS to country-specific practices, thereby encouraging even wider local adoption of these already broadly accepted international standards (van Greuning, H., 2004). Further methodological developments have led to foundation in 2010 of Sustainability Accounting Standards Board (SASB). According to the SASB work plan, the objective is to develop sustainability standards for 88 industries in 10 sectors by the end of 2015. Even though SABS operate in the US, and its framework is built in line with local guidelines, its sustainability reporting standards can be used by other companies or be an inspiration for other standards across the globe (European Court of Auditors, 2012).

The aim of this paper is focused on the relevance of accounting principles in practice not only in theory field. After introducing several aspects on Romanian financial accounting reform history, the structure paper is composed by four sections: (i) Accounting Standards & Literature review ; (ii) Evolutions of National Accounting and Auditing Harmonization to International Standards; (iii) Romanian Accounting Current Regulations and Substance over Form Accounting Assertion; (iv) Contradictory and segmented applying of law's provisions really can be solved by principle of substance over form? - Case study; (v) Conclusions.

The main findings are linked on different patrimonial results depending of outsourcing and labour contract of internal audit services in public entities and despite of the inappropriate legal form in case of outsourcing, the result is positive as value for money-economy. The results of research relieve lack of convergence between accounting regulations and practice and on the other hand, between regulations and practice of government audits. Contribution consists on finding understand ability the fundamental utility of accounting principles in accounting treatments itself. The scheme included in third section relives a better patrimonial result as a double amount economy by using treatment adapted on outsourcing internal audit. The synopsis of case study is about of wages engagement versus freelance contractual engagement.

1. Accounting Standards & Literature review

The Romanian accounting system has developed continuously over the last 30 years, in the context of economic globalization and integration in the European Union. During the economic and social reform, a quick and sustainable adaptation to the requirements of international accounting, financial reporting and auditing standards was needed. This process was imposed by the acceleration of the privatization process, the development of the capital market and the functional market economy. In this evolution, an inception in changing professional mentality was revelation about accounting as social game - assertion brought by Feleagă and Ionașcu (1993 foreword). Moreover, Feleagă *et al* (1996 p.24) put the problem of European directives as perfect products in the context of an accounting Europe. Step by step, Romanian professional bodies acting in accounting profession, academics, accountants, financial analysts and other specialists of entire professional medium, started to understand and apply the attributes of useful of reporting information (relevance, reliability, comparability and understand ability), the underlying assumptions (accrual basis and going concern).

2. Evolutions of National Accounting and Auditing Harmonization to International Standards

The recent history of Romanian accounting regulations is characterized by a series of rapid changes, determined in most cases by the adoption of foreign models and influences (Albu and Palarie, 2016). Transparency in Financial Statements Achieved through Compliance with IASB Framework, refers to objective of financial statements, fair presentation attributes of useful information and underlying assumptions (The Framework for the Preparation and Presentation of Financial Statements (IAS 1). The attributes of useful information are follows:

- Comparability of information.
- Understand ability of information;
- Relevance obtained by presenting the nature and materiality of transactions;
- Reliability refers to a mix of several features of information expressed as well-known assertions: faithful representation, **substance over form**, neutrality, prudence and completeness.

These attributes should be understood and apply in balance with certain constrains as timeliness, benefit vs. cost, balancing the qualitative characteristics in respect of IAS 1 or business entity and accounting period, according other authors in this field (Alexander and Nobes (2001 p. 47) cited by Dutescu A. and Olimid L. (2004 p. 35).

Speaking about a reliable information, only a free information from bias and material error can be trusted by users making decisions.

In the European continental concept promoted by France, Belgium and Germany, in order to present a fair view of entity in financial reporting, accounting should comply with the rule of prudence, regularity and honesty (sincerity) of the accounts. Vincent Allard (1997, p.15) explain that prudence is reasonable appreciation of the facts to avoid and transfer risks view as a present uncertainty susceptible to strike patrimony and results of business entity. Regularity is compliance with the rules and procedures in force. Honesty of accounts means applying the rules and procedures in good faith, knowing we are responsible for reality and importance of operations, events or situations.

If prudence is a traditional ingredient of financial information and accountants, including the Romanians, have always exercised a degree of caution when making estimates but the others features need more convincing assimilation.

Firstly, information should represent faithfully the transaction or events that it tries to depict. Secondly, in accordance with substance over form accounting assertion, information should be in accordance with the substance and economic reality of transactions and not merely with their legal form. For most transactions the legal form and economic substance is identical. Complex transactions, however, may be arranged in such a way that these two aspects become distinct. A sale of land with a repurchase option may something distinguish a secure loan, if the repurchase is not a market one, but builds up on the original sale price. A synthetic comparison between national economic medium and Anglo-Saxon practices may be presented as follows.

Table 1 Comparison between national economic medium and Anglo-Saxon practices

National economic & accounting reality	Anglo-Saxon economic & accounting reality
----------------------------------------	-------------------------------------------

Public power largely manages economic activity	Market regulates most of the value flows (stocks and monetary flows)
Financing system predominantly banking	Financing system predominantly stock market
Accounting is connected to taxation	Accounting is not connected to taxation
Inductive accounting normalization using the Chart of accounts as main instrument	Deductive accounting standardization using the Framework for preparation and presentation of financial statements as main instrument (acceptable coherent framework of fundamental principles)

Source: author's own processing adapted from Albu, C.N., Albu, N., Feleagă, L. (coordinators), 2012. (Author Calu, D.A. Normalizarea contabilă în România, între continuitate și schimbare: repere istorice. [Accounting normalization in Romania between on-going and changing: historical points]. pp. 202-209)

In this period of accounting reform, accountants and specialists become conscious about the difference between normalization and standardization, between mandatory rules of Chart of accounts and an acceptable coherent framework of fundamental principles.

Going further in achieving applying international standards experience, two of the most popular accounting standards were IAS 7 Cash Flow Statements, IAS 17 Leasing and IAS 32 Financial Instruments (and IFRS 9). Firstly, IAS 7 Cash Flow Statements was quickly assimilated by practitioners, because of simply activities taxonomy: Financing, Investing, and Operating. Secondly, IAS 32 Financial Instruments revealed complexity of certain transactions, risks and intricacy of capital market field. Finally, IAS 17 Leasing revealed finance lease treatment as a real novelty in application of a new principle what is refers to prevalence of economics over legal issues.

This standard and finance lease treatment become the most frequent example making difference between national accounting rules and the novelties bring by international standards. In a country with strong professional beliefs and reasoning based on specific law not on customs, this was received as an expression of economic freedom regarding the not-transfer property of asset lease. Moreover, particular attention has been given to fair value as the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction. Nowadays, this assertion is more explicit in IFRS 13 and more interesting in applying it.

Accounting by lessees: the classification of leases (operating or finance) is done at the inception of the lease. The substance rather than the form of the lease contract is indicative of the classification (IAS 17 Leasing par. 16.4.1). The classification is based on the extent to which risks and rewards incident to ownership of a leased asset lie with the lessors or the lessees:

- Risks include potential losses from idle capacity, technological obsolescence, and variation in return due to changing economic conditions.
- Rewards include the expectation of profitable operation over the asset's economic life and of gain from appreciation in value or the realization of a residual value.

An asset held under a finance lease and its corresponding obligation is recognized in terms of the principle of substance over form (IAS 17 Leasing par. 16.4.2). The accounting treatment is as follows:

- At inception, the asset and a corresponding liability for future lease payments are recognized at the same amounts (asset recognized as property, plant and equipment).
- Initial direct costs in connection with lease activities are capitalized to the assets.
- Lease payments consist of the finance charge and the reduction of the outstanding liability. The finance charge is to be a constant periodic rate of interest on the remaining balance of the liability for each period.
- Depreciation and impairment of the leased asset is recognized in terms of IAS 16 and IAS 36.

Accounting by lessors: an asset held under a finance lease is presented as a receivable (IAS 17 Leasing par. 16.4.4). The receivable is recorded at the net investment amount. The recognition of finance income is based on a pattern reflecting a constant periodic rate of return on the net investment. Initial direct costs are deducted from receivables (except for manufacturer or dealer lessors).

In the field of audit, the principle substance over form has the same semantic sense in content and form: Transactions and other events in the life of an organisation should be accounted for and presented in

accordance with their substance and with financial reality and not merely with their legal form (Feleagă, 1996). Moreover, in the context of a financial audit, the audit objectives relevant to the reliability of the account are:

- for revenue and expenditure accounts (commitment and payment appropriations) completeness, reality of operations, measurement, presentation and publication;

- for balance sheet: completeness, existence and ownership, valuation and presentation and publication.

We should retain commitment and payment appropriations as the core of recognizing for revenue and expenditure accounts. In the same time, this is the reason of double- entry accounting with the double effect gearing the fundamental equation: $\text{assets} = \text{equity} + \text{liabilities}$.

In Romanian accounting, *double-entry* accounting assumes that each transaction has a double effect at least on two accounts: one of which will be recorded as a debit in one account and the other which will be recorded as a credit in another account. It follows that total debits must equal total credits for each transaction. To demonstrate the rules as to when to debit and when to credit an account, we shall resort to the fundamental equation: $\text{Assets} = \text{Equity} + \text{Liabilities}$ (Dutescu A. and Olimid L. 2004 p.79). This due is related with substance over form as an important attribute of accounting and audit information reliability.

As a first interim conclusion, generally speaking, an assertion is a confident and forceful statement of fact or belief, but accounting assertion *substance over form* in a finance lease (IAS 17) and in the audit field is an instrument to recognize in the income statement, a finance charge (expense) accounting by lessees and a finance income (revenue) accounting by lessors. This part was about confidence and force given of an accounting assertion by the international regulators.

3. Romanian Accounting Current Regulations and Substance over Form Accounting Assertion

In this section we try to seek the same semantics in explanation of the principle of substance over form between IAS 17 provisions and national accounting regulations, both precedent regulations and current regulations. The previous national accounting regulations (Order 3055/2009) and the current national accounting regulations (Order 1802/2014), both of them known as Romanian Accounting Standards (RAS) are applied for non-public entities and for small size entities in terms of turnover, total assets and employees.

Under Order 3055 (Romanian Minister of Public Finance, 2009 paragraph 46) this assertion is provided as principle of prevalence of economic content over legal contractual form: *Presentation the values within the balance sheet items and the profit and loss account are made taking into account the economic substance of the transaction or transaction reported, and not only by their legal form. Compliance with this principle is intended to be recorded in the accounts and a faithful presentation of economic and financial operations in accordance with economic reality, highlighting rights and obligations as well as risks associated with these operations (...¹).*

¹ Events and economic and financial operations must be highlighted in accounting as they arise on the basis of supporting documents. Documents underlying the recording of operations economic and financial needs must reflect exactly how they are produced, respectively to be in line with reality. Also, contracts concluded between the parties must provide for the way operations are carried out and respect the existing legal framework. Under normal circumstances, the legal form of a document should be in concordance with the economic reality. In rare cases, when there are differences between the substance or economic nature of an operation or transaction and its form the entity shall record these operations in accounting, with due respect their economic background. Examples of situations where the principle of economic prevalence applies on the law can be considered: the user's assignment of the contracts leasing for operational or financial leasing; assignment of sales operations in own name or commission, respectively consignment; revenue recognition, respectively the expenses in the profit and loss account or as in-advance income, respectively advance expenses; classifying holdings as held-to-maturity long or short term; recognition of ownership interests held by nature shares held in affiliated entities, participation interests or other financial assets; including the discounts granted or received, to commercial or financial discounts. Entities are required to account for economic and financial operations take into account all the available information so that to be extremely rare the situations in which the nature of the operation, determined on the basis of the prevalence of the economy over the law, to be different from that which would be determined in the absence of application of this principle.

Under actual applying Order 1802 (Romanian Minister of Public Finance, 2014 paragraph 57.) the same assertion substance over form is provide as follows: *Accounting for and presenting balance sheet items and profit and loss account taking into account the economic substance of the transaction or commitment in question. Compliance with this principle aims to record in accounting and accurate presentation of economic and financial operations in line with economic reality, highlighting the rights and obligations as well as the risks associated with these operations (....²).*

We observe the same semantic explanation but the sense of comply or not comply to this principle is changed. First Order imposes to comply to this principle, speaking about determination of nature of operation on the basis of the prevalence of the economy over the law and speaking about determination of nature of operation in the absence of application of this principle. The difference is between existence and absence of application of this principle. Second Order imposes to comply to this principle, speaking about to be extremely rare the situations in which the economic nature of the operation to be different from the legal nature of the documents underlying them. Thereby, the application of this principle is eliminated by alignment of economic nature (substance) to legal nature of the documents (form). So, assertion substance over form is replaced by substance equal form. Then, the entire sense of over form was removed, and also, the freedom of find the real substance, to find the consistency with reality, was deleted.

The risk of this last row in text is that in fact, the entire text becomes none operating and that principle had lost its genuine sense given by the IASB in IAS. As a second interim conclusion, the accounting assertion substance over form had lost its genuine sense given by the IASB in IAS. RAS by Order 1802/2014, had removed sense of the principle from over form in equal to the form, even though is affirmed in terms of economic nature and as an instrument for revenue recognition, respectively the expenses in the profit and loss account. This is an effective change of specific regulations, beyond a change in accounting principles and consistency to facilitate comparison. Including in internal audit field, in the accounting changes the same accounting policies ordinarily should be followed consistently, to facilitate comparison. Accounting changes include changes in principle (policies according IFRSs) and estimates. US GAAP does not define accounting principles. IFRS define accounting policies as specific principles, bases, conventions, rules, and practices adopted by an entity in preparing and presenting financial statements (Gleim, 2011, p. 182). However, changes in accounting principle normally are accounted for by retrospective application, not for a current application. A change in accounting principle is allowed if it can be justified as preferable or is required. Under IFRSs, a change is allowed if it will result in reliable and more relevant information is required (Gleim, 2011, p. 183).

This second part of the paper is about the challenge of harmonization by the national regulators regarding one of the most important accounting assertions, substance over form. In this point, it is worth mentioning the special provisions for applying of the Romanian Tax Code art. about the economic purpose of transactions and the possibility of not taking into account the transactions or disregarding of these for additional profit taxation. When determining the amount of a tax, tax authorities may not consider a transaction that has no economic purpose, adjusting its tax effects, or can re-shape the form of a transaction/activity, to reflect the economic content of transaction or activity. This is another way to apply in taxation field, the same principle substance over form.

² Events and economic and financial operations must be accounted for in the accounting as they arise, on the basis of supporting documents. The supporting documents underlying the recording of the economic and financial operations in the accounting must reflect exactly how they are produced or consistent with reality. Contracts between the parties must also provide for the execution of operations and respect the existing legal framework. The legal form of a document must be in line with economic reality. Where there is a difference between the substance or economic nature of an operation or transaction and its legal form, the entity shall account for those operations, with due regard for their economic substance. Examples of situations where this principle applies can be considered: leasing users of operating leases in operating or financial leasing; recognition of rental income and rental expenses according to the economic background of the contract and any related incentives (incentives); the assignment of operations for sale on own behalf or commission, respectively consignment; recognition of income or expenses in the profit and loss account or as in-advance or prepaid expenses; the recognition of holdings held as being in the nature of shares held in affiliated entities or in the form of other financial assets; including the discounts granted or received, to commercial or financial discounts. Entities are required to take account of all available information when drawing up supporting documents and accounting for economic and financial operations so that so that to be extremely rare the situations in which the economic nature of the operation to be different from the legal nature of the documents underlying them.

4. Contradictory and segmented applying of law's provisions really can be solved by principle of substance over form? - case study

This third section of the paper is about seeking solution of this challenge of harmonization by the national regulators regarding one of the most important accounting assertions: substance over form. We really can find a solution? An empirical case study in the field of intern audit in budgetary field an entity subordinated on local public administration, show an obvious difference between economic nature (by value for money) and form of engagements (wage agreement or salary contract vs. service contract). This situation in the context of an asymmetrical infringement of law by deleting an old possibility but in the context of a real value for money (saving money and thrift behaviour) can remain without opportunity to apply such a precious principle? In this case study the well-known double-entry principle was ignored and also, commitment and payment appropriations for revenue and expenditure accounts. Even, the methodology external public financial audit is clear in national specific regulations (Order 1802/2014), it was not applied in its letter and in its spirit, as a saying that became a byword for accounting professionals. External public financial audit national specific regulations (Romanian Court of Accounts, 2012) indicate that a deviation or error of applying a law or regulations, may cause or not prejudicial effects. In this case a real saving money was happened, as is presented in the below scheme. We mention that Regulation on the organization and conduct of specific activities of the Romanian Court of Accounts (ROCSA-RCoA) approved by the Decision of the Plenum of the Romanian Court of Accounts no. 155/2012, valid for the reference period 2012-2016, at paragraph 88, shows that a deviation from the law can determine a damage or cannot determine a damage.

In this case, control bodies- external public auditors did not described the circumstances and facts that could determine any damage.

Certain provisions of ROCSA-RCoA expressly indicate the objective working method of control bodies and how to compile the report: Paragraph 70. External public auditors analyse the data and information gathered by using the analytical procedures (quantitative and qualitative, namely: a) benchmarking; b) analysing the level of accomplishment of the purpose, objectives and attributions stipulated in the normative acts for setting up and organizing the activity of the controlled entity; c) Cost-effectiveness analysis ...Paragraph 88. In the event of errors / deviations from the legality and regularity that have caused or not caused damage, facts for which there are indications that they have been committed in violation of criminal law or instances of non-compliance with the principles of economy, efficiency and effectiveness, they will be clearly and concisely exposed in the control report and will be supported by relevant evidence.

The legality defined by Regulation on the organization and conduct of specific activities of the Romanian Court of Accounts 2014 (ROCSA-RCoA) is the characteristic of an operation to comply with all legal provisions applicable to it and in force at the date of its execution.

The economy defined by ROCSA-RCoA is a characteristic attributed to the situation in which the cost of resources allocated to achieve the expected results of an activity is minimized while maintaining the appropriate quality of these results;

The damage defined by ROCSA-RCoA is a loss of public or private property of the state, of an administrative-territorial unit or of a public entity thereof, as a result of the commission of an illegal act by a person in charge of the administration of the patrimony. The damage must be fully recovered by covering the loss as well as the unrealized benefits. During the control / audit actions, the external public auditors estimate the value of the error / deviation found, the extent of the damage being determined by the management of the verified entity, according to the provisions of art. 33 par. (3) of the law of RCoA.

According ROCSA-RCoA, the professional judgment that should be apply is defined as the application by external public auditors of training, knowledge and experience in the context of the audit in order to make informed decisions about the choice of procedure appropriate to the conditions under which the audit engagement is carried out; Subsequently, on 30.06.2017 this ROCSA-RCoA was amended by the Plenum of the Court of Accounts of Romania no. 205/2017, which improves from the perspective of the control body: i) by developing the concrete way of establishing the causal link between the deviation and the responsible person, including internal control; ii) by redefining the damage with cancellation/annulment of the mention regarding the quality of the person in charge of patrimony management. The both changes extends the area of responsibility to the any person, regardless of its quality and to the causal link between the assessment of internal control (including internal audit) and the deviations found during the external public audit of RCoA. All of these above are important to study and analyse a case where the solution can arise precisely by application

of the principle. The comparative scheme for the application of the Romanian public internal audit law in the context of the establishment or non-constitution of the internal public audit department, under the motivation of economic activity, from the perspective of economic content prevalence over the legal form is as follows.

Figure 1: Comparative scheme under application of substance over form principle - the law of internal audit in the conditions of establishing and non-establishing the operative internal audit department

Romanian Internal Audit Law no. 672/2002 rep.2011 = The overall objective of public internal audit in public entities is to improve their management and can be achieved mainly by: a) Reasonable Assurance activities which are objective examinations of the evidence, conducted in order to provide the public entities with an independent evaluation of the risk management, control and governance processes; b) Counseling/Advisory activities designed to add value and improve the processes of governance in public entities, without the internal auditor assuming managerial responsibilities. **The scope** of public internal audit covers all the activities carried out within the public entities for the fulfillment of their objectives, including the evaluation of the management control system. **Art 2** In the meaning of this law, the terms and expressions below are defined as follows:

a) Internal public audit = independent and objective functional activity for reasonable assurance and counseling, designed to add value and improve the activities of the public entity; helps the public entity to meet its goals, through a systematic and methodical approach, evaluates and improves the efficiency and effectiveness of risk management, control and governance processes;

f) Internal public audit department = Generic notion on the type of basic functional structure of public internal audit which, depending on the volume and complexity of the activities and the associated risks from the entity, it can be: general direction, direction, service, office or department with at least 2 internal auditors, full time employees;

Art 11 Internal public audit department should be organized like this:

a) The manager of the public institution or, in the case of other public entities, *the collective management body has the obligation to ensure the organizational and functional framework necessary for the development of the public internal audit activity.*

c) To local public entities that did not constitute their own department, or have not entered in cooperation for this activity, *this can be provided by internal auditors, certified individuals, on the basis of service contracts, conformable/according to the present law (repealed article by Governance Ordinance no. 26, June 2012)....*

f) The head manager of the subordinate public entity, under the coordination or under the authority of another public entity establishes and maintains a functional department of the PIA, with the consent of the hierarchically superior public entity; if this agreement is not given, the entity's audit is performed by the department of the entity that has decided it.

Art 23 Is a contravention and it is sanctioned with a fine from 3000 lei to 5000 lei the following facts:

a) Violation of the obligation to ensure the organizational and functional framework necessary for the development of the PIA activity, in accordance with Article 11 lit a); **WE OBSERVE TWO CONTRADICTIONARY PROVISIONS: the functioning of internal audit remain compulsory, so the related expenses are mandatory even the art. 11 lit c was repealed** e by GO no. 26, June 2012).

Certain provisions of *Regulation on the organization and conduct of specific activities of the Romanian Court of Accounts (ROCSA-RCoA)* expressly indicate the objective working method of control bodies and how to compile the report:

Paragraph 70. External public auditors analyze the data and information gathered by using the analytical procedures (quantitative and qualitative), namely: a) benchmarking; b) analyzing the level of accomplishment of the purpose, objectives and attributions stipulated in the normative acts for setting up and organizing the activity of the controlled entity; c) Cost-effectiveness analysis ...

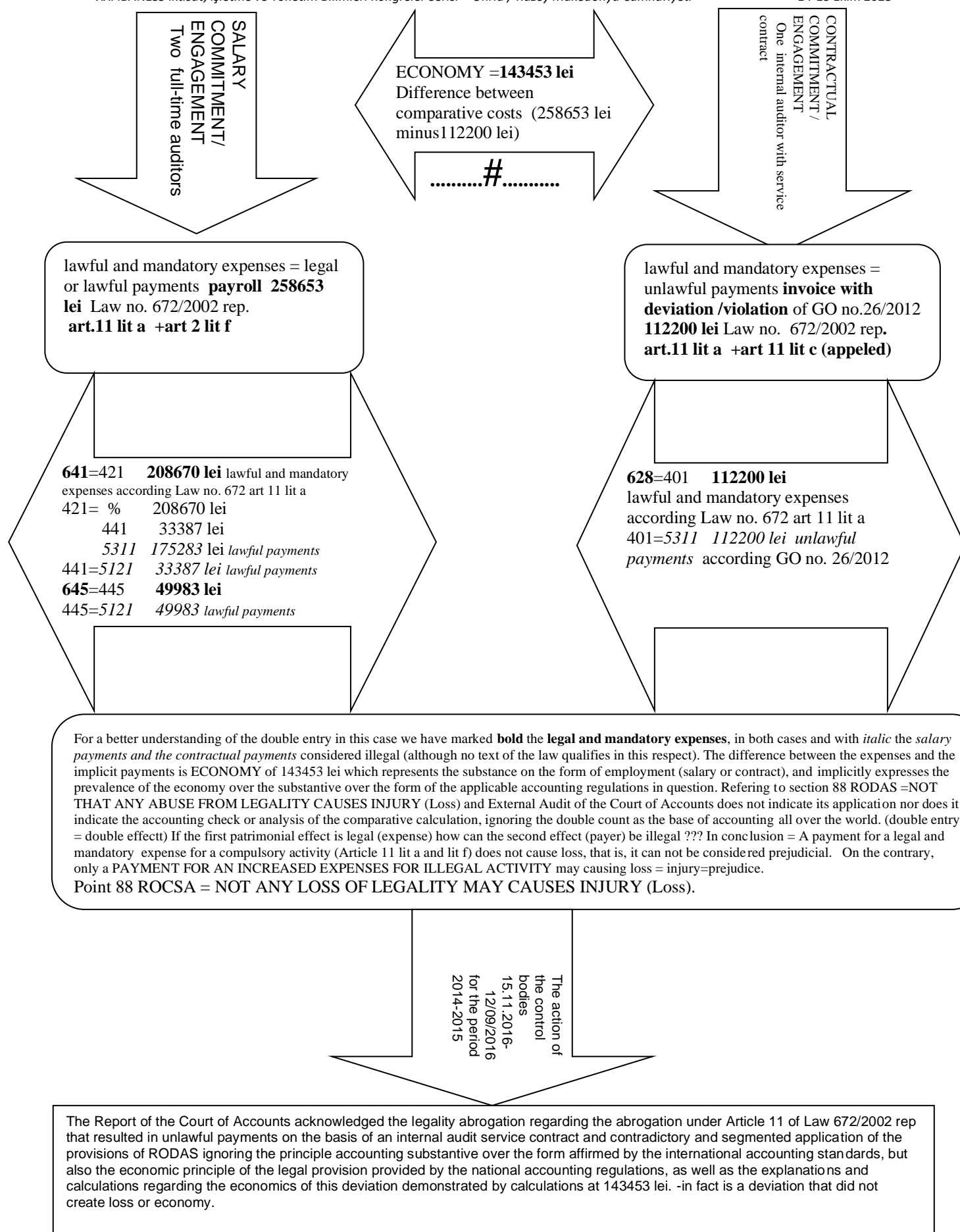
Paragraph 88. In the event of errors / deviations from the legality and regularity that have caused or not caused damage, facts for which there are indications that they have been committed in violation of criminal law or instances of non-compliance with the principles of economy, efficiency and effectiveness, they will be clearly and concisely exposed in the control report and will be supported by relevant evidence.

The *legality* defined by ROCSA-RCoA is the characteristic of an operation to comply with all legal provisions applicable to it and in force at the date of its execution

The *economy* defined by ROCSA-RCoA is a characteristic attributed to the situation in which the cost of resources allocated to achieve the expected results of an activity is minimized while maintaining the appropriate quality of these results;

The *damage* defined by ROCSA-RCoA is a loss of public or private property of the state, of an administrative-territorial unit or of a public entity thereof, as a result of the commission of an illegal act by a person in charge of the administration of the patrimony. The damage must be fully recovered by covering the loss as well as the unrealized benefits. During the control / audit actions, the external public auditors estimate the value of the error / deviation found, the extent of the damage being determined by the management of the verified entity, according to the provisions of art. 33 par. (3) of the law of RCoA.

According to ROCSA-RCoA, the *professional judgment* that should be applied is defined as the application by external public auditors of training, knowledge and experience in the context of the audit in order to make informed decisions about the choice of procedure appropriate to the conditions under which the audit engagement is carried out;



As a third interim conclusion, the synopsis of case study is about of Salary commitment/engagement versus Contractual engagement. According accounting judgments' only, a legal or lawful and mandatory expense can generate only legal or lawful payments.

That is given by *double-entry* accounting technique and on the other hand, so called unlawful payments generate economy in the amount of 143543 lei. Finally, all is about what prevails: lawful and mandatory expenses or unlawful payments? Obviously, prevails lawful and mandatory expenses as a major component of profit and loss account. So, there is no prejudice because there are no unlawful expenses, even there are unlawful payments caused by a contractual engagement instead wages or salary engagement with an internal auditor. Dascalu (2016), notice that mandatory requirements for the periodic exercise of internal audit imply that the internal audit department is adequately sized to provide the necessary resources for this activity. Unfortunately, we can exemplify many others cases of inadequate application of this principle by the law itself. For instance, financial auditors candidates are accepted to exams by Chamber of Romanian Financial Auditors if they meet certain conditions according art. 8 (2) of Romanian Audit Law no.133/2002: *they are licensed by a faculty with an economic profile and have experience in the financial-accounting field*. So, is considered by law to be edifying the economic profile of faculty in a technical university, not only economic studies, or have the capacity of an accountant expert, respectively an authorized accountant with economical higher education. We can observe an asymmetry between the first part and the second part of wording. Such a hesitant wording *licensed by a faculty of economics* brings the risk of being accepted even engineering or medicine higher education licensed. That could be interpreted as the prevalence of form over substance not *substance over form - profile* means only appearance, shape, form not substance.

5. Conclusions

An assertion is a confident and forceful statement of fact or belief, but accounting assertion substance over form in a finance lease (IAS 17) and in the audit field is an instrument to recognize in the income statement, a finance charge (expense) accounting by lessees and a finance income (revenue) accounting by lessors. The accounting assertion substance over form had lost its genuine sense given by the IASB in IAS. RAS by Order 1802/2014, had removed sense of the principle from over form in equal to the form, even though is affirmed in terms of economic nature and as an instrument for revenue recognition, respectively the expenses in the profit and loss account. This is an effective change of specific regulations, beyond a change in accounting principles and consistency to facilitate comparison. Including in internal audit field, in the accounting changes the same accounting policies ordinarily should be followed consistently, to facilitate comparison. Accounting changes include changes in principle (policies according IFRSs) and estimates. US GAAP does not define accounting principles.

The synopsis of case study is about of salary commitment or wages engagement versus external contract engagement. According accounting judgments' only, a legal or lawful and mandatory expense can generate only legal or lawful payments. That is given by double -entry accounting technique. On the other hand, so called unlawful payments generate economy in the amount of 143543 lei. Finally, all is about what prevails: lawful and mandatory expenses or unlawful payments? Obviously, prevails lawful and mandatory expenses as a major component of profit and loss account. So, there is no prejudice because there are no unlawful expenses, even there are unlawful payments caused by a contractual engagement instead wages or salary engagement with an internal auditor. Moreover, the economy generated reflects the *value for money* feature attached on cost minimizing of resources spent for achievement of estimated results with maintenance of results quality (Romanian Court of Accounts (ROCSA-RCoA, 2015).

No explanations, government audits appreciate that only the form of employment prevails and not the outcome of the engagement through its positive patrimonial effects. The results of research relieve lack of convergence between accounting regulations and practice and on the other hand, between regulations and practice of government audits. This situation seems to be due to insufficient or inadequate training in the immediate good practice. In the economic reforms process were certain inconsistencies in professional field: (i) lack of collaboration between different professional bodies; (ii) lack of synchronization in the parallel stages of professional reforms; (iii) weak involvement of academics in accountancy reforms. All this led to a non-homogenous practice in application of the new conceptual delimitations. The negative effects are patrimonial but also socio-human and professional. Paradoxically, they seem cannot be removed and solved by judicial endeavours for the same reasons: insufficient and inadequate training in immediate practice in legal and judicial field.

The conclusion is that accounting principle substance over form should be applied as at least a good practice, even as an assertion, due the importance of its patrimonial effects. That would become a veritable expression of due professional care, a very important element of professional behaviour. From this perspective, we can redefine our paper as: *Prevalence of economic background over legal form of engagements. Substance over form – assertion, challenge or solution in Romanian accounting reform?*

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Türkiye ve İran Ayçiçeği İthalat Talep Fonksiyonunun Ekonometrik Tahmini ve Karşılaştırılması

Elmira AKSÜT¹

Prof.Dr. Canan ABAY²

¹ Ege Üniversitesi, Fen Bilimleri Enstitüsü, Tarım Ekonomisi Anabilim Dalı, l.ahmadvash@gmail.com,

ORCID: 0000-0001-6473-831X

² Ege Üniversitesi, Fen Bilimleri Enstitüsü, Tarım Ekonomisi Anabilim Dalı, canan.abay@ege.edu.tr,

ORCID: 0000-0003-3603-3130

Özet: Bu çalışma, Türkiye ve İran'da artan talep nedeniyle tarımsal ithalatı açısından önemli olan ayçiçeği ithalat talep fonksiyonlarını analiz ederek, bu ülkelerde ayçiçeği ithalatını etkileyen faktörlerin kısa ve uzun vadeli etkilerini değerlendirmeyi amaçlamaktadır. Her iki ülke ayçiçeği üretimi açısından uygun koşullara sahip olmasına rağmen ayçiçeği ithalat değeri 2001-2021 yılları arasında yaklaşık olarak Türkiye'de 4 kat artarken İran'da 408 kat artmıştır. Ayçiçeği ithalat talep fonksiyonu tahmininde dağıtılmış otoregresif modele dayanan sınır testi yaklaşımı olan ARDL (Autoregressive Distributed Lag) modeli ve 2001-2021 yılları arasındaki dönem için yıllık veriler kullanılmıştır. Modelde, ayçiçeği ithalat miktarı bağımlı değişken, Gayri Safi Yurtiçi Hasıla, döviz kuru ve göreceli fiyatlar ise açıklayıcı değişkenler olarak yer almıştır. Araştırma sonuçlarına göre, İran'ın ayçiçeği ithalatında gelir esnekliğinin oldukça yüksek olduğu ve gelir değişikliklerinin bu ithalatı önemli ölçüde etkilediği belirlenmiştir. Ayrıca, döviz kuru ve göreceli fiyatların da ayçiçeği ithalatını istatistiksel olarak önemli düzeyde etkilediği belirlenmiştir. Türkiye için gelir artışının ayçiçeği ithalatını %0.54 artırması tahmin edilirken, döviz kuru artışının %0.26 azaltması öngörülmektedir. İran için ise gelir artışının ayçiçeği ithalatını %15.54 artırması, döviz kuru artışının %3.04 azaltması ve göreceli fiyat artışının ise %1.39 azaltması tahmin edilmiştir. Sonuç olarak, İran'ın ayçiçeği ithalatı üzerindeki gelir etkisi Türkiye'ye göre daha yüksektir ve İran'da yaşanacak gelir değişikliklerinin ithalat talebine daha büyük bir etki yapması beklenmektedir. Ayrıca, Türkiye'de ayçiçeği ithalatının kısa vadeli şoklara karşı daha hızlı bir şekilde (%51, yaklaşık 2 yıl) dengeye geldiği gözlemlenmiştir. İran'da ise dengeye ulaşma sürecinin daha uzun olduğu (%28, yaklaşık 3.5 yıl) tespit edilmiştir.

Anahtar Kelimeler: Dış ticaret, İran, Türkiye, Ayçiçeği, ARDL Model

1. GİRİŞ

Yağlı tohumlar dünya tarımsal üretiminin önemli bir parçasını oluşturmaktadır. FAO verilerine göre, 2000-2021 yılları arasında dünya yağlı tohum ekim alanı ortalama yaklaşık %46 oranında ve dünya yağlı tohum üretim miktarı ise yaklaşık %107.7 oranında artış gerçekleşmiştir. Bu artışta, nüfus ve gelir artışı gibi nedenlerle artan gıda talebi, biyoyakıt ve sanayi talepleri gibi faktörler etkili olmuştur. Ayçiçeği, soya ve kolza dünya yağlı tohum ekim alanındaki en büyük artışı kaydeden ürünler olmuştur. Çin, ABD, Brezilya, Hindistan ve Arjantin ise dünya yağlı tohum üretiminde önde gelen ülkelerdir ve toplam üretimin yaklaşık %60'ını karşılamaktadır (FAO, 2023). Dünya yağlı tohum ithalat miktarı 2000-2021 yılları arasında %200 artarken, ithalat değeri %688 artmıştır. Dünya bitkisel yağlı tohumlar ithalatında ilk sırada yer alan ülkeler, Çin, Hindistan, AB (Avrupa Birliği), Mısır ve ABD dir. İhracatda ise, AB, ABD, Arjantin, Brezilya ve Endonezya yer almaktadır (FAO, 2022).

Ayçiçeği bitkisi, hem yağlı tohumlarından elde edilen yağ hem de çeşitli endüstriyel kullanımlarıyla ticari değere sahiptir. Ayçiçeği yağı, yemek pişirme, margarin üretimi, sabun yapımı ve biyodizel üretimi gibi gıda endüstrisi ve enerji sektörlerinde yaygın olarak kullanılmaktadır. Ayrıca, ayçiçeği sapları ve lifleri, kağıt ve tekstil endüstrisinde ham madde olarak değerlendirilmektedir. Bitkinin çiçekleri ise arılar için önemli bir nektar kaynağıdır ve polinasyonun teşvik edilmesine katkı sağlar. Bu nedenle, hem ekonomik hem de ekolojik açıdan ayçiçeği tarımı önemlidir (Çakmakçı et al., 2021; Gürel, 2019). FAO'nun 2022 verilerine göre, 2000-2021 yılları arasında ortalama dünya ayçiçeği ekim alanı yaklaşık %38 ve üretim miktarı ise yaklaşık %117 artmıştır. Dünya ayçiçeği ekim alanı ve üretim miktarına göre önemli ülkelerin ekim alanı incelendiğinde dünyada ilk sırada Rusya gelmektedir. 2021 yılında 16 milyon ton ayçiçeği üretimi olan Ukrayna'yı, 15 milyon ton üretim miktarı ile Rusya takip etmektedir. Ukrayna ve Rusya'dan sonra Romanya, Arjantin ve Çin ayçiçeği üreticisi ülkelerin başında gelmektedir.

Dünya ayçiçeği ithalat miktarı 2000-2021 yılları arasında ortalama ayçiçeği ithalat miktarı yaklaşık %48 artarken, ithalat değeri %438 artmıştır. Dünya ayçiçeği ithalat verileri ülkeler bazında incelendiğinde, ilk sırada Türkiye ayçiçeği ithalat miktarı (13.8%) ve ithalat değeri (10.6%) yer almaktadır. Hollanda (8.3%), Bulgaristan (7.6%), ve İspanya (5.7%) ayçiçeği ithalat değerinde ilk sıralarda yer alan diğer ülkelerdendir (FAO, 2022).

FAO'nun 2021 yılı verilerine göre, Türkiye, dünya yağlı tohum üretiminde ilk 10 ülke arasında yer almaktadır. Türkiye, yağlı tohumlu bitkilerin üretiminde güçlü bir konuma sahip olmasına rağmen, ayçiçeği ürününde ithalatçı bir ülke olarak öne çıkmaktadır. 2000-2021 yılları arasındaki verilere bakıldığında, Türkiye'nin ayçiçeği ekim alanında %50'lik bir artış kaydedilmiştir. Aynı dönemde ayçiçeği üretimi miktarı ise %180 oranında artarak dikkat çekici bir yükseliş göstermiştir. Ancak, ithalat tarafında da önemli bir değişim yaşanmıştır. 2000-2021 yılları arasında Türkiye'nin ayçiçeği ithalat miktarı yaklaşık olarak %40 artış göstermiş ve ithalat değerinde ise %425'lik büyük bir artış yaşanmıştır(FAO, 2022).

İran, petrol üreticisi olmasına rağmen yağlı tohumlu bitkiler, ekonomik ve tarımsal açıdan önemli bir rol oynamaktadır. Özellikle ayçiçeği, susam, soya, kolza, keten tohumu ve mısır gibi bitkiler İran'da yetiştirilmektedir ve bu bitkiler ülkenin tarım sektörüne ve beslenme ihtiyaçlarına katkı sağlamaktadır (Mousavi, ve ark 2015). 2000-2021 yılları arasında İran'da ayçiçeği ekim alanı %20, ayçiçeği üretimi ise %25 azalmıştır. İran'ın ayçiçeği ithalat değeri ise 408 kat artmıştır(FAO, 2022).

Türkiye ve İran, Orta Doğu'nun büyük nüfusa ve güçlü ekonomilere sahip önemli ülkelerindendir. Bu iki ülke için yağlı tohumlar önemli bir ithalat pazarı oluşturmaktadır. Ancak, yağlı tohum üretimi, artan nüfus ve hızla büyüyen sanayi talepleri karşısında yetersiz kalmaktadır. Türkiye ve İran'ın iklim ve toprak koşulları da yağlı tohumlu bitkilerin çeşitliliğini sınırlamaktadır(Kılıç ve Beycioğlu, 2019). Bu nedenle, her iki ülke de yağlı tohum ve ham yağ ithalatı artmaktadır(Kadakoğlu, 2019). İran ve Türkiye'nin ayçiçeği ithalatındaki artışın arkasındaki faktörler arasında hızla büyüyen nüfus ve sanayi talepleri yer almaktadır (Doğan ve ark., 2020; İzci ve ark., 2020; TÜİK, 2021). Bu bağlamda, Türkiye ve İran'ın ayçiçeği ithalatını etkileyen faktörlerin daha ayrıntılı bir şekilde araştırılması, bu iki ülkenin ekonomik koşulları ve küresel ticaretin gelişimi açısından büyük bir öneme sahiptir(Arioğlu, 2016; Aydın ve Çatuk, 2018; Küçük ve ark., 2021). Bu çalışma, Türkiye ve İran'ın ayçiçeği ithalatını belirleyen faktörleri ve bu faktörlerin ithalat üzerindeki etkilerini incelemeyi amaçlamaktadır. Çalışmada ARDL (AutoRegressive Distributed Lag) yöntemi kullanılarak gerçekleştirilen veri analizi, Türkiye ve İran'ın ayçiçeği ithalatını etkileyen faktörleri ve bu faktörlerin ithalat üzerindeki etkilerini doğru ve güvenilir bir şekilde incelemeyi amaçlamaktadır. Literatür incelemesi, Türkiye ve İran'ın ayçiçeği ithalatını etkileyen faktörleri ve bu faktörlerin etkilerini karşılaştıran geniş kapsamlı bir çalışmanın mevcut olmadığını göstermektedir. Bu çalışma, bu eksikliği gidererek literatüre önemli bir katkı sunabilir. Sonuçlar, bu iki ülkenin ayçiçeği dış ticaret politikalarını daha iyi anlamamıza ve daha etkili ticaret stratejileri oluşturulmasına yardımcı olabilir.

1.2 Araştırmanın Amacı

Çalışmanın ana amacı, Türkiye ve İran'ın ayçiçeği tohumlar ithalatını belirleyen faktörlerin tahmin edilmesi ve bu faktörlerdeki değişimin ithalat üzerindeki kısa ve uzun dönem etkilerinin ortaya konulmasıdır.

Çalışmanın ana amacına bağlı diğer amaçlar ise şunlardır;

- Türkiye için ulusal gelir, döviz kuru ve göreceli fiyatların ayçiçeği ithal talep fonksiyonu üzerindeki kısa ve uzun dönem etkilerinin belirlenmesi,
- İran için ulusal gelir, döviz kuru ve göreceli ithal fiyatların ayçiçeği ithal talep fonksiyonu üzerindeki kısa ve uzun dönem etkilerinin belirlenmesi,
- Her iki ülkenin analiz sonuçlarına bağlı olarak ayçiçeği için politika önerilerinin geliştirilmesidir.

Dış ticaret teorisi, uluslararası mal ve hizmet ticaretinin işleyişini ve ticaretin belirleyicilerini incelemeyi amaçlar. Bu teorik yapı içerisinde, ithalat talebi, ulusal gelir, döviz kuru ve göreceli fiyatlar gibi faktörlerin etkileşimiyle oluşur. Ulusal gelirdeki değişimler, tüketici harcamalarındaki dalgalanmalar aracılığıyla ithalat talebini şekillendirebilir. Bu bağlamda, ulusal gelirdeki artışlar, genel tüketim gücünün yükselmesine paralel olarak ithalat talebinin artmasına neden olabilir. Aynı şekilde, ulusal gelirdeki düşüşler, tüketici harcamalarını sınırlayarak ithalat talebinin azalmasına yol açabilir. Döviz kuru değişiklikleri, ithal edilen malların yerel para birimi cinsinden fiyatlarını etkiler ve böylelikle ithalat talebini etkileyebilir. Döviz kuru, dış ticaretin temel bir belirleyicisi olarak kabul edilir ve döviz kuru değişikliklerinin ithalat talebine etkisi dış ticaret teorisinin merkezi konularından birini oluşturur. Değişen döviz kuru, ithal edilen malların yerel para birimi cinsinden fiyatlarını etkiler. Eğer yerel para birimi değer kaybederse, ithal edilen malların fiyatları yerel para birimi cinsinden yükselir ve bu da ithalat maliyetini artırır. Bu durum, ithalat talebinin düşmesine neden olabilir. Tersine, yerel para birimi değer kazanırsa, ithal edilen malların fiyatları düşer ve bu durum ithalat talebinin artmasına yol açabilir. Göreceli fiyat değişiklikleri, ithal ürünlerin rekabet düzeyini etkiler ve böylece ithalat talebinde

değişikliklere neden olabilir. Dış ticaret teorisine göre, ürün fiyatlarının göreceli düzeyleri, uluslararası ticareti etkileyebilir. Özellikle yağlı tohumlar gibi ithal edilen malların fiyatlarının diğer ürünlere kıyasla düşük olması, bu malların rekabet düzeyini artırabilir ve böylece ithalat talebinde bir artışa yol açabilir. Yani, düşük fiyatlı ithal ürünler, yerel üreticilere kıyasla daha çekici hale gelir ve bu durum ithalat talebinin yükselmesine neden olabilir (Krugman ve ark., 2014; Caves ve ark., 2007).

Bu teorik çerçeve temelinde çalışmanın amacına yönelik geliştirilen hipotezler şunlardır;

- Ulusal gelirdeki değişimler ayçiçeği ithalat talebini etkilemektedir.
- Döviz kurundaki değişimler ayçiçeği ithalat talebini etkilemektedir.
- Görelî fiyatlardaki değişim ayçiçeği ithalat talebini etkilemektedir.

2. MATERYAL VE YÖNTEM

2.1. Materyal

Çalışmanın ana materyalini, TradeMap adlı web tabanlı bir hizmet sağlayıcısından temin edilen ikincil veriler oluşturmaktadır. TradeMap, küresel düzeyde ticaret istatistiklerini sunan bir platformdur. Bu çalışmada, Türkiye ve İran'ın ayçiçeği ithalat talep fonksiyonunun tahmin edilmesi amacıyla 2001-2021 yılları arasındaki döneme ait yıllık zaman serisi verileri kullanılmıştır.

Yıllık verilerin tercih edilmesinin önemli nedenleri vardır. İlk olarak, yağlı tohum ithalat talepleri genellikle uzun vadeli faktörlere dayanarak değişiklik gösterir. Dolayısıyla, yıllık veriler, bu uzun vadeli faktörlerle talep fonksiyonunu ilişkilendirmek için daha uygun bir temel sağlamaktadır. İkinci olarak, yıllık veriler, veri toplama ve kaydetme sürecindeki hataları ve bozulmaları azaltmaktadır. Aylık veya günlük verilerdeki dalgalanmalar ve mevsimsel etkiler, tahmin modellerini karmaşıktırabilir ve sonuçları yanıltıcı hale getirebilir. Yıllık veriler, bu tür etkilerin düzeltilmesine yardımcı olur ve daha istikrarlı bir analiz sunar (Hassouneh ve Serra, 2017; Chang ve ark., 2011; Tuan ve Monarch, 2002). Sonuç olarak, yıllık verilerin kullanılması, ARDL yöntemiyle ayçiçeği ithalat talep fonksiyonunun tahmin edilmesi, uzun vadeli trendleri, yapısal değişiklikleri ve gelecekteki talep değişikliklerini daha güvenilir bir şekilde tahmin etme konusunda araştırmaya yardımcı olmaktadır. Çalışmada 2001-2021 yılları arası dönemin ele alınmasındaki başlıca sebep bu dönemdeki verilere sorunsuz bir şekilde ulaşılabilmesi, analizde kesintisiz ve güvenilir veri setinin kullanılmasının sağlanmış olmasıdır. Bu çalışmada, döviz kuru değişimi, gelir düzeyi ve görelî fiyatlar, Türkiye ve İran'ın ayçiçeği ithalatının temel belirleyicileri olarak seçilmiştir çünkü bu faktörler, ekonomik koşulların yanı sıra küresel ticaretin gelişimini de etkileyen kritik faktörlerdir.

Döviz kuru değişimi, ithal edilen ürünlerin fiyatlarını etkileyen önemli bir faktördür. İthalatçılar, yabancı para birimi cinsinden ödeme yaparken yerel para biriminin değerine bağlıdırlar. Döviz kuru dalgalanmaları, ithalatçıların ödeme gücünü etkileyebilir ve dolayısıyla ithal edilen ürünlerin fiyatlarını doğrudan etkileyebilir. Bu nedenle, Türkiye ve İran gibi ülkelerin yağlı tohum ithalatı, döviz kuru dalgalanmalarından etkilenebilir. Gelir düzeyi ise, tüketicilerin talebini belirleyen önemli bir faktördür. Gelir seviyesi arttıkça, tüketicilerin yağlı tohumlara olan talebi de artar. Bu da ithalatçıların ithal ettikleri ürünlerin fiyatlarını yükseltebilir. Türkiye ve İran'ın ekonomik durumlarına bağlı olarak, yağlı tohum ithalatına olan talep değişebilir.

Görelî fiyatlar da yağlı tohum ithalatını etkileyen önemli bir faktördür. İthal edilen yağlı tohumların fiyatları, diğer ülkelerin fiyatlarına göre yüksekse, yerel üreticilerin talebi karşılayamaması durumunda ithalat artabilir. Ayrıca, yerel yağlı tohum üretiminin maliyetleri ile ithal edilen yağlı tohumların fiyatları arasındaki farklar da görelî fiyatları etkileyebilir. Bu faktörlerin tümü, yağlı tohum ithalatının kısa ve uzun dönemdeki etkilerini belirlemek açısından önemli bir rol oynamaktadır. Bu araştırmada kullanılan ARDL analizi, dış ticaret ile ilgili çalışmalarda önemli bir yöntem olarak kullanılmıştır (Bahmani-Oskooee ve Sallahuddin, 2020; Cui ve ark., 2017; Ghorbani ve Mosavi., 2013; Karabulut, 2018). Çizelge 1'de, çalışmada kullanılan değişkenlerin açıklamaları ve veri kaynağı verilmiştir:

Çizelge 1: Çalışmada Kullanılan Değişkenler

Değişkenin Adı	Çalışmadaki Kısa Adı	Dönemi	Kaynağı
Gayri Safi Yurt İçi Hasıla	Y	2001-2021	World Bank
Döviz Kuru Oranı	EX	2001-2021	World Bank

Ayçiçeği İthalatı	TAİ	2001-2021	Trade Map
Görelî Fiyatlar	RP	2001-2021	Trade Map

Bu değişkenler, ARDL yöntemiyle yapılan tahminlerde kullanılarak geçmiş eğilimlere dayalı olarak Türkiye ve İran'ın ayçiçeği ithalat taleplerinin analizini sağlayacak ve gelecekteki talep değişikliklerini tahmin etmeye yardımcı olacaktır.

2.2. Yöntem

Bu çalışmada, Türkiye ve İran için ayçiçeği ithalat talep fonksiyonu tahmin edilirken, dağıtılmış otoregresif modele dayanan sınır testi yaklaşımı olan ARDL (Autoregressive Distributed Lag) yöntemi kullanılmıştır. Bu yöntem, son yıllarda eş bütünleşme testi olarak geliştirilmiştir ve uzun vadeli ilişkileri analiz etmek için yaygın olarak kullanılmaktadır (Pesaran, ve ark., 2001). Çalışmanın başlangıcında, verilerin zaman serisi özelliklerini test etmek için ADF (Augmented Dickey-Fuller), PP (Phillips-Perron) ve KPSS (Kwiatkowski-Phillips-Schmidt-Shin) birim kök analizleri uygulanmıştır. Bu analizler, veri serilerinin durağanlık özelliklerini ve zaman içindeki durağanlık durumunu değerlendirmek için kullanılmıştır. Analizin ikinci bölümünde, ARDL yöntemleri kullanılarak uzun süreli ilişkinin varlığı belirlenmiştir. Bu yöntem, değişkenler arasındaki uzun vadeli ilişkiyi ortaya çıkarmak için otoregresif ve dağıtılmış gecikme terimlerini içeren bir model kullanmaktadır. Bu çalışmada ayrıca, kısa dönem tahminleri için Hata Düzeltme Modeli (HDM) oluşturulmuştur. Bu yöntem, kısa vadeli etkileşimleri ve dengesizlikleri düzeltmek için hızlı bir düzeltme sürecini sağlamaktadır. HDM, uzun vadeli ilişkileri ve etkileri göz önünde bulundurarak kısa vadeli tahminlerin doğruluğunu artırır ve analiz sonuçlarının istikrarını sağlamaktadır.

2.3. Türkiye ve İran Ayçiçeği İthalat Talep Modeli

Çalışmanın bu bölümünde, Türkiye ve İran'ın 2001-2021 dönemi için yıllık olarak tahmin edilen ayçiçeği ithalat fonksiyonu incelenmiştir. İthalat miktarı, bağımlı değişken olarak ele alınmış olup, açıklayıcı değişkenler olarak GSYİH, döviz kuru ve görelî fiyatlar kullanılmıştır.

TAİ (Dolar cinsinden ayçiçeği ithalat değeri): ayçiçeği ithalat değerini reelileştirmek için ayçiçeği fiyat endeksi kullanılmıştır (Trade Map, 2021).

GSYİH (Gayri Safi Yurt İçi Hasıla) değişkeni: 2010 yılı baz alınarak deflatör ile enflasyondan arındırılarak hesaplanmıştır. Bu yöntem sayesinde, GSYİH'nın fiyat artışlarından etkilenmeden, ekonominin gerçek büyümesi ve performansı daha doğru bir şekilde ölçülebilmektedir. Bu nedenle, enflasyonun GSYİH üzerindeki etkisi ortadan kaldırılarak daha güvenilir ve karşılaştırılabilir bir GSYİH verisi elde edilir (World Bank, 2021).

Görelî fiyatlar: (Ayçiçeği ithalat fiyat endeksi/ Yurt içi ayçiçeği fiyat endeksi). Bu oran, ithalat fiyatlarının yurt içi fiyatlar karşısındaki göreceli durumunu göstermektedir. Eğer görelî fiyatlar 1'den büyük ise, ithalat fiyatları yerel fiyatlara kıyasla yüksektir ve bu durumda ithalat daha pahalı olabilmektedir. Tam tersi olarak, görelî fiyatlar 1'den küçük ise, ithalat fiyatları yerel fiyatlara kıyasla düşüktür ve ithalat daha cazip hale gelebilmektedir (Trade Map, 2021).

Tüm değişkenlerin logaritmik olarak kullanıldığı bir model oluşturulmuştur. Veriler, TRADE MAP, TÜİK ve World Bank'tan elde edilmiş olup, analizler Eviews 11 paket programıyla gerçekleştirilmiştir. İlk aşamada ADF, PP ve KPSS testleriyle verilerin özellikleri incelenmiştir. Bu testler, zaman serisi verilerinin durağanlık, birim kök varlığı, trend ve otokorelasyon gibi önemli özelliklerini incelemek için kullanılan istatistiksel yöntemlerdir. Bu özellikler, zaman serisi analizi ve tahminlemesi için uygun modellerin seçilmesi ve verilerin doğru şekilde yorumlanması açısından önem arz etmektedir. İkinci aşamada ise uzun dönemli ilişkileri açıklamak için ARDL (Autoregressive Distributed Lag) ve kısa dönem içinde hata düzeltme modeli kullanılmıştır. Ayçiçeği ithalat talebi, reel milli gelir, döviz kuru oranı ve görelî fiyatlar arasında bir fonksiyon olarak ifade edilebilmektedir. Bu bağlamda, reel ayçiçeği ithalatı, döviz kuru oranı ve görelî fiyatlar değişkenleri arasında ters yönlü bir ilişki beklenmektedir. Aynı zamanda, reel milli gelirdeki artış ise ayçiçeği ithalatına olan talebi artırabilir, dolayısıyla reel milli gelir ile ayçiçeği ithalatı arasında pozitif bir ilişki beklenmektedir. Bu ilişkileri ifade etmek için aşağıdaki fonksiyon kullanılabilir:

$$\ln TAİ_t = \alpha + \beta_1 \ln Y_t + \beta_2 \ln EX_t + \beta_3 \ln RP_t + \mu_t$$

$\ln T A_{t-1}$ = ayçiçeği ithalatı (dolar cinsinden), $\ln Y_t$ = reel milli gelir, $\ln EX_t$ = döviz kuru oranını (dolar cinsinden), $\ln RP_t$ = göreceli fiyatlar, μ_t = hata terimini, f_1 = ithalat talebinin gelir esnekliği, f_2 = ithalat talebinin döviz kuru oranı esnekliği, ve f_3 = ithalat talebinin göreceli fiyat esnekliği, (Doğanlar ve ark.,2006).

3.BULGULAR

3.1. Türkiye Ayçiçeği İthalat Talep Fonksiyonu

Çizelge 2'de verilen bilgilere göre, Ayçiçeği'nin ARDL (1,0,0,1) modeli tahmin sonuçlarına göre, $\ln ayçiçeği(-1)$, katsayı 0.48 olarak bulunmuş ve t-istatistiği 3.67 (0.00) olarak hesaplanmıştır. Katsayının anlamlılığı %1 düzeyinde elde edilmiştir. $\ln Y$, katsayı 2.28 olarak bulunmuş ve t-istatistiği 3.90 (0.00) olarak hesaplanmıştır. Bu değişkenin katsayısı, gelir düzeyinin ayçiçeği ithalat talebi üzerinde pozitif bir etkiye sahip olduğunu göstermektedir. Katsayının anlamlılığı %1 düzeyinde elde edilmiştir. $\ln RP$, katsayı 1.35 olarak bulunmuş ve t-istatistiği 4.70 (0.00) olarak hesaplanmıştır. Katsayının anlamlılığı %1 düzeyinde elde edilmiştir. $\ln RP(-1)$, katsayı -1.11 olarak bulunmuş ve t-istatistiği -3.59 (0.00) olarak hesaplanmıştır. Bu değişkenin katsayısı, bir önceki dönemdeki göreceli fiyat oranının mevcut dönemdeki ayçiçeği ithalat talebini olumsuz yönde etkilediğini göstermektedir. Katsayı istatistiksel olarak %1 düzeyinde anlamlıdır. $\ln EX$, katsayı -0.13 olarak bulunmuş ve t-istatistiği -1.55 (0.14) olarak hesaplanmıştır. Bu değişkenin katsayısı, döviz kurlarının ayçiçeği ithalat talebi üzerinde negatif bir etkiye sahip olduğunu göstermektedir. Ancak, katsayı istatistiksel olarak anlamlı değildir. Modelin açıklama gücü olan R^2 değeri 0.74 olarak hesaplanmıştır. Bu, modelin kullanılan değişkenlerle ayçiçeği ithalat talebi varyasyonun %74'ünü açıkladığını gösterir. Yani, modelin verilere uyum sağladığı ve açıklama gücünün yüksek olduğu söylenebilir. Modelin uyum iyiliği olan R^2 değeri 0.68 olarak hesaplanmıştır. Bu değer, modelin ayçiçeği ithalat talebindeki değişiklikleri açıklamada başarılı olduğunu ve kullanılan değişkenlerin uyumlu bir şekilde bir araya getirildiğini göstermektedir. Jarque-Bera testi değeri 0.37 olarak hesaplanmıştır. Bu değer, modelin hata terimlerinin normal dağılım gösterdiğini ve istatistiksel olarak anlamlı olduğunu göstermektedir. Yani, modelin hatalarının istatistiksel olarak uygun olduğu söylenebilir. Sonuç olarak, ayçiçeği ARDL (1,0,0,1) modelinin tanısal test sonuçları, modelin verilere iyi uyum sağladığını ve istatistiksel olarak anlamlı olduğunu göstermektedir (Çizelge 2).

Çizelge 2: Türkiye Ayçiçeği ARDL (1,0,0,1) model tahmin sonuçları

Değişken	Katsayı	t-istatistiği	Olasılık (p)
$\ln ayçiçeği(-1)$	0.48	3.67	0.00
$\ln Y$	2.28	3.90	0.00
$\ln RP$	1.35	4.70	0.00
$\ln RP(-1)$	-1.11	-3.59	0.00
$\ln EX$	-0.13	-1.55	0.14
Tanısal testler	$R^2 = 0.74$	$R^2 = 0.68$	Jarque-Bera=0.37(0.82)

Çizelge 3'de Türkiye ayçiçeği modelinin güvenilirlik test sonuçları verilmiştir. Breusch-Pagan-Godfrey testi, F istatistiği 0.79 olarak hesaplanmış ve olasılık değeri 0.57 olarak elde edilmiştir. Elde edilen sonuçlara göre, modelin hata terimlerinde heteroskedastisite sorunu olmadığı söylenebilir. LM testi, F istatistiği 0.06 olarak hesaplanmış ve olasılık değeri 0.94 olarak elde edilmiştir. Sonuçlara göre, modelin hata terimlerinde otokorelasyon sorunu olmadığı söylenebilir. RESET testi, F istatistiği 1.61 olarak hesaplanmış ve olasılık değeri 0.12 olarak elde edilmiştir. Bu testin sonuçlarına göre, modelin belirlenmiş işlev formuna uygun olduğu söylenebilir. Bu güvenilirlik test sonuçlarına göre, ayçiçeği modeli hata terimlerinin heteroskedastisite, otokorelasyon ve belirlenmiş işlev formu gibi yaygın sorunlara sahip olmadığını göstermektedir. Bu da modelin güvenilir olduğunu ve istatistiksel olarak geçerli sonuçlar sağladığını gösterir (Çizelge 3).

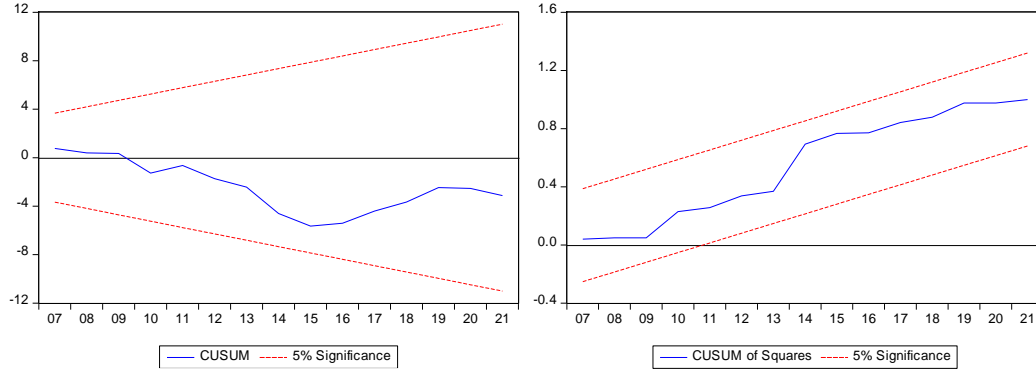
Çizelge 3: Türkiye Ayçiçeği Model Güvenilirlik Testleri

Güvenilirlik Testleri	F istatistiği	Olasılık (p)
Breusch-Pagan-Godfrey	0.79	0.57

LM	0.06	0.94
RESET	1.61	0.12

Şekil 1 incelendiğinde, Ardışık hata karelerinin kümülatif toplam testisonucunda modelin tahmin döneminde kararlı olduğu görülmektedir.

Şekil 1: Ardışık Hata Karelerinin Kümülatif Toplam Testleri.



Çalışma kapsamında kurulan hipotezler aşağıda yer almaktadır. Buna göre;

- H0: Toplam ayçiçeği ithalat talebi ile gelir, döviz kuru ve görel fiyatlar arasında eşbütünleşme yoktur.
- H1: Toplam ayçiçeği yağlı ithalat talebi ile gelir, döviz kuru ve görel fiyatlar arasında eşbütünleşme vardır.

Bu hipotezler doğrultusunda, sınır testi ile eşbütünleşme ilişkisinin varlığı test edilmiş ve sonuçlar çizelge 8.30'da verilmiştir. Test sonuçları incelendiğinde, F-test istatistiğinin (9.69) üst sınır kritik değerlerinden büyük olduğu için tüm önem seviyesinde seriler arasında eşbütünleşme ilişkisinin var olduğu görülmüştür Buna göre, seriler uzun dönemde birlikte hareket etmektedir (Çizelge 4).

Çizelge 4: Sınır Testi İle Eşbütünleşme İlişkisi Sonuçları

k	F-istatistiği	Alt Sınırlar I(0)				Üst Sınırlar I(1)			
		%1	%2.5	%5	%10	%1	%2.5	%5	%10
3	9.69	4.3	3.80	3.38	2.97	5.23	4.68	4.23	3.74

Çizelge 5'de verilen ayçiçeği modelinin uzun dönem katsayılarında, LY, katsayı 0.54 olarak bulunmuş ve T-değeri 62.81 (0.00) olarak hesaplanmıştır. Bu değişkenin katsayısı, gelir ile ayçiçeği ithalat talebi arasında pozitif bir ilişki olduğunu göstermektedir. LEX, katsayı -0.26 olarak bulunmuş ve T-değeri -1.80 (0.09) olarak hesaplanmıştır. Bu değişkenin katsayısı, döviz kurlarındaki değişikliklerin ayçiçeği ithalat talebi üzerinde negatif bir etkiye sahip olduğunu göstermektedir. LRP, katsayı 0.45 olarak bulunmuş ve T-değeri 0.96 (0.34) olarak hesaplanmıştır. Görel fiyatlar değişkeni beklentire uygun ve anlamlı bulunmamıştır.

Çizelge 5: Ayçiçeği Uzun Dönem Katsayıları

Değişken	Katsayı	T-değeri
LY	0.54***	62.81(0.00)
LEX	-0.26**	-1.80 (0.09)
LRP	0.45	0.96 (0.34)

*,** ve *** sırasıyla %10, %5 ve %1 anlamlılık düzeyinde anlamlı ifade etmektedir. p değeri; parantez içindeki olasılık değerini göstermektedir.

Türkiye ayçiçeği ithalat talebi için yapılan analiz sonuçlarına göre gelir esnekliği 0.54 olarak bulunmuştur. Gelir katsayısı istatistiksel olarak anlamlıdır. Gelirdeki %1'lik bir artışın ayçiçeği ithalat talebinde %0.54'lük bir artışa neden olacağı anlaşılmaktadır. Bu sonuç, Ayçiçeği yağlı tohumlar ithalatının gelire bağımlı olduğunu ve gelir artışının ithalat talebini pozitif yönde etkilediğini göstermektedir.. Döviz kuru ile ayçiçeği ithalat talebi arasında

ise negatif bir ilişki bulunmuştur. Analiz sonucuna göre döviz kurundaki %1'lik artış, ithalatla %0.26'lık bir azalmaya neden olmaktadır. Görelî fiyatlar değişkeninin katsayısı 0.45 olarak hesaplanmıştır. Ancak, bu katsayı istatistiksel olarak anlamlı değildir.

Çizelge 6'da verilen ayçiçeği modelinin kısa dönem eşbütünleşme ilişkisi katsayıları, ECTt-1 katsayısı -0.51 olarak bulunmuş ve t-değeri -3.20 (0.00) olarak hesaplanmıştır. Katsayı %1 önem düzeyinde istatistiksel olarak anlamlıdır. Hata düzeltme modeline dayanan kısa dönem teriminin katsayısının -0.51 olması, modeldeki değişkenler arasında kısa dönem eş bütünleşme ilişkisi olduğunu ve bu ilişkinin dengesizlikleri düzeltme yeteneği olduğunu göstermektedir. Ayrıca, negatif olması, değişkenlerin uzun vadeli dengeye hızlı bir şekilde dönme eğiliminde olduğunu işaret etmektedir. Türkiye ayçiçeği ithalat talebinin yaklaşık 2 yılda dengeye geleceği ifade edilebilir ($1/0.51=1.9$). Görelî fiyat katsayısı ise 1.35 olarak hesaplanmış ve t-değeri 6.05 (0.00) olarak hesaplanmıştır. Katsayı %1 önem düzeyinde istatistiksel olarak anlamlıdır. Bu değişkenin katsayısı, görelî fiyatlardaki değişikliklerin kısa dönemde ayçiçeği ithalat talebi üzerinde pozitif bir etkiye sahip olduğunu göstermektedir.

Çizelge 6: Türkiye Ayçiçeği İçin Kısa Dönem Hata Düzeltme Modeli

Değişken	Katsayı	T-değeri
ECTt-1	-0.51***	-3.20 (0.00)
D(LRP)	1.35***	6.05 (0.00)

*, ** ve *** sırasıyla %10, %5 ve %1 anlamlılık düzeyinde anlamlı ifade etmektedir. p değeri; olasılık değerini (0.05) göstermektedir.

3.2. İran Ayçiçeği İthalat Talep Fonksiyonu

Ayçiçeği ürününe ilişkin ARDL modeli uygulanmış ve model tahmin sonuçları Çizelge 7'de verilmiştir. Modele, bağımlı değişkenin 2 gecikmesi, bağımsız değişkenlerin ise 0 ve 1 gecikmesi dahil edilmiştir. İran ayçiçek ARDL (1,1,1,0) model tahmin sonuçlarına göre, lnayçiçeği (-1), lnY (-1), lnRP, lnRP (-1), lnEX değişkenlerinin katsayıları istatistiksel olarak anlamlıdır. R^2 değeri 0.93'tür, yani modelin açıkladığı değişkenlik oranı %93'tür. Bu, modelin verileri iyi şekilde uyumladığını gösterir. R^2 değeri 0.90'dır, yani düzeltilmiş R^2 değeri %90'dır. Bu da modelin bağımsız değişkenlerin eklenmesiyle iyileştirildiğini ve daha sağlam bir model olduğunu gösterir. Jarque-Bera istatistiği 3.27'dir ve p değeri 0.19'dur. Bu test, modelin hata terimlerinin normal dağılıma uygun olup olmadığını değerlendirmektedir. P değeri 0.05'ten büyük olduğundan, hata terimlerinin normal dağılıma uygun olduğu kabul edilebilir. Bu sonuçlar, ayçiçek ARDL modelinin verilere iyi uyum sağladığını ve istatistiksel olarak anlamlı olduğunu göstermektedir.

Çizelge 7: İran Ayçiçek ARDL (1,1,1,0) Model Tahmin Sonuçları

Değişken	Katsayı	t-istatistiği	Olasılık (p)
Lnsunflower(-1)	0.71	12.06	0.00
lnY	3.34	0.15	0.87
lnY (-1)	4.09	1.85	0.08
lnRP	-1.04	-14.58	0.00
lnRP (-1)	-1.44	-8.08	0.00
lnEX	-0.86	-8.08	0.00
Sabit	-107.44	-2.31	0.03
Tanısal testler	$R^2= 0.93$	$R^2=0.90$	Jarque-Bera=3.27(0.19)

Çizelge 8'de yer alan İran ayçiçeği modelinin güvenilirlik test sonuçlarına göre, Breusch-Pagan-Godfrey testi için F istatistiği 0.85 ve p değeri 0.55'tir. P değeri 0.05'ten büyük olduğundan, heteroskedastisite varsayımı kabul edilebilir. LM testi için F istatistiği 1.32 ve p değeri 0.32'dir. P değeri 0.05'ten büyük olduğundan, otokorelasyon varsayımı kabul edilebilir. RESET testi için F istatistiği 1.73 ve p değeri 0.21'dir. P değeri 0.05'ten büyük

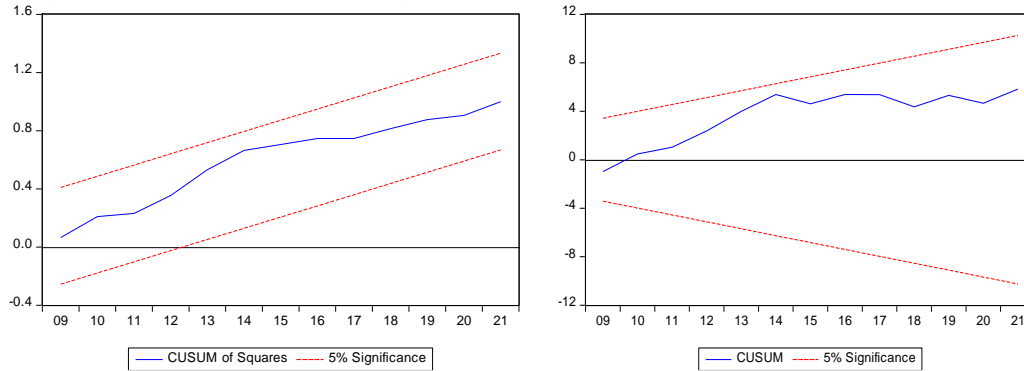
olduğundan, doğrusallık varsayımı kabul edilebilir. Bu sonuçlar, ayçiçeği modelinin güvenilir olduğunu ve istatistiksel olarak anlamlı sonuçlar sunduğunu göstermektedir (Çizelge 8).

Çizelge 8: İran Ayçiçeği Modelde Güvenilirlik Testleri

Güvenilirlik Testleri	F istatistiği	Olasılık
Breusch-Pagan-Godfrey	0.85	0.55
LM	1.32	0.32
RESET	1.73	0.21

Şekil 2 incelendiğinde, ardışık hata karelerinin kümülatif toplam testi sonucunda modelin tahmin döneminde kararlı olduğu, yani herhangi bir yapısal kırılmanın olmadığı görülmektedir.

Şekil 2: Ardışık Hata Karelerinin Kümülatif Toplam Testleri.



Çalışma kapsamında kurulan hipotezler aşağıda yer almaktadır. Buna göre;

- H0: Toplam ayçiçeği yağlı tohumlar ithalat talebi ile gelir, döviz kuru ve görel fiyatlar arasında eşbütünleşme yoktur.
- H1: Toplam ayçiçeği yağlı tohumlar ithalat talebi ile gelir, döviz kuru ve görel fiyatlar arasında eşbütünleşme vardır.

Bu hipotezler doğrultusunda, sınır testi ile eşbütünleşme ilişkisinin varlığı test edilmiş ve sonuçlar Çizelge 9’de verilmiştir. Test sonuçları incelendiğinde, F-test istatistiğinin (4.48) üst sınır kritik değerlerinden büyük olduğu için %5 ve %10 önem seviyesinde seriler arasında eşbütünleşme ilişkisinin var olduğu görülmüştür Buna göre, seriler uzun dönemde birlikte hareket etmektedir (Çizelge 9).

Çizelge 9: Sınır Testi İle Eşbütünleşme İlişkisi Sonuçları

k	F-istatistiği	Alt Sınırlar I(0)				Üst Sınırlar I(1)			
		%1	%2.5	%5	%10	%1	%2.5	%5	%10
3	4.48	4.29	3.69	3.23	2.72	5.61	4.89	4.35	3.77

Çizelge 10’deki İran ayçiçeği modelinin uzun dönem katsayıları aşağıdaki gibidir: LY gelir değişkeninin katsayısı 15.54, t-değeri ise 2.69’dur. Bu değişkenin p değeri 0.01’den küçük olduğundan (%1 anlamlılık düzeyinde), durağanlık hipotezi kabul edilir ve modeldeki gelir değişkeni istatistiksel olarak anlamlıdır. LEX döviz kuru değişkeninin katsayısı -3.04, t-değeri ise -3.13’tür. Bu değişkenin p değeri 0.05’ten küçük olduğundan (%5 anlamlılık düzeyinde), durağanlık hipotezi kabul edilir ve modeldeki döviz kuru değişkeni istatistiksel olarak anlamlıdır. LRP görel Fiyatlar değişkeninin katsayısı -1.39, t-değeri ise -2.04’tür. Bu değişkenin p değeri 0.06’dan küçük olmadığından (%10 anlamlılık düzeyinde), durağanlık hipotezi kabul edilir ve modeldeki görel fiyatlar değişkeni istatistiksel olarak anlamlı değildir. Bu sonuçlara göre, ayçiçeği modelinde gelir ve döviz kuru değişkenlerinin uzun dönemde etkili olduğu görülmektedir. Ancak, görel fiyatlar değişkeni için istatistiksel olarak anlamlı bir ilişki bulunamamıştır.

Çizelge 10: İran Ayçiçeği Uzun Dönem İthalat Talep Modelindeki Katsayılar

Değişken	Katsayı	t-değeri
LY	15.54***	2.69 (0,01)
LEX	-3.04***	-3.13 (0.00)
LRP	-1.39**	-2.04 (0,06)

*, ** ve *** sırasıyla %10, %5 ve %1 anlamlılık düzeyinde anlamlı ifade etmektedir. p değeri; parantez içindeki olasılık değerini göstermektedir.

İran ayçiçeği ithalat talebi model sonuçlarına göre, gelirdeki %1'lik artışta, ayçiçeği tohumu ithalat talebi yaklaşık olarak %15.54 artmaktadır. Döviz kurundaki %1'lik düşüş, ayçiçeği ithalat talebini yaklaşık olarak %3.04 artırmaktadır. Analiz sonuçlarına göre göreceli fiyatlarda %1'lik düşüş, ayçiçeği ithalat talebini yaklaşık olarak %1.39 artırmaktadır (Çizelge 10). Çizelge 11'deki İran ayçiçeği kısa dönem eş bütünleşme ilişkisi incelendiğinde, bir önceki dönemdeki dengeden sapma hızını temsil eden eş bütünleşme terimi (ECT) değerine göre, her %1'lik sapma hızında, ayçiçeği tohumu ithalat talebi yaklaşık olarak %0.28 azalmaktadır ve İran ayçiçeği İthalat talebi yaklaşık 3.5 yılda dengeye geldiğini göstermektedir ($1/0.28=3.57$). Gelir değişkeni ise (D(LY)) istatistiksel olarak anlamlı değildir, yani ayçiçeği ithalat talebini açıklamada önemli bir etkisi bulunmamaktadır. Göreceli fiyatlar (D(LRP)) ise ayçiçeği tohumu ithalat talebini negatif yönde etkilemektedir. Her %1'lik artışta, ayçiçeği ithalat talebi yaklaşık olarak %1.04 azalmaktadır. (Çizelge 11).

Çizelge 11: İran Ayçiçeği İçin Kısa Dönem Hata Düzeltme Modeli

Değişken	Katsayı	t-değeri
ECT _{t-1}	-0.28***	-3.49 (0.00)
D(LY)	0.34	0.12 (0.90)
D(LRP)	-1.04***	-11.85 (0.00)

*, ** ve *** sırasıyla %10, %5 ve %1 anlamlılık düzeyinde anlamlı ifade etmektedir. p değeri; parantez içindeki olasılık değerini göstermektedir.

SONUÇ

Türkiye ve İran'ın ayçiçeği ithalat talep fonksiyonlarının incelendiği bu çalışmada, her iki ülkenin de ayçiçeği ithalat taleplerinin farklı faktörlere duyarlı olduğu belirlenmiştir. Türkiye'de ayçiçeği ithalat talebi, gelir artışlarına ve göreceli fiyat değişimlerine hassas olmakla birlikte, döviz kuru değişimlerine daha az duyarlı olduğu gözlemlenmiştir. İran için ise, ayçiçeği ithalat talebi, gelir artışlarına oldukça duyarlıdır ve döviz kuru değişimlerine de belirgin bir şekilde tepki vermektedir. Bu nedenle, İran'da ayçiçeği ithalat talebinin Türkiye'ye göre daha fazla gelir odaklı olduğu sonucuna varılmıştır. İran ayçiçeği ithalat talebinin Türkiye'ye kıyasla gelir artışlarına daha fazla duyarlı olmasının nedenleri incelendiğinde, İran'ın nüfusunun çoğunluğunun, Türkiye'ye kıyasla daha düşük gelir düzeyinde olduğu anlaşılmaktadır. Bu durumda, İran'da yaşanan gelir artışları, tüketicilerin satın alma gücünü artırarak, temel ihtiyaçlarını karşılamak için daha fazla mal ve hizmet satın almalarına neden olabilmektedir. Bu durumda, ayçiçeği gibi gıda maddelerine olan talep de artmaktadır. İran'daki tüketicilerin beslenme alışkanlıkları da Türk tüketicilerin beslenme alışkanlıklarından farklı olabileceğinden, İran'da ayçiçeği yağı daha yüksek talep gösterebilir. İran'ın ayçiçeği ithalat talebinin, Türkiye'nin ayçiçeği ithalat talebine kıyasla, gelire daha duyarlı olmasının bir diğer nedeni ise ikame mal açısından farklılık göstermesidir. İran'da, ayçiçeği yağına ikame olarak kullanılabilecek alternatiflerin sınırlı olması nedeniyle, tüketicilerin gelir artışlarına daha fazla tepki vermesi ve daha fazla ayçiçeği yağı talep etmesi beklenirken, Türkiye'de ayçiçeği yağına ikame olarak zeytinyağı kullanılabilmektedir. Bu çalışmada, Türkiye ve İran'ın ayçiçeği ithalat taleplerindeki dengeye dönme süreleri karşılaştırılmıştır. Sonuçlar, Türkiye'nin ayçiçeği ithalat talebinin dengeye dönme süresinin daha uzun olduğunu ve kısa dönemde herhangi bir şokun etkisinin yaklaşık %51 oranında azaldığını göstermektedir. Benzer şekilde, İran'da bu oran %28 olarak hesaplanmıştır. Bu bulgular, Türkiye ve İran'ın ithalat taleplerinin farklı özelliklere sahip olduğunu ortaya koymaktadır. Türkiye'nin daha kısa dengeye dönme süresi, ülkenin ayçiçeği ithalat talebine daha hızlı yanıt vermesine olanak tanımaktadır. Öte yandan, İran'ın daha yavaş dengeye dönme süresi, ülkenin ayçiçeği ithalatına olan bağımlılığını artırma ihtimalini göstermektedir. Türkiye ve İran'ın ayçiçeği üretimini artırması ve dolayısıyla ithalat bağımlılığını azaltması amacıyla aşağıda politika önerileri sunulmuştur:

Ayçiçeği için en uygun yetiştirme bölgeleri belirlenmeli ve bu bölgelerde üretim teşvik edilmelidir. İklim analizleri, her bölgenin potansiyelini belirlemekte yardımcı olabilir. Ayçiçeği üreticilerine suyun daha verimli kullanılmasını sağlayan modern sulama teknikleri benimsetilmelidir. Bu durum, su kaynaklarının sürdürülebilir kullanımını teşvik eder. Yüksek verimli, hastalıklara dayanıklı ve kuraklığa dayanıklı ayçiçeği tohum çeşitleri geliştirilmeli, yüksek verimli ve kaliteli tohum çeşitlerinin üretimi teşvik edilmelidir. Ayçiçeği üreticilerine modern tarım teknikleri ve işletme yönetimi konularında eğitim ve danışmanlık hizmetleri sunulmalıdır. Bu, kaliteyi ve verimliliği artırabilir; Ayçiçeği ürünlerinin kalite standartlarına uygunluğunun sağlanması önemlidir. Bu, ürünlerin uluslararası pazarda rekabet gücünü artırabilir. Tarım sektöründe araştırma ve geliştirme çalışmalarına yatırım yapılmalıdır. Ayçiçeği yetiştiriciliği için daha etkili yöntemlerin bulunması ve yaygınlaştırılması önemlidir. Ayçiçeği ürünlerinin pazarlama ve tanıtım faaliyetleri düzenlenmelidir. Ürünlerin markalaşması ve uluslararası pazarda bilinirlik kazanması teşvik edilmelidir. Ayçiçeği üretiminin maliyetlerini düşürmek için tarımsal girdi fiyatlarının kontrol altında tutulması veya düşük maliyetli kaynaklara erişimin kolaylaştırılması gibi önlemler alınabilir. Bu öneriler, İran ve Türkiye'nin ayçiçeği üretimini artırarak bu ürün için dışa bağımlılığını azaltmasına yardımcı olabilir.

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The effects of quality in the food industry

Emanuela Esmerova, PhD¹

¹Associate professor, MIT University, Republic of North Macedonia- Skopje, email:emaesmerova@yahoo.com

Abstract: A technology, invention, device or new product does not have to be an innovation in itself. For something to be technically innovative it has to offer new value and a new, better way of doing things. Invention is not the same as innovation. Invention is only one part of the process of creating innovation. Innovation is the process of bringing an invention to market where it can be used. Innovations span the entire process and they create changes in the way people do things. Of course, innovation is not valuable in itself – it gains value when someone pays for it.

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.

Keywords: quality, standards, food industry, management and innovation

JEL Classification: M10, K10, F40

Introduction

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 implemented in a systematic way, meaning that appropriate quality management is established through planning and system activities.

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).

1. Quality baselines

Quality is an important factor for the survival, business success and prosperity of enterprises, while the activities of producers are aimed at:

- preventive measures to ensure quality in the whole life product cycle, in order to approach the so-called error-free production
- gaining confidence among customers that the organization system in the company 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:¹

- higher level of quality;
- maximum flexibility;
- reduction of costs, to the extent of necessary minimum .
- shortening the production time.

¹ Andrew, J.P, Manget, J., Michael, D.C., Taylor,A., & Zablit, H., Innovation: A return to Prominence and the Emergence of a New World Order.Boston, MA: Boston Consulting Group, 2010, p.125

These are the reasons why companies from the food industry must direct their activities to the following elements:

- in the shortest possible time
the product to appear on
the market;
- to perform on the market with everything
better products and services;
- to constantly be fast
product modifications and
the services;
- to continuously decrease
prices .
- to provide all necessary
standards and certificates for
the product and the organization.

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.² The purpose of QM is to build, maintain, verify and improve quality at 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 set on the basis of marketing, according to its orientation towards the buyer, considering that today the buyer determines the quality, not the manufacturer.

In the past, quality management applied only to manufacturing food enterprises, and now, the principles of quality management (QM) apply to service activities as well. Unlike in the past when in manufacturing, productivity and product cost were critical success factors of an organization, nowadays the requirements for innovation skills, uniqueness, ability to learn, well-designed products and service programs, flexible adaptation to changing market conditions and customer requirements represent the greatest requirements of the quality standards of a modern organization

In essence, quality management refers to the general management of the various processes in enterprises from the food sector, to ensure control of values and minimal errors in each phase of work, regardless of the activity, that is, the business activities of an organization.³ It requires a more decentralized approach to managing workflows, as opposed to the traditional notion of management, where leaders are responsible for all decisions and employees simply follow policy and rules of business processes in enterprises from the food industry .

The desired results can be effectively achieved if the management of the relevant activities and resources of the activities in the food industry takes place as a process. Enterprises from the food industry are generally structured in functions that should be related to processes, and products and services result from all processes. In view of that, the following definitions are accepted:⁴

- A process represents a set of internally related resources and activities
that transform inputs into value-added outputs;

² .Audretsch, David B., Falck Oliver, Heblich Stephan, Lederer Adam, Handbook of Research on Innovation and Entrepreneurship, DIW Berlin Germany, 2010, p. 125

³ . Broom, H.N., Justium G. Longenecker: "Small business management", 5 firth ed., South-Western Publishing Co., Cincinnati, 2002. p.214

⁴ Cuervo, A., Ribeiro D., Roig S., "Entrepreneuership Concepts, Theory and Perspect", Springer Berlin Heidelberg New York, 2007. p. 354

- The main business process turns market opportunities into financial flow and generates income and
- Auxiliary processes are responsible for maintaining the effectiveness of the main process.

The process in the center of the diagram is the main process. Surrounding processes are auxiliary and provide information for the main process, in order to obtain the planned results from it. All these interconnected processes make up a management system for quality management (Quality management systems - QMS). The output of one process becomes the input of another process. Inputs and outputs can be grouped into four general categories: products, services, resources (people, money, energy, materials) and information. In doing so, food industry enterprises must identify the main business and auxiliary processes and manage them within the framework of quality management management systems.⁵

This means that the process approach is a management strategy, using the interaction between the identified processes, and the inputs and outputs linking all the processes together in that process approach. In short, the management system for quality management is composed of many processes, and these processes are interconnected by means of many input-output relationships. Those input-output relationships translate into a loose network of processes in an integrated system. Without such input-output relationships, we would not have an integrated quality management system in the food industry.⁶

Accordingly, quality management is a systemic way of managing processes, a set of activities and actions that affect the quality of products, services, operations in food establishments and execution of business processes. Hence, today, the competitiveness of the world market is determined by the quality of the processes inside the enterprises of the food industry.⁷

2. Standardization and Certification, process of implementation of the standard for enterprises from the Food Industry

Standardization is an activity for establishing provisions (rules) for common and re-use, which refer to actual or potential problems, in order to achieve an optimal degree of orderliness in the food industry. A large number of definitions are attached to the term standardization. According to some, standardization is a set of coordinated activities for the adoption of standards and related documents. According to others, standardization is a process of creating rules for systematically organized access to a special activity that benefits all interested parties and their cooperation, and especially for optimal improvement of the overall efficiency of food industry enterprises.⁸

Standardization is an activity in all business areas in food industry enterprises, aimed at increasing efficiency through their unification and simplification. Standardization can have one or more objectives that enable products, processes and services to conform to their intended purpose. The result of standardization are standards, which represent official documents.

Standardization is based on the following principles:⁹

- voluntary participation of all stakeholders in the process of adoption of standards;
- voluntary application of the standards;

⁵ .David B.Audretsch, Steven Kleppere, Innovation, Economic Development and the Evolution of Industry, UK: Edgar Elgar Publishing Limited, volume III, 2000, p. 458

⁶ .Hatten, T. S., Small Business Management, Entrepreneurship and Beyon, Houghton Mifflin Company, USA, 2006, p. 152

⁷ Heller, Robert, Priručnik za menadžere: Sve što morate znati o tome kako funkcioniraju poduzeće I njegov menadžment, Profil, Zagreb, 2004, p258

⁸ . Kerstin, Wagner and Andreas Ziltener, The Nascent Entrepreneur at the crossroads: Entrepreneurial Motives as Determinants for Different Types of Entrepreneurs, Swiss institute for Entrepreneurship, University of Applied Sciences Chur, 2008, p. 211

⁹ .Kennedy, Karen Norman, Goolsby Jerry R., Arnould Eric J.: Implementing a Customer Orientation: Extension of Theory and Application. Journal of Marketing, Chicago: AMA, Vol. 67 (2003),p.158

- harmonizing the views of all stakeholders in relation to the technical content of the standards, reached by consensus;
- publicity and transparency of decisions on adoption of standards;
- mutual harmonization of standards and
- achieving optimal benefits for society as a whole

The standard itself requires each enterprise to check internally, to determine whether it is managing its processes in an appropriate and efficient manner, and with that check to confirm that it is fully in control of its activities. In addition, food industry enterprises can invite or enable their customers to check their management system and make sure that their enterprise is reliable and able to deliver the requested product or service, which fully meets their requirements.

Finally, food industry enterprises are also inspected by an independent accredited certification body, which will determine compliance with ISO standards. This type of verification has become almost necessary, since the market places the highest importance on the certificate and proof of credibility of enterprises by independent institutions. This is especially useful as a business reference between enterprises and customers that are geographically distant, whose secondary checks become complicated and expensive for enterprises.¹⁰

Certification is the process of determining whether a product, service, enterprise or individual meets the requirements of the relevant standards. It ends with an official confirmation - certificate of conformity and entry of the holder of the certificate in the appropriate register.

The certificate is a written guarantee, issued by an independent accredited certification body, which is issued after an inspection to determine that the specific management system, product or service is in accordance with the requirements established in the relevant standard. In the case of certification, it is important to note that in accordance with the needs, the top management of the enterprises makes a decision to determine the scope of the certification, i.e. it decides whether all processes within the enterprises in the food industry will be certified or only a part of them, on one, more or all locations of establishments in the food industry.¹¹

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, enterprises can and should strive to bring non-certified processes into compliance with the requirements of the standard, so that there is no potential opportunity to jeopardize certified processes, and thus there is also a danger of withdrawing the issued certificate.

3. 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. It is necessary to develop an overall plan that will describe the needs of the enterprises.

Implementation phases should be carried out, which in experience last at least six to eight months. In addition, the plan should identify the stages, participants and time for the necessary trainings such as awareness of the main topic of the problem - quality, environment, health and safety at work, the management of the same, the reasons for which the implementation is needed, the role of each employee in relevant systems, preparation of documented information and analysis of activities, training of internal verifiers. Employees should be constantly informed about the progress of the implementation.

3.1. Training of employees for management standard

Training during implementation itself in the food industry is key to successful certification of any management standard. Through it, employees acquire skills for analyzing the processes in their own enterprises, as a basis

¹⁰ Han Jin K, Kim Namwoon, Srivastava Rajendra K.: Market Orientation and Organizational Performance: Is Innovation a Missing Link?. Journal of Marketing, Chicago: AMA, Vol. 62 (1998),p.542

¹¹ .Han Jin K, Kim Namwoon, Srivastava Rajendra K.: Market Orientation and Organizational Performance: Is Innovation a Missing Link?. Journal of Marketing, Chicago: AMA, Vol. 62 (1998),p.125

for creating the necessary documented information. It also includes the fulfillment of the necessary requirements from the relevant clauses of the standard, adherence to the time schedule from the activity plan, provision of useful process facts, familiarizing employees with the requirements of the particular specific process, its control and measurability, as well as suggestions for possible improvements in the same.¹²

3.2. Analysis of processes in the food industry

For the analysis of the processes in the food industry, well-known software tools are used for the creation of flow diagrams of activities, through which the essence of a process can be clearly perceived, a fact more than all the standards emphasize the process approach in the application of requirements. Thus, it is clearly shown what is the input to the process, what activities are carried out within it, what documentation circulates between them and what is the output of that process.¹³ These block diagrams should be prepared by responsible persons, the so-called process holders and aligned within their sectors.

3.3. Development of the necessary documented information

On the basis of the block diagrams, documents such as procedures, work instructions, records and, if desired, a manual can be prepared. When they are prepared, they are released to the companies for discussion. It is not mandatory, but a management system manual (quality, environment, health and safety at work) can be prepared, and within which gives a clear view of the enterprises from the food industry, i.e. the management policy, the responsibilities of all employees for the relevant management system, the organizational chart shown through the management structure, the scope of the management system and a brief description of the processes in which the requirements of the standards are applied.¹⁴

3.4. Release of documented information

The produced documented information must be checked and approved

Before they are released. The order in which they are issued is very important. Some of them should be issued before others and at the appropriate time. A plan/schedule for internal checks must be drawn up, through which it will be clearly seen which activities covered by documented information will be checked and in which 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 enterprises, through the so-called reviews that are held with a certain dynamism and frequency.¹⁵

3.5. Internal checks and management review

Trained internal auditors perform the internal audits that are planned in the previously prepared schedule. The process of internal checks includes activities of planning checks, notification of checks, review of the documented information that is checked, drawing up check lists for checking, performing the check, drawing up a report of the performed check, issuing corrective requests and monitoring the check in relation to the undertaken and carried out corrective requirements.¹⁶ Management reviews must be conducted at least twice a year. With them, the relevant management system is reviewed to ensure its compliance, adequacy and effectiveness.

With these reviews, the possibilities for change and its improvement must also be considered.

¹² Šehić, Dževad & Zijada Rahimić, Menadžment, Univerzitet u Sarajevu, Ekonomski fakultet, Sarajevo, 2006, p. 254

¹³ William, D. Wells, Sandra Moriarty, John Burnett, Advertising: Principles and Practice, 7th edition, 2005

¹⁴ Heller, Robert, Priručnik za menadžere: Sve što morate znati o tome kako funkcioniraju poduzeće i njegov menadžment, Profil, Zagreb, 2004

¹⁵ Hatten, T. S., Small Business Management, Entrepreneurship and Beyond, Houghton Mifflin Company, USA, 2006

¹⁶ William, D. Wells, Sandra Moriarty, John Burnett, Advertising: Principles and Practice, 7th edition, 2005

3.6. Pre-certification – Management system check

It is desirable that about four to six weeks before the certification of any management system by the independent accredited certification body, a pre-certification or pre-assessment of the same should be carried out. It is seen as an exercise for the certification that follows. It is good to find all major inconsistencies during it, which will be of great benefit for the upcoming certification, as well as great experience in terms of the necessary communication with external verifiers.

4. Internal checks of the management system – a tool for self-control in the food industry

The above management standards are internationally recognized and recognized as the best management tool in all enterprises. The application of the requirements of the same ensures a better and transparent monitoring of all segments of the operation, necessary for the same.

In fact, they are a tool that frees management from overseeing day-to-day operations and gives them more time to devote to managerial activities oriented toward management, sales, securing profits, and creating a positive corporate image. With them, a clear determination of the work in a defined system of powers and responsibilities is established in the enterprises of the food industry, and models of quality monitoring and checking of individual processes are also established through certain criteria and methods.¹⁷

One of them is of course the internal inspection. ISO 19011:2018, on the other hand, has the meaning of a guide – a standard that provides guidelines for checking management systems (internal and external), including the principles of the checks themselves, the management of the check program and the implementation of management system checks. This standard also provides guidance for assessing the competence of individuals involved in the verification process, including the person managing the verification program, verifiers, and the verification team. ISO 19011:2018 is applicable to all enterprises that need to conduct internal or external audit of management systems, as well as management of audit programs. The application of ISO 19011:2018 is also possible for other types of checks, provided that special attention is paid to the specific competences required.

The general definition of an audit actually refers to a planned and documented activity performed by qualified personnel to determine, by investigation, examination, or evaluation of objective evidence, the adequacy and compliance with established procedures or applicable documented information, as well as the effectiveness of implementing them.

The term can refer to audits in accounting, internal controls, quality management, environmental management, occupational health and safety, water and energy management. Verification is defined as a systematic and independent examination of data, reports, records, operations and performances in enterprises for the stated purpose. In each inspection, the verifier sees and recognizes the facts, collects evidence, evaluates them and, based on all of that, formulates his assessment, which he submits through an inspection report.¹⁸

The objective is to provide an opinion on the adequacy of controls in the given environment in which the audits are performed, to evaluate and improve the effectiveness of quality, risk, control and process management. In internal audits (first-party audit) the verifiers, the client and the audited party are usually all from the same company. The verifiers (internal auditors) are the coordinator or manager for the relevant system (Quality environmental oh&s manager/coordinator) and other employees qualified for that purpose. The customer is actually the organization itself.

The implementation of internal checks is under the responsibility of the function of ensuring the relevant management system/standard.

The purpose of the internal audit is to check its compliance and effectiveness for a certain period of time. During internal audits, the management system is checked to determine compliance with:¹⁹

¹⁷ David B.Audretsch, Steven Kleppere, Innovation, Economic Development and the Evolution of Industry, UK: Edgar Elgar Publishing Limited, volume III, 2000

Hatten, T. S., Small Business Management, Entrepreneurship and Beyon, Houghton Mifflin Company, USA, 2006

¹⁸ William, D. Wells, Sandra moriarty, John Burnett, Advertising: Principles and Practice, 7th edition, 2005

¹⁹ T. Shaun,: Essentials of Human Resource Managenent, 5th edition, Elsevier Ltd., Burlington, 2006

- the planned implementation of products and services;
- the requirements of the standard;
- requirements from the management system of the company itself.

Internal review provides a mechanism to check effectiveness of the management system and advances it by identifying:

- places where everything is good;
- places where all is not well;
- strengths of the system;
- weaknesses of the system;
- ways of improving the system.

The above-mentioned standard specifies how to carry out checks that are in accordance with a previously established plan of checks, approved by responsible persons. Each part of the system needs to be checked at least once a year depending on the status of the individual parts, the importance and effect on quality, the environment, health protection, risks in general, etc. During the year, unplanned internal checks can also be carried out. They can be the result of major problems in the system caused from outside (customer complaints, incidents, etc.). It is the obligation of every enterprise from the food industry to have certified internal inspectors.²⁰

For the benefit of food sector enterprises, internal audits are essentially not only carried out to issue non-conformances and implement corrective measures, but also to highlight areas of good practice and provide records and evidence of compliance. In this way, information is delivered between sectors in order to obtain added value in work practice, which will result in continuous improvement.

Internal audits of management systems are a good and efficient tool in the hands of the management through which the goals for improving the operations of food industry enterprises are generally realized.

Conclusion

The process of acceptance and adoption of the product in 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. In contemporary economic literature, innovation is not exclusively linked to high technologies.

On the contrary, innovation and entrepreneurial behavior today are also a factor of real restructuring and production-technical revitalization of the old, traditional sectors of business. In that regard, today in the USA a large number of entrepreneurs-innovators are making high profits by revitalizing old industrial branches: steel, textiles, leather and milk. Innovation here means creating and promoting something new, different from the previous one, which gives economic entities or the entire economy a new development strategy and energy.

Namely, innovations should be seen as occasions for investing in the production of new material goods, introducing new production methods, conquering new markets, introducing a new organization of production in the food industry, etc.

²⁰ Zakic, N.; Jovanovic, A.; Stamatovic, M.; External & Internal Factors Affecting the Product & Business Process Innovation, Economics & Organisation, 2008

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Innovative Aspects in Digital Marketing of Textile Companies from Prilep

Ena Petreska Tomeska, MSc¹

Filip Taskovski, MSc²

¹ UKLO, Faculty of Economics – Prilep, Republic of North Macedonia, e-mail: ena.petreska@uklo.edu.mk,
ORCID: <https://orcid.org/0009-0007-0669-9499>

² UKLO, Faculty of Economics – Prilep, Republic of North Macedonia, e-mail: filip.taskovski@uklo.edu.mk,
ORCID: <https://orcid.org/0009-0002-6440-3944>

Abstract: Today's dynamic environment, digitization and innovation through computers, smartphones and other devices dominate the business life of companies and that of the high-potential consumer. Innovations have a great influence in the digital society on the development of changes that occur in the dynamic business environment. The foundation of digital marketing is found on Internet. Digital marketing should be seen as a new philosophy and business practice that occurs with improvements of technology. Digital marketing is a powerful strategy that helps companies promote their products or services worldwide. The aim of this paper is to implement and provide conceptual, methodological and thematic guidance for companies interested in the use of digital marketing innovations. The challenge is about getting the correct information about the exact products to the right customer, so finding and targeting the right audience can dramatically increase sales. The research in this paper is based on a scientific approach in order to produce qualitative and quantitative data. In this paper, statistical methods are also used for the analysis of the situations for the impact of innovations and digital marketing. Innovations in digital marketing create value for companies as well as for people who are willing to pay for the completion of the whole process. As part of the digitalization of companies, the amount of time, money and effort are directed into rational management.

Keywords: Innovations, digital marketing, strategies, companies, textile industry.

JEL classification: M15, M21, M31.

1. INTRODUCTION

The phenomenon of digital marketing innovation attracts the attention of scholars, practitioners across multiple disciplines, for example: economics, strategy, innovation management and marketing (Autio, et al., 2018). The internet, computers, smartphones, mobile applications and other digital communication technologies have become part of the daily lives of billions of people around the world. According to recent statistics for July 2022, 5.03 billion people are active internet users, and 4.70 billion people are active on social networks, which actually covers 59% of the global population (Statistista, 2022). Also, the use of digital marketing is an integral element in the work of companies around the world. The presence of digital technology in every sphere of activity has not only changed the way of organization and realization of the implementation of digital innovations in operations, but also applying new combinations of digital and physical components for the production of new products or services (A. & Griffith, 2020). Companies applying digital innovations must investigate and analyze in more detail how digital technologies shape nature, the process and the results of digital innovations, as well as the long-term, medium-term and short-term social, cultural and economic consequences of appropriate use (Markus & Nan, 2020). Digitalization is a key instigator of marketing innovation and enables new methods of communication, branding strategies, offering designs and transaction settings.

With the challenges arising from new digital technologies, changing digital patterns and the divided attention of consumers, the optimal integration of digital marketing communications is receiving even greater attention from companies that strive to satisfy the demands and needs of consumers (Batra & Keller, 2016).

Consumers prefer to network and create groups on different online media platforms that share mutual preferences, interests and desires. Hence digital marketing innovations open a wide range of digital communications to increase and strengthen the strategies of the elements, characteristics of digital marketing such as: social network marketing, content marketing, advertising management and innovative strategy.

The digital technology revolution enabled by the internet, known as the wireless world, makes communication between companies and consumers easy to access and are highly visible (Rehman, et al., 2022).

2. LITERATURE REVIEW

A digital marketing innovation system that is designed by planners and strategists encourages a clear understanding of the opinions related to the company's brand, i.e. their products or services, in order to encourage a dialogue with consumers in due time and facilitate the insight and understanding of the activity of the competitive brand as vital, it is of great importance for employees in companies who are in a responsible marketing position and set policies and strategies. The strategic dimension of consistency confirms that all communications related to the brand entity provide a consistent message to customers and other stakeholders (S., et al., 2022).

Scientific studies consider the engagement of companies as a result of the use of digital marketing, so the study of Sirdal and Briggs (2018) suggests that engagement should be considered as a psychological state of the brain and should be considered separately from the interactive behavior that includes liking and sharing content. Digital marketing innovations in studies refer to: social media marketing, content marketing, advertising management and this paper will review these elements of the digital approach resulting in a new model. With internet platforms, digital marketing approaches are in constant growth, which consistently enables new functions in the communications of companies with consumers in the global market (Dwivedi & et al., 2020). So, to say that the use and advancement of digital technologies significantly affect the environment in which companies work and strive for successful interactive communication with consumers through online platforms.

2.1. SOCIAL NETWORK MARKETING

According to the authors in the scientific literature there are many different social media sites, and they have many different forms and contain different features. Social networks transform the way companies think about advertising. Some company's direct customers' attention to their social profile pages rather than their own websites (Watson, et al., 2002). The primary advantages of using social media relate to reduced costs and increased outstretch, as well as enabling companies to reach customers who may not be available due to time and location constraints of existing distribution channels (Sheth & Sharma, 2005).

Information provided for customers is provided in a form that is easy to process and understand. The company can also create customized interactions to design products or services that meet their specific requirements (Nadaraja & Yazdanifard, 2013). Given this reality, it is beneficial for companies, especially marketers, to integrate social media into an innovative marketing strategy.

2.2. CONTENT MARKETING

Content marketing is also known as story marketing (Sullivan, 2013). It is about informing and persuading the audience with an excellent content in order to raise awareness or increase the perception of the company's brand. Innovative content can motivate consumers to buy products, turning them into loyal customers, and sharing the content on the internet with other users (Odden, 2013).

2.3. ADVERTISING MANAGEMENT

According to scientists from previous researches, the management of ads, i.e. Google ads, enable companies to highlight their website more easily. Based on the keywords of searches by users, the highest quality results are achieved through Google ads (I. & S.Z, 2017). Today, almost 65% of small and medium-sized companies use Google Ads and successfully strengthen their brand. Also, advertisements used by companies are easily measurable, scalable and offer exceptional targeting opportunities (Curley, 2021).

2.4. INNOVATIVE STRATEGY

In the era of digital economy, companies face internal and external challenges, for this purpose, in order to maintain the continued existence of the global market, companies hire employees or form teams for easier cooperation to improve operations, whose creativity is possible and desirable. The concept of innovative strategy in digital marketing management refers to the creation and maintenance of the company's brand identity, as well as the use of digital marketing tools that contribute to building value for the company (Kavas, 2004). Successful innovation strategy efforts must be in step with the company's overall business strategy. The main focus of every company should be its customers, i.e. constantly giving them value and importance, in a

way that would be remembered and different from all others and it will be a prominent element of the company's brand identity as well as the business strategy and impact of the digital marketing tools that the company applies during its operations (Montgomery, 2019).

According to the research of the authors in the literature, with the application of digital marketing services, companies provide great publicity on social networks, most people use social networks in their everyday life, so through the Google Analytics option, the success of the company's digital marketing is analyzed and the return on investment is measured (ROI) (Cruz, 2019).

According to a research, experimental innovation is based on customer mapping optimization, which includes theoretical marketing concepts and appropriate knowledge of digital marketing (Bosio, 2019). Companies use social media, digital billboards, game consoles, televisions, laptops, tablets, and smartphones to promote the company itself and other services offered.

Innovations in digital infrastructure and technology are necessary to maintain a competitive position in the market among companies and relate to powerful messages that attract ideal customers. Digital marketing innovation includes a wide range of activities such as advertising, prospecting, acquiring new and retaining existing customers, and optimization. What is crucial is to follow the latest trends and advances in digital innovation technology in order to enable greater competitive advantage (Cruz, 2019).

3. METHODOLOGY

This research aims to explain the relationship between the entities and the benefits of innovative digital marketing and the research approach is based on a survey approach. The excerpt in this research is smaller, that is, it refers to several textile companies from Prilep. Primary and secondary data are used in the research.

In this abstract 5 large companies, 5 medium companies and 5 small companies will be taken into account. Primary and secondary data will be used. The research will be based on data analysis.

The inferential method used in this research provides a new approach that has roles such as market, consumer and company variables. Based on the research results, the influence of digital marketing and information technology is developing significantly and the demand for digital marketing services is increasing.

4. RESULTS AND DISCUSSION

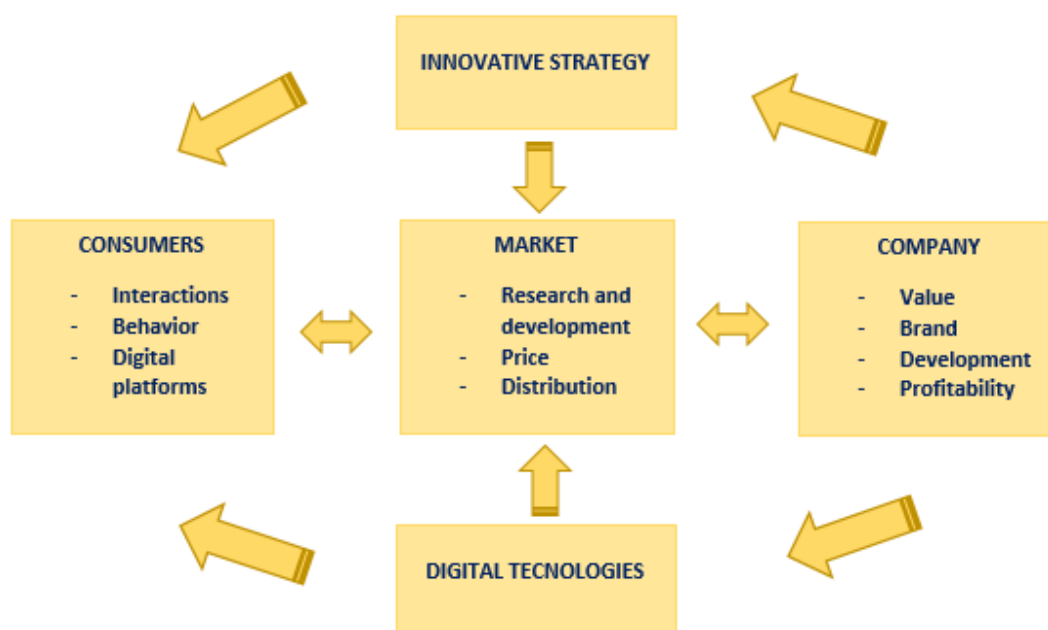
Digital marketing itself has far-reaching implications for the interests of markets and consumers, determining that companies are directly affected by the use of digital marketing services in their operations. As a result, digital marketing services represent a useful framework for developing a company's strategy.

Quoting Harvindra Yoga Prasetya and Adi Nurmahdi, digital marketing (also called internet marketing or online marketing) is related to direct marketing because companies that carry out these digital marketing activities can shorten their offer chains or supply chains, and of course can reduce their operating costs.

Cost reduction will certainly have a positive impact on both the company and users as well as consumers. Also, the new digital "box" that changes the world combines and improves traditional communication technologies in new digital formats, and the implications refer to marketing, which is the core of the companies' advertising strategy.

The schematic view that emerges from the research refers to three main components that are affected by the innovative strategy and digital technologies that contribute to the realization of success and relate to the market, consumers and company.

Figure 1. Schematic representation of the innovative approach to digital marketing



Source: Author

Regardless of the industry in which companies operate in and what services or products they sell, consumers and the market are the most important segments to be retained. Without consumers, there are no sales, but also without a market, there is no marketing of products or services. As a result, they are critical factors in the development and maintenance of companies' work. According to research, what is of key importance for companies is the knowledge of consumers and markets. Products or services offered by companies should be tailored to help consumers solve problems more effectively. If companies do not create offers based on consumer needs, they will not be able to sell in the markets. According to current practice, the decision to purchase a product or service is based on an emotional level. Therefore, the company should offer its customers value and brand, which will result in growth and profitability. Companies that want to stay close to their consumers and stay in the markets as long as possible should use emotional language in their actions in order to help consumers identify themselves. If the application of digital technologies is based on a logical approach without any emotional appeal, it will not resonate with deep emotional feelings among consumers and therefore consumers will not become loyal customers of the company (Ahmed, 2020). Knowing your customers is vital whether a company offers and sells a tangible or intangible product. The key to selling tangible or intangible products or services lies in personalization. This is a process that involves the appropriate adaptation of digital technologies and innovative strategies. Consumer requirements are first assessed by the company's marketing department, and then a quality decision is made based on the collected data and information. Through the research and development process companies segment the various wants and needs of consumers based on specific demographic, geographic, psychographic and behavioral criteria. After segmenting the needs of consumers, the company needs to create and build a "personality" for market placement. Building a so-called persona is a reference document that details the characteristics of the ideal consumer who will become a loyal customer, the challenges that will be experienced and the results that will be obtained (Team, 2021). The choice of an appropriate pricing policy for business will also require the implementation of various methods and techniques for determining prices that will provide an income (profit) to the company, and on the other hand, will be acceptable to consumers. This is not such an easy process. This is where the art and creativity of marketing lies. The key or finish line of any marketing activity is distribution when the product and/or service is delivered to the customer. A different promotional form affects potential consumers differently. The right choice of the mixture of promotional elements can contribute to increasing the entry of potential consumers into the sales funnel of the business. It is necessary to design the promotion very well by the entrepreneur so that every penny invested can be returned several times in favor of the business effectively and efficiently (Sutevski, 2012).

Companies daily face the challenges of digital transformation and the need to use digital technologies to accelerate their growth, as well as to innovate processes, products and services, so that they adapt to new generations of consumers. In order for Macedonian companies to be competitive on the European and world markets, all work processes should move to a digital platform, regardless of whether it is about projects, products, marketing or sales. It is a real challenge for companies to decide which of the new technologies will work in the best interest for the advancement of business operations (Огненовски, 2019). The increasing number of digital marketing innovations (social media marketing, content marketing, advertising management, brand strategy, research and development, lead generation (B2B strategies)), which appear as a result of various digital trends, does not mean that the company has better quality and more successful relationships with the target market. Therefore, with the application of current and upcoming digital marketing trends, it is very important for managers to choose digital tools suitable for the correct operation of the company (Гологанов, 2019). By using digital marketing innovations in an efficient way, the growth and profitability of the company is achieved. From the schematic view, it can be seen that the company that applies an innovative strategy and digital technologies achieves positive results. By applying an innovative strategy and digital technologies, companies influence the market and consumers.

CONCLUSION

The world is becoming more digital, with consumers increasingly finding all the news, communicating with brands and buying products online. This way, companies can reach the international audience faster, when they use different channels of digital media. Its digital nature allows for diverse and very precise ways of interaction, as well as measuring the activities of the consumer and their interaction on the internet. In addition, special attention should be paid to developing several distinctive systems and innovative techniques of digital marketing, such as social network marketing, content marketing, advertising management and innovative strategy. The advantages of the internet as an advertising media are numerous, and some of them are: effectiveness, quick results, interactivity and wide scope.

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The Russian-Ukrainian Conflict, A Challenge for The International Monetary System

Filip Taskovski, MSc¹

Ena Petreska Tomeska, MSc²

¹ UKLO, Faculty of Economics – Prilep, Republic of North Macedonia, e-mail: filip.taskovski@uklo.edu.mk,
ORCID: <https://orcid.org/0009-0002-6440-3944>

² UKLO, Faculty of Economics – Prilep, Republic of North Macedonia, e-mail: ena.petreska@uklo.edu.mk,
ORCID: <https://orcid.org/0009-0007-0669-9499>

Abstract: The Russian-Ukrainian conflict that started in February 2022 amongst other things, caused a significant disruption of the international monetary system. Namely, with the beginning of the conflict, the international flow of capital was destabilized due to the fact that the countries of the EU and the United States began to impose sanctions on the Russian economy, whereby banks from Russia were excluded from SWIFT, bans were introduced on the import of Russian oil and oil derivatives, and a wide range of Russian raw materials and finished products. Consequently, the US dollar reached a high level of appreciation in relation to the Euro and the British pound, and EU countries recorded high budget deficits, a growth in public debt, and growth in inflation. On the other hand, the countries of the BRICS started to leave the US dollar as the only means of payment in international trade and make payments in their national currencies or through the mediation of the Chinese currency, whose international role is on the rise, in addition, BRICS initiates the creation of a currency which will be the counterpart of the dollar.

The focus of this paper is to identify the challenges faced by the international monetary system as a result of the Russian-Ukrainian conflict and its effect on the US dollar, the Eurozone and the initiation of the de-dollarization process in the field of international payments.

Based on the research, it can be concluded that the Russian-Ukrainian conflict has undermined the hegemony of the US dollar as the anchor of international financial flows, it has caused serious economic damage to the countries of the Eurozone, and there is a need to reform the international monetary system in the direction of accepting the Chinese Yuan as a factor of stability and promotion of monetary cooperation with the BRICS countries.

Keywords: International monetary system, de-dollarization, BRICS, capital, reforms.

JEL classification: F33, F34, F35.

1. INTRODUCTION

The Russian-Ukrainian conflict, like any war, in addition to being fought on the battlefield with conventional weapons, has a much wider scope, even though, the conflict is called armed, it is also fought parallel with the domain of international finance, trade and the world economy as a whole. The beginning of the Russian-Ukrainian conflict caused a significant disruption of the international order, analogously to that, the stability and sustainability of the international monetary system was challenged by the so-called western world which began to sanction the Russian economy.

The sanctions, which were mostly introduced by the EU and the USA, covered a wide range of economic functioning, thus, their focus is the ban on the import of products of Russian origin, the gradual cancellation of the EU's dependence on Russian oil and oil derivatives, and the exclusion of the Russian banking sector from the SWIFT international banking network. It is characteristic that although the sanctions were introduced in order to slow down and reverse the Russian economy, thereby limiting the means of financing the military intervention in Ukraine, which were reflected on the EU economy (Müller, 2023). Namely, the sanctions caused a shock on the market of oil and oil derivatives from the offering side, whereas their prices recorded an enormous growth. The growth in the prices of oil and oil derivatives, which represent raw materials in almost every industry, had a strong effect on the course of world trade, the economies within the Eurozone faced the growth of budget deficits, the growth of indebtedness and the growth of inflation. The American dollar, which in practice represents the hegemonic within the framework of world trade and payments, noted a strong appreciation, which further caused the growth of inflation in the countries of the Eurozone (Pandey, 2023). Parallel to these processes, the BRICS countries (Brazil, Russia, India, China and the South African Republic) are initiating the introduction of a new currency that will be a competitor to the US dollar and will cause de-dollarization in the field of trade and international payments, these countries also trade with their own national currencies, so the Chinese currency, Renminbi is mostly used because of the International Payment System (CIPS), which was launched in 2015, and as a result of CIPS, the Chinese government in 2018 created oil futures

and oil derivatives denominated in Chinese currency (Jennings, 2023). Given the fact that this currency is one of the world's currencies that fall into the Special Drawing Rights (SDR) created by the IMF in 1969 and which have the role of an interest-bearing international reserve, it lagged behind the US dollar before the start of the military conflict, but the military conflict, which according to all analysis is in favor of the Chinese currency, can contribute to its further strengthening and enable parity with the dollar (Chuluun, 2023). According to a large number of analyses, in the Russian Federation, the Chinese currency and a widespread currency for trading, also the Chinese economy, which records a strong growth and a surplus, appears in the role of a creditor to a significant number of countries in the world, which affects the strengthening of the Chinese influence especially in the countries of the so-called western world. In addition to China's increasing dominance in traditional international financial flows, it has begun the process of developing a digital currency that represents a pioneer in the process of financial digitalization.

The purpose of this paper is to identify the impact of the Russian-Ukrainian conflict on the international monetary system, that is, the challenges it faces as a result of the de-dollarization process, the elation of the Chinese national currency and the pressure from BRICS on the current monetary order.

Based on the purpose of the paper, the following hypothesis can be placed:

X – The Russian-Ukrainian conflict has a significant impact on the current arrangement of the international monetary system and mediates its reformation in accordance with the new world order of multipolarity.

The paper is conceptualized in several parts, thus, in the theoretical overview, emphasis is put on the history of the international monetary system, the setting of the current monetary system, its weaknesses and strengths, its challenges during the financial crisis in 2008 and after, the process of de-dollarization and the role of BRICS, and in the part of the analysis of financial flows during the conflict, the emphasis is placed on the role of the US dollar in world trade, the impact of the conflict between Russia and Ukraine on the financial flow in the Eurozone and the rise of the Chinese national currency against the US dollar.

2. LITERATURE REVIEW

The international monetary system during the gold standard functioned almost without institutional support and on the basis of decentralization. The system set up in this way did not provide stability because, during every financial crisis, there was a disruption of the monetary balance, and the beginning of the first world war caused an increase in expenditures due to the financing of the war and the purchase of military equipment, as a result of which the countries participating in the war they faced: 1) an inflationary blow and 2) a disturbance of the parities of the national currencies, during which they were forced to take unpopular measures such as deflation, in order to return to the balance of parities. Besides, during the Great Depression due to the gold standard, the US was forced to use the fiscal policy as an instrument to resolve the crisis (Carney, 2009). Analogously, there was a need to reform the system, which would allow greater freedom for maneuver and the ability to maintain the macroeconomic stability of economies.

At the end of the Second World War, the Allies began the process of establishing a new monetary order mainly as a result of the instability that occurred in the period between the two World Wars and the recovery from the economic and financial consequences of the Second World War, according to that in 1944, the Bretton Woods model of the monetary system was launched, with the forming of IMF and the World Bank Group (Bernstein, 1984). The Breton Wood system was based on gold, that is, the convertibility of the US dollar with gold, and the rest of the exchange rates were connected with the US dollar. What is characteristic of this monetary system is that it was subject to be controlled and managed by the International Monetary Fund as a mechanism capital control. Namely, the focus of this system was the American economy and the American currency as the pivot of the international monetary system (Dooley, Folkerts-Landau, & Garber, 2003). In 1971 the president of the USA, Richard Nixon, as a result of the lack of gold cover and the excessive circulation of dollars in the USA and in the world, made a decision to devalue it and suspend the gold standard. Consequently, countries were left to decide which exchange rate model to use according to their economic characteristics and foreign trade relations (Фити, 2018) After the official end of the gold standard, the institutions that emerged from the Breton-Woods system remained, in order to help maintain monetary stability and stimulate the growth of the world economy (Truman, 2017).

The collapse of the Breton Woods system required the creation of a new monetary order, the new reformed order was based on the will of the countries to decide for themselves what exchange rate system will be used. Characteristic of the new monetary system is that the role of gold was totally thrown out, market principles

were put in focus, and the management system became more decentralized in contrast to the previous system, which allowed for the liberalization of the capital market (Salvatore, 1994). The new international monetary system allowed the countries to use the monetary policy in conditions of domestic financial crisis and international crises because they could adjust the exchange rate to their needs, in addition, the control of inflation and prices was made possible. Similarly, economies, especially market-oriented ones, have improved their economic performance and generated economic growth (Meese, 1990). The system set this way, in addition to enabling economic growth, was used by a large number of countries in the direction of underestimating exchange rates and stimulating exports, which to a certain extent represents unfair competition to other countries. These processes contributed to the creation of great pressure on the dollar, the creation of a significant deficit on the current account of the United States, reinforcing global economic pressure and the loss of control over the flow of capital, which represented an introduction to the financial crisis (Escrivá, Garcia-Herrero, Nuño, & Vial, 2008).

According to a number of authors, the setting of the international monetary and financial system was one of the main reasons for the beginning of the great financial crisis in 2008. Namely, before the crisis, on one hand, the global markets were dominated by a low risk premium, and on the other hand, the capital imbalance and weak control of capital flows, especially in East Asian countries caused a surge in non-performing loans (Dorrucci & McKay, 2011). Many renowned economists during the crisis claimed and initiated the need to create reforms for the international monetary system, consequently the leaders of the G20 countries-initiated reforms to it. The reforms mainly consisted of reforming the International Monetary Fund, modifying the decision-making process by giving more weight to fast-growing economies such as China, Turkey, South Korea, Brazil and Mexico, but also giving them a higher degree of involvement to smaller countries, that is, countries with lower incomes. The second package of reforms consisted of reforming the way of ranking the equity shares in order to give a clearer picture of the economic conditions in the world, strengthening the legitimacy and broader functions of the IMF, also increasing the degree of involvement of poor countries in the adoption of decisions by the IMF. In the domain of banking operations, the reforms referred to the reinstatement of the international settlement of payments and the creation of additional prudential measures and rules for increased transparency, supervision of commercial banks by central banks (Uddin, 2011).

Although the international monetary system was reformed several times, as a result of the deepening conflicts between the so-called West and East, that is, on one hand the USA and the EU and on the other hand Russia and the booming economy of China and the formation of the BRICS bloc, which faced a process of de-dollarization by the member countries of the newly established political-economic bloc. The US dollar as the dominant currency in the domain of world trade and finance is becoming an increasing challenge for the BRICS countries, which also in a political sense appear as opponents of US hegemony. A number of authors argue that mutual trade agreements between the BRICS countries, especially those of China and Brazil, whose focus is trading in their national currencies and abandoning the dollar as a means of payment, will contribute to the weakening of the dollar's power (Gerding & Hartley, 2023). The start of the military conflict between Russia and Ukraine has deepened the de-dollarization process so that countries that appear to be supporters of the Russian Federation are signing mutual trade agreements where goods are paid for in their national currencies, and the US and the EU are increasingly approaching a process of introduction of mostly economic and financial sanctions. The American Senator Rubio, during the introduction of sanctions claimed that they will contribute to the weakening of the dollar, and by expelling Russia from SWIFT, other countries will be encouraged to trade and pay in currencies other than the dollar. As a result of the Russian-Ukrainian military conflict and the sanctions against Russia, the BRICS countries are increasingly initiating to move towards creating a currency union that will completely be independent of the US dollar, and the "BRICS" currency will be a counterpart to the dollar (Lukack, 2023).

3. RESEARCH METHODOLOGY

The research is composed of regression analysis using the method of least squares and secondary data. The regression refers to the period from January 2022 until June 2023 on a monthly basis. When selecting data sources, several criteria were applied, such as: the relevance of the institution that publishes them, the date of publication, and the degree of contribution to the research.

The regression analysis is represented by the following formula:

$$INF_t = \beta_0 + \beta_1 GAS_t + \beta_2 OIL_t + \beta_3 EDE_t + \epsilon$$

t – month spanning from January 2022 to June 2023

ε – residual

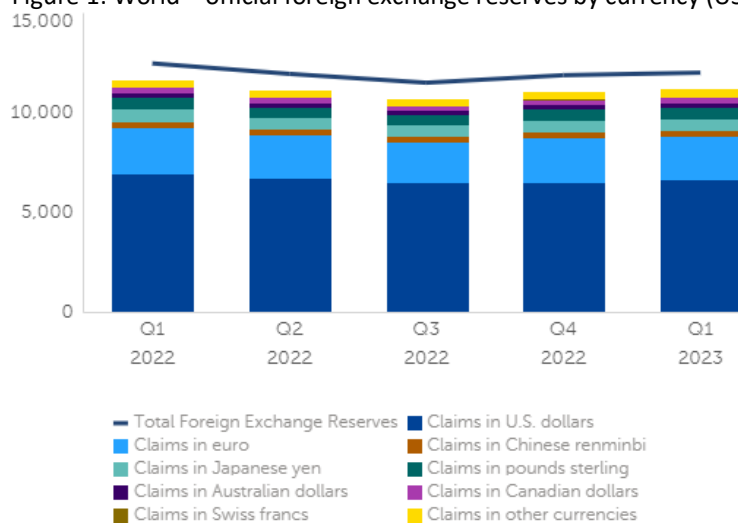
Variables	Acronym	Unit	Source
Monthly inflation rate (dependent)	INF	INF_t	Eurostat
Average monthly gas price in the Eurozone (independent)	GAS	β_1	Eurostat
Average monthly price of Brent oil (independent)	OIL	β_2	FED
Exchange rate of the euro against the US dollar (independent)	EDE	β_3	FED

4. THE ROLE OF THE US DOLLAR IN WORLD TRADE

Although the American dollar is facing strong competition from the rapidly growing Chinese economy, avoiding it in trade between the BRICS countries and the attempt of de-dollarization, it is still the dominant currency in the world financial system.

According to graph 1, it can be concluded that most of the world's foreign exchange reserves are denominated in US dollars, namely according to the data, there is almost no shift in the distribution of the denomination in the world's foreign exchange reserves for the period of 2022 and the first quarter of 2023, that is, after the start of the military conflict between the Russian Federation and Ukraine, which indicates the stability of the 60% share of the US dollar in the total foreign exchange reserves. Unlike the US dollar, the share of the Chinese Renminbi as a rising currency is 3%. Similarly, the US dollar is a determinant of the stability of world trade, whereby the world trade order is based on: 1) the flow of US trade, 2) the macroeconomic situation of the US and 3) the monetary policies created by FED. It can also be concluded that the fluctuations of the value of the dollar in relation to other currencies, especially those that create the value of special drawing rights (SDR), can disrupt the world trade order, and thus the international monetary system. Based on the available data, the process of de-dollarization of world trade still has no effect in the domain of world trade.

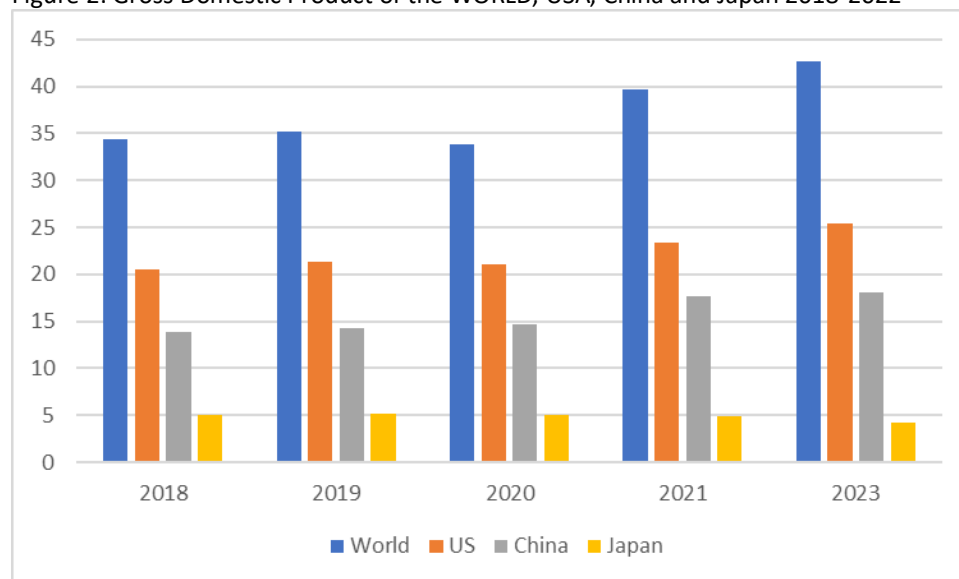
Figure 1: World – official foreign exchange reserves by currency (US Dollars, Billions)



Source: International Monetary Fund <https://data.imf.org/?sk=e6a5f467-c14b-4aa8-9f6d-5a09ec4e62a4>

Based on graph 1, it can be concluded that from 2018 to 2022 the world GDP is growing, also the GDP of the USA and China are growing, but the GDP of the USA is increasing with a greater progression compared to China, Japan's GDP from 2019 records a decline. According to the data, the US GDP in 2018 has a share of 60% in the total GDP, and China's 40%. In 2022 The USA participated with 60% in total GDP, which indicates stagnation, China's share is growing, so that in 2022 amounts to 42%. Although in the short term it will not cause significant disruptions in the shares, but in the long term it can change the situation, this additionally affects the significant drop in Japan's participation in the world GDP, which from 15% in 2018 the same drops to 10% in 2022.

Figure 2: Gross Domestic Product of the WORLD, USA, China and Japan 2018-2022



Source: International Monetary Fund

https://www.imf.org/external/datamapper/NGDP_RPCH@WEO/OEMDC/ADVEC/WEOWORLD

5. ECONOMIC EFFECTS OF THE RUSSIAN-UKRAINIAN CONFLICT ON THE EUROZONE

Eurozone countries, most of which are members of NATO, sided with Ukraine after the start of the military conflict, and in addition to supporting it with weapons and military training, they also imposed significant sanctions on the Russian Federation, including: a ban on the import of Russian products, semi-products and energy, also part of the Russian capital in Europe was frozen, and the Russian Federation was excluded from SWIFT. In the short term this contributed to, on one hand the overflow of capital that is not frozen from Europe to other countries, and on the other hand to the rapid growth of energy prices on the world stock markets. As a result of Europe's dependence on Russian energies, the increase in the price of the same, and the appreciation of the US dollar in relation to the euro, the Eurozone faced a significant increase in inflation, an increase in the budget deficit and an increase in public debt. According to the results of the regression statistics, it can be concluded that 87% of the inflation growth in the Eurozone is determined by the growth of energy prices in the Eurozone and by appreciation, and the remaining 13% are explained by factors that are not covered by the research.

Table 1: Regression statistics

Regression Statistics	
Multiple R	0,876100164
R Square	0,767551497
Adjusted R Square	0,717741104
Standard Error	0,858261441
Observations	18

Source: Author's calculation (Excel)

Based on the regression results, it can be concluded that the growth of the US dollar in relation to the Euro has the most significant share in the growth of inflation in the Eurozone ($p=0.00$). Also, the increase in the price of BRENT oil has a negative impact on inflation, that is, it contributes to its growth.

Table 2: Regression results

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	-28,95069283	8,8764835	-3,261504721	0,00568117	-47,988856	-9,9125292
EU Gas price	-0,004287081	0,0118015	-0,363265046	0,721833334	-0,0295988	0,0210247
Crude oil price	0,024387987	0,0256367	0,951293739	0,357590745	-0,0305972	0,0793731

Euro-dollar	37,19990886	8,6429892	4,304055935	0,000727811	18,662541	55,737277
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Source: Author's calculation (Excel)

6. THE ROLE OF THE CHINESE RENMINBI IN INTERNATIONAL TRADE

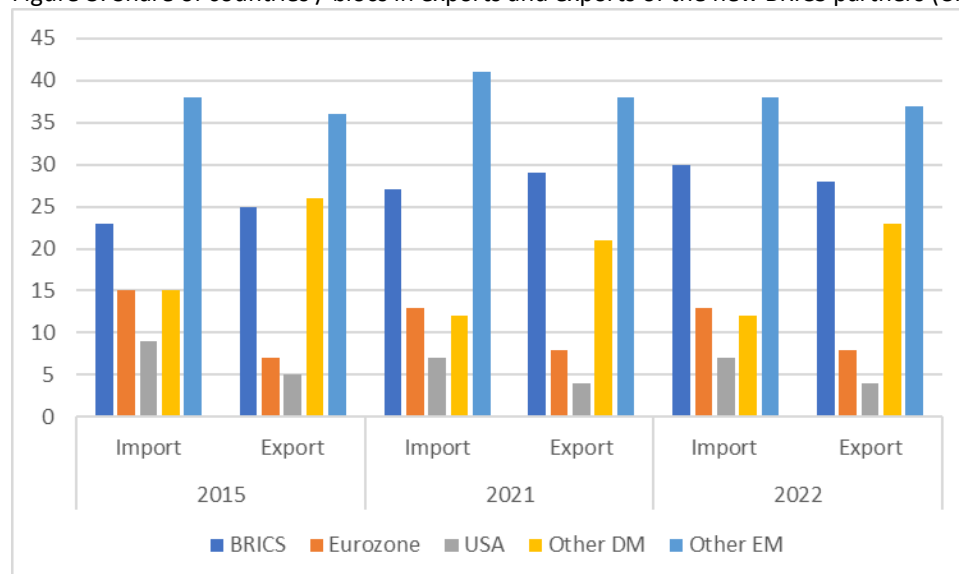
The Renminbi, as one of the currencies whose value is a determinant for calculating the value of the SDR, is on the rise for several reasons, namely: 1) the growth of the Chinese economy over 5% annually, 2) the de-dollarization process, 3) the flow of capital in the Russian Federation after the start of the military conflict between Russia and Ukraine and 4) the flow of capital within the BRICS bloc.

It is characteristic that after the beginning of the military conflict between Russia and Ukraine, the BRICS bloc began to expand significantly, thus, in addition to Iran and the United Arab Emirates, Saudi Arabia was also invited, which increasingly has a pro-Russian political attitude. Considering the fact that Saudi Arabia is one of the strongest economies and a country that has large reserves and is the largest exporter of oil, this will have a significant negative impact mostly on the dollar, since trade between Saudi Arabia and the BRICS is already carried out through Chinese currency. In 2022 the country exported about 7.3 million barrels of oil, with 2.5 million meant for China and India.

According to a great deal of analysis made by economists, the BRICS expansion with the UAE and Saudi Arabia will contribute to an increase of 16% in BRICS participation in world trade and reinforcement of de-dollarization.

From graph 3, it can be concluded that the role of the BRICS bloc in imports and exports to the potential new BRICS countries, the UAE and Saudi Arabia, has a permanent growth. It is characteristic that the role of the United States is in decline. If it is taken into account that the potential countries are extremely developed and rich in economy and are located in a region rich in oil and oil derivatives, their trade partners and foreign trade policy have a significant impact on the rest of the trade flow and capital inflows and outflows.

Figure 3: Share of countries / blocs in exports and imports of the new BRICS partners (UAE and Saudi Arabia)



Source: International Monetary Fund / <https://www.ing.com/Newsroom/News/BRICS-expansion-The-Saudi-surprise-adds-momentum-to-the-de-dollarisation-debate.htm>

CONCLUSION

The beginning of the Russian-Ukrainian conflict contributed to the tightening of political and economic relations in the world, so that the same conditions strongly reinforced de-dollarization, disruption of capital flows and structural changes in international trade. Although the countries of the so-called West introduced sanctions against Russia, but did not contribute to the slowdown of the Russian economy, but to the growth of inflation in the Eurozone, the rise of the BRICS and the strengthening of the position of the Chinese Renminbi within the international monetary system. From the research it can be concluded that the foreign exchange reserves are still stable in terms of the currency structure, and the US dollar still has a dominant role in the field

of foreign exchange reserves, that is, the USA still has the primacy of an economic superpower even though it is in decline. The onset of the conflict and the sanctions caused an appreciation of the dollar, and as a result the Eurozone faced a rapid rise in inflation and a significant economic downturn, and the BRICS countries, mostly China, started trading in their national currencies or the Chinese Renminbi. Consequently, from the aspect of international payments and trade, the process of de-dollarization began, which created conditions for the destabilization of the international monetary system and the need to reform it, where it would rely on the concept of currency multilateralism and the abolition of the US dollar as hegemon and stability factor of the international financial and monetary system.

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The Size of the Business as a Determinant of the Interest Rate for Bank Loans - Comparative Analysis Between Kosovo and North Macedonia From the Banks' Perspective

Prof.Ass.Dr. Filloreta Kunoviku Demiri, EDBA¹

Prof.Assoc.Dr. Qazim Tmava²

Prof.Assoc.Dr. Ajtene Avdullahi³

Elena Gjorevska, PhD, EDBA⁴

¹ Faculty of Economics, University "Isa Boletini" in Mitrovica, Kosovo, E-mail: filloreta.demiri@umib.net, ORCID: 0000-0002-8849-4417

² Faculty of Economics, University "Isa Boletini" in Mitrovica, Kosovo, E-mail: qazim.tmava@umib.net, ORCID: 0000-0002-3738-8649

³ Faculty of Economics, University "Isa Boletini" in Mitrovica, Kosovo, E-mail: ajtene.avdullahi@umib.net, ORCID: 0000-0001-6358-8399

⁴ University American College Skopje, North Macedonia, E-mail: elena.gjorevska@uacs.edu.mk, ORCID: 0009-0004-4447-7211

Abstract: Business financing is one of the main factors that influence business growth and development in every country. This is an important topic among researchers worldwide, that needs continual research from different approaches. Furthermore, bank loans are considered as the main sources of business finance and, are considered as external sources of financing. Whereas, interest rates are considered as the main obstacles to using bank loans as a financing source. Despite their size, businesses contribute to employment as well as to the economic development of developed and developing countries. Regardless of their size business growth and investment depend on financing. In this paper, we aim to investigate whether the interest rate offered by banks differs depending on the size of the business. For this purpose, a comparative analysis of the interest rate for bank loans based on the banks' perspective between Kosovo and North Macedonia has been conducted, aiming to analyze the impact of the size of the business on the interest rate of loans.

For our research purpose we have reviewed the existing literature and, the primary data were collected through qualitative research conducted on banks in the Republic of Kosovo and in the Republic of North Macedonia. In addition, the secondary data we have collected from state institutions, EU reports, research reports, etc.

The results revealed that in both countries more than 70% of the banks do not apply the same interest rates for all business sizes and, some reasons for these differences are presented. Finally, the findings are presented, recommendations for the main stakeholders are drawn, and suggestions for further research and provided.

Keywords: Businesses, Banks, Loans, Interest Rates, Kosovo, North Macedonia.

1. INTRODUCTION

Regardless of their size, each business holds a key position in promoting economic growth in both developed and developing countries. In Kosovo and North Macedonia, approximately 90% of enterprises fall under the SME category, emphasizing their essential contribution to the economic advancement of these countries. Particularly, bank loans serve as a primary means of external financing for SMEs in both regions, and the presence of financial barriers is notable as a significant challenge encountered by these small and medium-sized enterprises (Demiri, Tmava, & Durguti, 2021).

In Kosovo, bank loans stand out as one of the limited options for SMEs seeking external financing. This limitation contributes to the elevated costs associated with bank financing, driven by factors such as short grace periods, high operational costs, huge collateral requirements up to double value from the required amount for the loan, the short period of the use of financial assets even in the case of investment loans, loan administrative fee (Demiri, Tmava, & Durguti, 2021).

Accordingly, access to finance is a significant issue for the North Macedonian SMEs. The underdeveloped financial market, unawareness of additional sources of finance, and illiquidity issues of the companies have made them susceptible to financial shocks from the domestic and the world's economies. Hence, most of the companies have used bank loans, although, they have initially suggested that commercial banks are offering banking loans with high interest rates (Boshkoska & Lazaroski, 2016).

The significance of bank loans for business growth is substantial, and as high financing costs are prevalent in both countries, this research aims to analyze whether the size of the business influences the interest rates from the perspective of banks.

2. LITERATURE REVIEW

When we examine the history of today's largest businesses, we find that each of them began as small enterprises. There is no guarantee that growth will ensure a business's success. Large businesses can encounter financial difficulties that may lead to bankruptcy. Not every business needs to evolve into a giant company with billions of dollars in sales and thousands of employees. However, even small businesses seek new customers, increased sales, and higher profits. Businesses can finance their growth by attracting additional investments, borrowing more funds from lenders, or reinvesting profits. Each of these alternatives requires the business to maintain financial health (Dlabay & Burrow, 2008, p. 68).

Bartlett and Bukvic identify two perspectives on the primary barriers to growth. The first perspective is referred to as the 'finance' approach, which posits that the main obstacles to SME growth are associated with financial constraints. In principle, these constraints could be surmounted by providing subsidized or low-cost financing, establishing credit guarantee agencies, implementing micro-credit schemes, or creating venture capital funds (Bartlett, Bateman, & Vehovec, 2002, p. 6).

The second perspective, labeled the 'institutional' approach by Bartlett and Bukvic, contends that non-financial barriers are the primary impediments to growth. This approach emphasizes that even with abundant low-cost credit or easy access to equity finance, the barriers to SME growth persist if the institutions of a market economy are absent, or if there is unfair competition and low levels of trust and social capital. These factors significantly raise the transaction costs of doing business (Bartlett, Bateman, & Vehovec, 2002, p. 6). The access to finance is crucial to business development. Investment and innovation are not feasible without sufficient financing. Difficulty in securing financial support remains one of the primary impediments to the growth of numerous businesses, especially small and medium-sized enterprises (SMEs). While there has been an increase in financial flows for SMEs, it still remains limited. Access to finance continues to be a significant concern for many SMEs. In developing countries, the situation is even more difficult in terms of access to finance for businesses owned by women (Avdullahi & Fejza Ademi, 2020). When comparing various types of enterprises, micro-enterprises, and particularly more innovative businesses, consider financing to be their most pressing issue. Bank loans continue to be the most vital source of external funding for SMEs in the EU (Commission, Survey on the Access to Finance of Enterprises, 2014).

It has been observed that lower bank interest rates have a positive impact on profitability. This implies that when interest rates are lower, SMEs can secure more substantial loans from banks, enabling them to invest in projects aimed at enhancing profitability, ultimately contributing to the measured growth of SMEs (Belas, Cepel, Kotaskova, & Dvorsky, 2018).

Lower interest rates often signify favorable conditions for businesses, while higher interest rates may prompt a manager to consider postponing expansion or growth until the cost of borrowing decreases (Godsway, 2017).

3. RESEARCH METHODOLOGY

The research paradigm of this paper is qualitative. The qualitative research was conducted through interviews in banks in Kosovo and North Macedonia.

Our research sample consists of 25 banks in Kosovo and North Macedonia. For our research purpose, we interviewed:

- 10 banks in Kosovo, and
- 15 banks in North Macedonia.

The research questionnaire is comprised of 16 questions that have to do with the bank's approach to financing SMEs, and, our focus was on gathering information for different subjects, including conditions for financial support of the SMEs. The study has used descriptive design to support results from questionnaires. Whereas the research is qualitative.

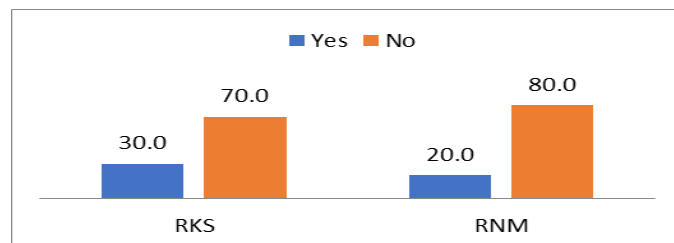
This study has used primary and secondary data. The primary data was collected through interviews conducted with representatives from Banks, while the secondary data came from institutions of the Republic of Kosovo and North Macedonia, EU reports, World Bank, BSCK, CBRK, and OECD reports. In addition, the relevant literature was reviewed.

4. ANALYSIS AND DISCUSSION OF RESEARCH RESULTS

The role of bank loans offered by commercial banks is of utmost importance in fostering entrepreneurship and, consequently, in the development of small and medium enterprises (SMEs) (Mazreku, Morina, & Mazreku, 2016). Loans, as an external source of financing for small and medium enterprises, is traditionally the most common method, but it is also an expensive means of financing (Risteska, Nikoloski, Gveroski, Spaseska, & Risteska, 'Analysis of SME Financing in the Republic of Macedonia - Conditions and Perspectives,' 2014).

In the questionnaire, we inquired whether banks apply identical interest rates to borrowers of all business sizes. In Kosovo, 3 out of 10 banks (30%) affirmed that they do apply uniform interest rates for all business sizes, while 7 out of 10 banks (70%) stated that they do not. Conversely, in North Macedonia, 3 out of 15 banks (20%) indicated that they maintain uniform interest rates for all business sizes, while 12 out of 15 banks (80%) reported that they do not.

Figure 1. The compared results of the bank's responses from Kosovo and North Macedonia regarding the consideration of business sizes when determining interest rates (Source: Authors)



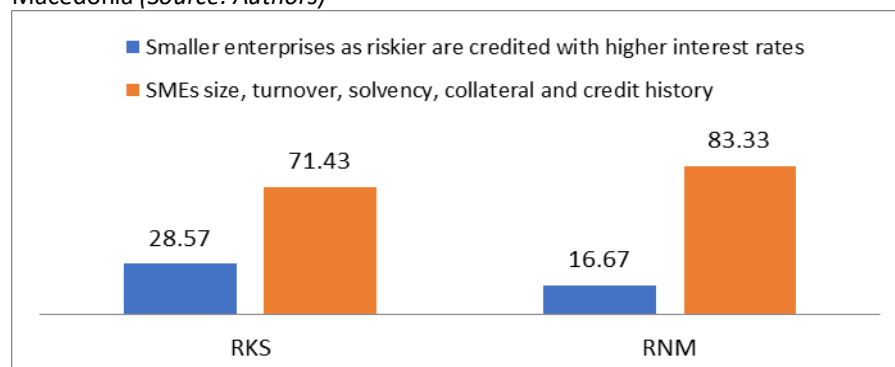
Based on the results obtained, it is evident that in both countries, over 70% of the banks do not employ identical interest rates for all business sizes.

Among the banks that responded negatively to the previous question, we requested them to outline the variations in interest rates based on the business size. In Kosovo, this involved 7 banks, whereas in North Macedonia, it included 12 banks.

In both countries, banks have categorized the factors influencing the determination of interest rates for different business sizes into two groups:

1. Smaller enterprises are considered riskier, resulting in higher interest rates. In Kosovo, 28% of the banks specified this as a factor influencing interest rate determination, while in North Macedonia, 16.67% of the banks identified this as a contributing factor.
2. A combination of SME size, turnover, solvency, collateral provided, and loan history plays a role. In Kosovo, 71.43% of the banks have cited this as a factor affecting the determination of interest rates, while in North Macedonia, 83.33% of the banks have identified this as an influential factor.

Figure 2. The percentage of differences in interest rates regarding business size, in Kosovo and North Macedonia (Source: Authors)



5. CONCLUSION AND RECOMMENDATION

The significance of bank loans as external sources of financing for SMEs and the factors affecting the interest rates on these loans have been subjects of debate for many years, both in developed and developing countries. It's worth noting that these debates have not only taken place among academics but have also been prevalent in the business world.

In our research, we examined the impact of business size on the interest rates for bank loans, as external financing sources for SMEs in the Republic of Kosovo and the Republic of North Macedonia, both of which are Western Balkan countries. Our analysis of the results reveals that in both countries, over 70% of banks do not apply uniform interest rates for all business sizes.

Furthermore, our findings indicate that more than 70% of banks in both countries consider a combination of factors such as SME size, turnover, solvency, collateral, and loan history when determining interest rates. In contrast, less than 30% of banks in both countries believe that smaller enterprises are riskier and thus deserve higher interest rates. Our findings align with those of Vuvor and Ackah (2011), who investigated the challenges faced by SMEs in Ghana when seeking loans. The study's results showed that, like SMEs in other countries, SMEs in Ghana encounter significant difficulties in securing financing. Factors contributing to this challenge include SMEs' inability to provide collateral and the required bank documentation, as well as the high cost of loans due to elevated interest rates (Vuvor & Ackah, 2011).

The topic we've examined is of paramount importance for the development of SMEs and the overall economic progress of any country. It's essential to note that our research focused solely on business size as a determinant of interest rates for bank loans, with a comparative analysis between Kosovo and North Macedonia from the perspective of banks. We acknowledge that other variables also play a role in influencing interest rates for business borrowers, opening avenues for future research in this field."

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Albanian Women Entrepreneurs and the Work-Family Conflict

Frederik Cucllari¹

Mirela Cini²

Matia Cucllari³

¹ Faculty of Economy, “Fan S. Noli” University, Korce, Albania, fcucllari@gmail.com

² Faculty of Economy, “Fan S. Noli” University, Korce, Albania, mirelacini@yahoo.com

³ Faculty of Economics and Business, KU Leuven, Brussels, Belgium, matiacucllari@gmail.com

Abstract: Women entrepreneurs are one of the fastest growing populations of entrepreneurs in the world. According to the GEM 2021/22 Women’s Entrepreneurship Report, globally, women represent about one in three high-growth entrepreneurs and one in three innovation entrepreneurs that are focused on national and international markets. In Albania, women in business are a recent phenomenon, starting after 1990 when major changes occurred in the transition period from a centralized to a market economy. Since 1991 and onwards the number of businesses created and ran by women continues to increase. Women-owned businesses are progressively diversifying into multiple entrepreneurial industries. In addition to managing their business, women have an important role in the family unit. They have major responsibilities that concern taking care of the house as well as raising their children. This multitude of duties they have to fulfill has led to the rise of the work-family conflict. The paper includes problems and challenges faced by women entrepreneurs in an effort to balance their role as a family member and their work efficiently. The picture that emerges of the finding is that women entrepreneurs face a lot of challenges in the Albanian socio-economic context and a lot of progress needs to be put forward in creating a conforming environment for women as they start and grow successful businesses that promote economic and social development for themselves, their families, their community and their country.

Keywords: Albania, women entrepreneurs, work-family conflict.

1. INTRODUCTION

Entrepreneurs are a key driving force of modern economies. The entrepreneurial spirit may manifest itself in the development of new markets, new products, new methods of production and management, the discovery of new inputs and the establishment of new businesses and even new organizational forms (Harper, 2003). The entrepreneurial field is no longer dominated by men as women entrepreneurs are one of the fastest growing entrepreneurial populations in the world. Some reasons as to why this is are stated by different researchers trying to form an explanation about the recent trend of women inclusion in the entrepreneurial space. The existing literature on entrepreneurial motivations has predominantly focused on ‘push’ versus ‘pull’ factors (Stevenson, 1986; Orhan and Scott, 2001; Schjoedt and Shaver, 2007). Push factors refer to factors that relate to necessity-based entrepreneurship such as unemployment, glass ceiling, redundancy, recession, inadequate family income, dissatisfaction with the current job, the need to accommodate work home roles simultaneously. The pull factors are opportunity-based. They may result from the need for independence, need for a challenge, improved financial opportunity, need of fulfilling a desire, flexibility for balancing family and work, potential to develop a hobby, personal achievement, and role models and other people’s influence (friends and family).

The firms owned by women are distributed across all sectors of industry. Top sectors for women include: health care (doctors and dentists), education services, social assistance (residential care facilities and child care providers), personal care services (beauty salons and dry cleaners), professional/technical/scientific services (accountants, public relations and human resources development consulting) and retail trade. Studies on women entrepreneurs show that their participation is lower in the IT and production sector compared to other sectors (European Commission, 2013; Niethammer, 2013). According to Verheul et al. (2006), entrepreneurship is tied to the economic development of a country.

In Albania, women in business are a recent phenomenon, starting after 1990 when major changes occurred in the transition period from a centralized to a market economy. Since 1991, the number of businesses created and ran by women continues to grow. Firms owned by women continue to diversify into all industries. Yet, women-owned firms still have a long way to go to achieve parity with men-owned firms.

The aim of this paper is to assess the intensity of women as entrepreneurs in Albania. The paper includes problems and challenges faced by women entrepreneurs in an effort to balance their role as a family member and their work efficiently. The analysis is based on data collected through literature surveys, statistics come

mainly from the Institute of Statistics (INSTAT), national surveys on women entrepreneurs in Albania and some empirical studies.

The paper is organized as follows: Section 2 discusses the literature concerning the work-family conflict and the factors that influence the success of women in entrepreneurship. Section 3 provides an image of the Albanian woman and her role in the national economy. In Section 4 problems and challenges relating to women entrepreneurs in Albania are mentioned. Lastly, the paper provides a conclusion.

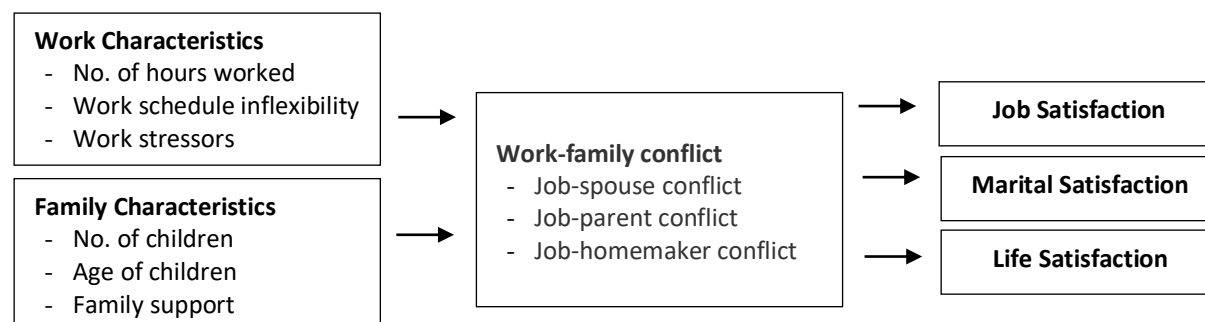
2. THEORETICAL FRAMEWORK

2.1. Work-family conflict

Work-family conflict arises from the work and family domain. Work-family conflict occurs when the pressures from the work and family domains are mutually incompatible, and as a result, participation in the family role is made more difficult by virtue of participation in the work role (Weer and Greenhaus, 2014). According to Greenhaus and Beutell (1985) conflict is divided into three types: (1) time-based, when the responsibilities in one domain use time that is essential to perform tasks in the other domain; (2) tension-based, arising from stressful situations in one sphere, which interfere with the duties of the other sphere; and (3) behavior-based, when there is a non-conformity of the roles assumed in the respective environments of inclusion.

Conversely, Kim and Ling (2001) studied work-family conflict separated in three subcategories, namely job-spouse conflict, job-parent conflict and job-homemaker conflict (Figure 1). Work-family conflict can affect the well-being of a person, influencing a person's satisfaction with his/her job, marriage and life.

Figure 1. Framework on work-family conflict



Source: Kim and Ling, 2001

2.2. The success factors of women entrepreneurs

Despite the significant contribution of women in entrepreneurship, challenges and barriers that impede further success are present. (Torres-Ortega, Errico, & Rong, 2015). The measurement of success of women entrepreneurs is based on different perspectives. Feng et al., (2023) study the influence of such factors as personality traits, motivation and commitment, availability of financial resources, and government support, on entrepreneurial success. According to Alam et al., 2011 family support, social ties and internal motivation have a significantly positive influence on the success of women entrepreneurs in the small business space. Itani et al. (2011) claimed that three major factors which contribute to women entrepreneurs' success include family support, self-confidence to achieve their target and increased profits.

2.3. Work-family conflict and women entrepreneurial success

Women entrepreneurs face challenges and problems that hinder their economic performance, professional achievements and personal contentment. Many women entrepreneurs have to partake in multiple roles in their families, in addition to their career. They have the main responsibility when it pertains to house chores or taking care of children. These responsibilities create the work-family conflict, which turns into an obstacle in managing their business.

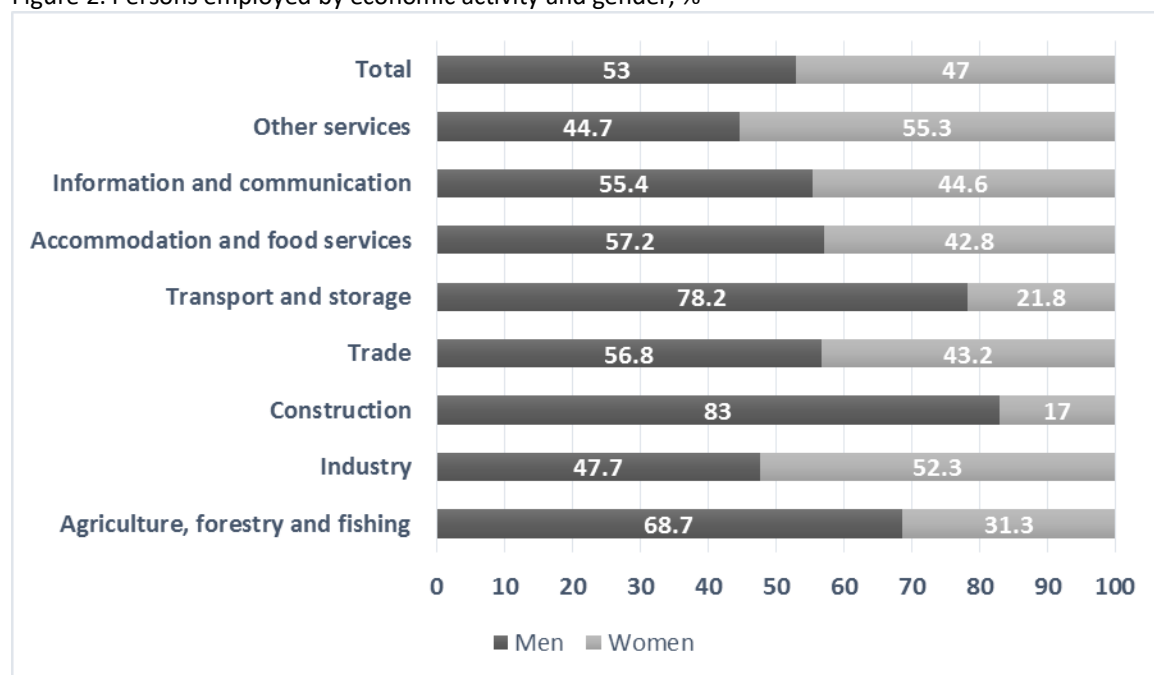
Women face many challenges in business such as limited capital, knowledge, lack of industry experience and work-life roles balance. The family unit plays an important role in the process of business creation. Jennings

and McDougald (2007, p. 747) emphasize that the “models of entrepreneurial outcomes are, to a certain extent, incomplete without attention to work–family considerations”.

3. WOMEN IN THE ALBANIAN ECONOMY

By the end of 1989, employment rates were high for women and men (94 per cent for men and 85 per cent for women). Women and men were under the communist regime, supposedly equal in all aspects of society. With the fall of the communist regime structural inequalities between men and women became evident coupled with the challenge to rediscover and learn the function of the market economy (OECD, 2004). During the early years of the transition period employment rates changed (50 per cent for men and 60 per cent for women). This was a direct consequence of major changes that took place in Albania during its transition from a centrally planned to market-oriented economy in 1991-1992. By the end of 2022, women cover 47,0% of the total employment (Figure 2) and the sector with the lowest representation of women is construction (INSTAT, 2022).

Figure 2. Persons employed by economic activity and gender, %

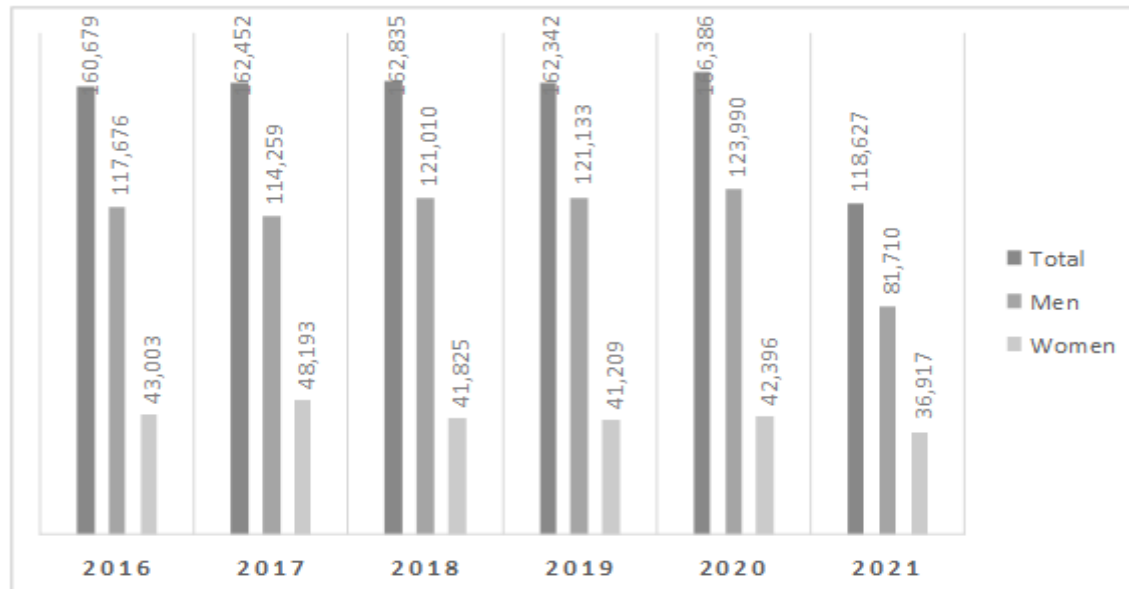


Source: INSTAT, 2022

In the years 1993-1994, the privatization of the state enterprises commenced which gave an impetus to the creation of the private sectors. However, the participation of women in the private sector stands at even lower levels. The national surveys show that female unemployment is characterized by greater difficulty in finding new jobs (Cucllari et al. 2010). On the other hand, many women are not seeking gainful work in waged employment outside their home because of the increase in unemployment that has accompanied the transition period. Another obstacle to the involvement of women is male emigration. Many men, in fact, have gone abroad leaving their womenfolk to look after their families. Women in this position obviously have little or no time to run a business, and some may not need another source of income due to the income received from “emigrants’ remittances” (Bezhani, 2001).

The economy of Albania is dominated by micro and small enterprises. According to official data obtained by the INSTAT (2022), the number of active enterprises ran by women is about three times lower than that of men. The percentage of active enterprises ran by women has remained almost stagnant during the period 2016-2020 (Figure 3).

Figure 3. Active enterprises by gender of owner/administrator in Albania during 2016-2020



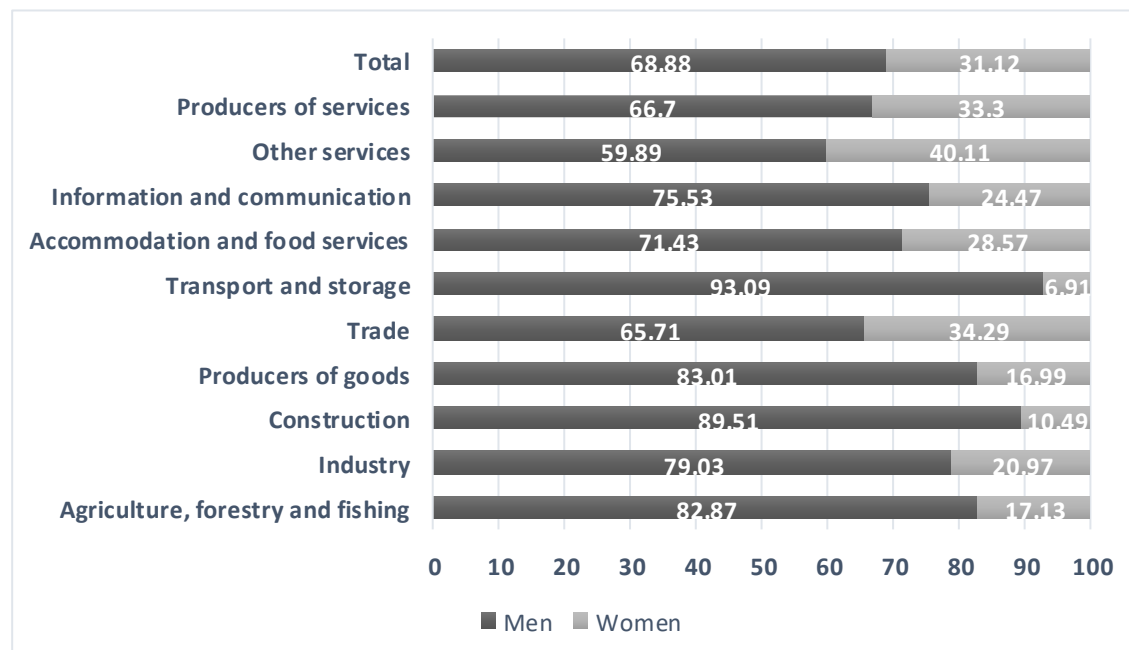
Source: INSTAT, 2022

32.4 per cent of total enterprises ran by women have 1-4 employees, while for the enterprises with 50+ employees the percentage is 23.6 (INSTAT, 2022). Most women are self-employed. The studies show that women entrepreneurs employ very few workers for two main reasons:

1. High social security contribution rates;
2. Low levels of vocational training attained by job seekers.

The structure of women's entrepreneurship tends to change very little over the course of time. Women's enterprises can thus be said to be typically in three sectors (Figure 4): trade (wholesalers and retailers); services (dentists, dispensing chemists, lawyers, public notaries, hairdressers, etc.) and industry (this sector mainly comprises of women engaged in the processing of milk, publishing houses, textile operations, dressmaking and craftwork).

Figure 4. Active enterprises by gender of owner/administrator and economic activity in Albania (%), 2021



Source: INSTAT, 2022

4. SOME BARRIERS TO SUCCESS

Drivers and barriers faced by men and women entrepreneurs are shown to be different, mainly because of the different roles that the society expects men and women to play and the environment that fosters entrepreneurship. Multiple and simultaneous roles held by women within society can support findings that women start a business later in life, rather than early when young (Bezhani, 2001). A woman is more likely to face dual responsibilities in the household, lack of collateral because of limited ownership rights, being sole income earners in the household, as well as other contextual barriers that limit their earning ability. Reportedly, additional incomes for themselves or families is the number one reason behind the establishment of a business by a woman (Ramadani, 2015), alongside other key reasons such as freedom and control in decision making (World Economic Forum, 2023).

The studies on women entrepreneurs in Albania show that a typical woman entrepreneur in Albania has a university education, manages a micro enterprise, before reaching the age of 30 and continues to be present in the business world for 10–15 years. The reasons behind establishing and maintaining a business motivated to undertake an entrepreneurial career due to the existing possibility focus on substantial profit, desire to work exclusively for themselves on their own account and aim to reach significant career achievements. They are normally married, have one or more children; nonetheless they devote a significant portion of their time to work (more than 10 hours a day) (Ramadani 2015).

Examination of the reasons why businesses close down throws light on the difficulties that Albanian women face. Among these are:

- Lack of funding;
- External factors, such as divorce, marriage and family life;
- Collapse of finance companies (some firms lost part of their venture capital);
- Women entrepreneurs tend to lack the self-confidence needed to make new investment decisions;
- Lack of appropriate support and expertise;
- Political and economic instability; etc.

Top management roles may force women to choose between work and family, especially in the case of single mothers. While both women and men have less time to devote to their careers when their domestic responsibilities include spouses and children, many studies have documented that women are still responsible for the majority of household labor, and hence their careers are more affected by domestic roles.

5. CONCLUSION

Women entrepreneurs have an important impact on the economy. The firms owned by women are distributed across all sectors of the industry. The choice to start a new business for women globally is often linked to necessities or opportunities. In Albania, a woman in business is a phenomenon that began after 1990 with the major changes that took place in Albania during its transition from a centrally planned to market-oriented economy. The major social and economic changes in Albania during the last 30 years have brought upon important alterations to the position of women in family and society. One of the most significant being the inclusion of women in the labor market, enforcing their role in the economic development of the community as a whole. Nonetheless, women entrepreneurs are still an untapped source of business and job establishment. A substantial gap exists between male and female entrepreneurship. Women entrepreneurs have always been characterized by a small company size. The percentage of women who manage a business is low. From the brief review of problems for women entrepreneurs, it can be concluded that women entrepreneurs in Albania are subject to a number of barriers that limit their ability and capacity to lead their enterprises towards success. Statistics show that Albanian women entrepreneurs possess characteristics that reflect the socio-economic environment in Albania. Studies show that women are still mostly responsible for house labor, meaning that their careers are affected by their role in the household. This explains why they face a lot more problems in managing a business, with higher levels of conflict, stress and lower levels of contentment, hindering their overall wellbeing.

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Contemporary Measurements of Corporate Reporting in the context of the Sustainable Development Concept

Galina Chipriyanova¹

¹Tsenov Academy of Economics, Svishtov, Bulgaria, g.chipriyanova@uni-svishtov.bg, ORCID: 0000-0002-8339-3238

Abstract: Modern businesses are increasingly facing the imperative to integrate ecological aspects into their economic activities and corresponding reporting. This paper aims to analyze the novel aspects of corporate reporting concerning the ecological and sustainable challenges of the contemporary business environment in which they operate. Environmental preservation and sustainable practices have become integral focal points in disclosing the financial and non-financial aspects of corporate operations. The reporting of environmental impacts not only reflects the social responsibility of businesses but also offers them an opportunity to contribute the achieving sustainable development. With this research, we aim to analyze the recent standards related to the standardization of environmental reporting and sustainable development. These standards aim to achieve comparability and transparency among enterprises, as well as to track trends and accomplishments of the same enterprise during different reporting periods. The thesis defended in this research is that understanding and integrating environmental and sustainable aspects into management processes and corresponding corporate reporting becomes a crucial factor for their successful operation within the new way of doing business. This becomes even more significant as enterprises seek tools for communicating with stakeholders. Environmental and sustainable reports play an essential role in providing reliable and credible information about companies' policies, strategies, and practices concerning resource conservation and environmental preservation.

Keywords: reporting, financial reporting, non-financial reporting, environmental reporting, sustainable reporting, sustainable development

1. INTRODUCTION

The business today faces the challenge of meeting market demands and paying sufficient attention to the growing need to respond to environmental and social requirements from society. In the context of these substantive changes, corporate reporting takes on a new and significant role. It is no longer confined solely to historical financial data and financial reports but should be treated as a tool for communication between enterprises and stakeholders, as well as between enterprises and society as a whole. All of this underscores the relevance of the research – global changes such as climate change, limited natural resources, and the increasing role of corporate social responsibility require companies to respond quickly and appropriately to the environmental impacts of their business activities and to act responsibly within the framework of sustainable development.

Contemporary businesses are increasingly compelled to integrate environmental and social aspects into their business operations and reporting. The object of the paper is the modern dimensions of corporate reporting, particularly focusing on their ability to report for and communicate their efforts towards sustainability and environmental preservation. The subject of the research encompasses innovative methods, standards, and practices utilized by businesses to integrate environmental and sustainable aspects into their reporting.

The analytical approach, which involves analyzing contemporary standards for the standardization of environmental reporting and sustainable development, was applied during the research. This approach will examine how these standards enhance comparability and transparency among enterprises and how they reflect trends and achievements of businesses across different reporting periods.

The research presents a current overview of contemporary dimensions of corporate reporting and examines their significance and impact on businesses in today's rapidly changing world. The results of the study find expression in assisting businesses, which should consider contemporary trends and align their future activities with the developing facets and aspects that will impact corporate reporting within the framework of sustainable development.

2. THE RELATIONSHIP: “SUSTAINABLE ENTERPRISE DEVELOPMENT – SUSTAINABLE MANAGEMENT – SUSTAINABLE ACCOUNTING”

2.1. Sustainable Enterprise Development (SED)

It is the broadest and overarching concept encompassing the comprehensive management and growth of a company with a focus on its long-term viability. This includes all aspects of sustainability – economic, social, and environmental. SED (Javed, Yasir, & Majid, 2019) refers to the strategic approach that businesses take to ensure their growth and operations coordinating with the principles of sustainability. It goes beyond short-term profit and considers the long-term impacts of business activities on economic, social, and environmental aspects. The goal of SED is to create lasting value for the company, its stakeholders, and the broader community while minimizing negative impacts on the environment and society. Key components of SED include:

✓ *economic sustainability*, which involves managing financial resources in a way that supports the long-term viability of the business. It includes responsible financial practices, diversification of revenue sources, and ensuring profitability while considering the needs of present and future generations.

✓ *social sustainability* – finds expression in the realization that a crucial factor for the success of the enterprise is the workforce. Businesses need to consider the well-being and rights of employees, local communities, customers, and other stakeholders. This involves fair labor practices, community engagement, supporting human rights, promoting diversity and inclusion, and contributing positively to society.

✓ *environmental sustainability* – businesses must assess and reduce their environmental footprint. This includes minimizing resource consumption, reducing waste, adopting cleaner technologies, and addressing issues like climate change, pollution, and biodiversity loss.

✓ *innovation and adaptation*, which means that sustainable enterprise development requires businesses to be adaptable and innovative. This might involve developing new products and services that address societal challenges, adopting circular economy principles, and staying updated with changing market trends.

✓ *long-term perspective* – instead of focusing solely on immediate gains, sustainable enterprise development emphasizes long-term thinking. This involves considering the potential consequences of decisions over extended periods and planning for business continuity in the face of potential risks.

✓ *stakeholder engagement*, which means engaging with stakeholders such as employees, customers, investors, and local communities is crucial for understanding their needs, concerns, and expectations. Businesses can then adjust their strategies to align with these stakeholder interests.

Incorporating the principles of SED requires a change in companies’ practices. Many of them are adopting sustainability reporting frameworks, such as the Global Reporting Initiative (GRI) or the Sustainability Accounting Standards Board (SASB), to transparently communicate their efforts and progress in economic, social, and environmental areas. Ultimately, sustainable enterprise development aims to create a harmonious balance between profit generation, social responsibility, and environmental stewardship.

2.2. Sustainable Management (SM)

SM is an aspect that can be placed under sustainable development, highlighting the importance of sustainable practices employed for enterprise management (Beckmann, Schaltegger, & Land, 2020). This encompasses human resource management, corporate culture, transparency, and other aspects that contribute to the sustainable success of the enterprise. We will synthesize the most important aspects in the following table (see table 1):

Table 1. Crucial components of SM

<i>Human resource management</i>	<i>Transparency and accountability</i>
Integrating sustainable practices into human resource management involves supporting diversity, equality, and fairness in the workplace. This includes creating a stimulating and inspiring work environment that enhances employee morale and motivates them to deliver better results.	Transparency and accountability are essential components of sustainable practice. Enterprises need to provide clear information about their activities, including their environmental, social, and economic aspects. This helps stakeholders assess whether the company is genuinely following

sustainable practices.	
<i>Corporate culture</i>	<i>Innovation and adaptation</i>
A sustainable corporate culture aims to align the company's values with the actions of its employees. This involves promoting ethical behavior, open communication, and maintaining good relationships with stakeholders.	Enterprises that integrate sustainability into their operations are more likely to innovate. This might involve developing more environmentally friendly products and services that not only meet ecological standards but also create new market opportunities.
<i>Strategic planning</i>	
Sustainable enterprise management requires integrating sustainable aspects into strategic planning. This approach leads to the creation of long-term strategies that balance economic, social, and environmental goals.	
Source: Based on ideas from (Sustainability Report 2022).	

Incorporating sustainable practices into enterprise management not only supports its long-term success but also adds greater meaning and value to its activities. This creates a positive impact on both internal personnel and the business model, as well as on external relationships and society as a whole.

2.3. Sustainable Accounting (SA)

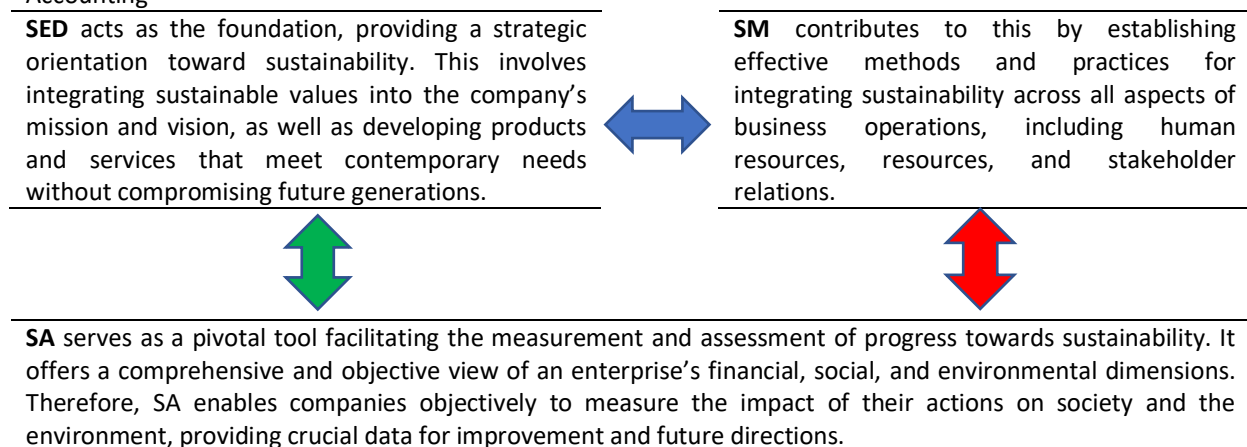
SA can be placed under sustainable management, emphasizing the importance of integrating sustainable aspects into the financial reporting of the enterprise. The focus is on environmental, social, and managerial data incorporated into the accounting process to provide a comprehensive picture of the enterprise's sustainability. The most important aspects of SA can be synthesized as follows:

- *environmental reporting* – refers to the preparation, presentation and communication of information relating to an organization's interactions with the natural environment; it is most commonly associated with self-reporting by companies although reporting about other enterprises by government agencies and other independent bodies and pressure groups remains an important pressure for environmental accountability (Grey, 2005). Companies commit to report their environmental impacts and efforts to minimize the negative effects on the environment. This might involve measuring gas emissions, waste management, water resource conservation, and other contributions to environmental sustainability.
- *social reporting* – “Sustainability Reporting is the practice of measuring, disclosing, and being accountable to internal and external stakeholders for organizational performance towards the goal of sustainable development.” (Richards & Wood) SA also encompasses reporting the social aspects of an enterprise's activities. This includes promoting employee well-being, maintaining positive community relationships, and adhering to social standards.
- *management reporting* – systematic or organized method of providing each level of management with all those data that needs for making decision, and in a form that aids management understanding and stimulates company's action (CHANDRAPRABHA). Enterprises use sustainable accounting for internal purposes, to manage and measure their sustainability. This could involve tracking key sustainability indicators, developing risk reduction strategies, and enhancing sustainable practices.

SA contributes to greater transparency and accountability to stakeholders such as investors, customers, and the public. This allows enterprises to show their commitment to sustainability and be accountable for their actions. SA has a significant role in organizational management, aiding them in adapting to a constantly evolving sustainable business environment. It helps companies integrate sustainability into their strategies, operations, and decisions, thereby creating value and contributing to a more sustainable future.

SED, SM, and SA form an interconnected and integrated framework aimed at enhancing businesses by integrating economic, social, and environmental dimensions. All three areas focus on the long-term viability of enterprises, emphasizing balanced growth that encompasses transparency, responsibility, and environmentally conscious behavior. The connection between them finds expression through the following figure (see Fig. 1):

Fig. 1. The relationship: “Sustainable Enterprise Development – Sustainable Management – Sustainable Accounting”



The relationship between SED, SM, and SA aims to enhance the sustainability, efficiency, and impact of enterprises, contributing to a more sustainable and balanced business model.

3. THE IMPORTANCE OF TRANSITIONING FROM TRADITIONAL REPORTING TO SUSTAINABILITY REPORTING

In the endeavor to emphasize the significance and necessity of this transition, we will analyze the different ways of enterprise's reporting starting with the traditional (financial) reporting and moving on to the newer types of reporting (non-financial, ecological and sustainable) today:

→ *financial reporting*, which encompasses the primary reports that provide information about the financial position and results of the company. They encompass data on revenues, expenses, profits, losses, assets, liabilities, owner's equity and other financial indicators. The objective of general purpose of financial statements is to provide information about the financial position of an entity; they are intended to serve users who do not have the authority to demand financial reports tailored for their own needs (Intermediate Level I1.2 FINANCIAL REPORTING, 2nd Edition February 2020). The primary types of financial statements are as follows: *A statement of financial position at the end of the period / Balance Sheet* (it provides a summary of an enterprise's assets, liabilities, and owner's equity over a reporting period; it shows the financial position of the enterprise at a given point in time); *A statement of comprehensive income for the period / Income Statement* (Profit and Loss Statement; it offers information about an enterprise's revenues and expenses over a reporting period; it provides insight into the results of a business's operations and whether it has achieved a profit or incurred a loss); *A Statement of Changes in Equity for the period* (it describes changes in the enterprise's equity over a reporting period, including the impact of profits, dividend distributions, and other transactions); *A Statement of Cash Flows for the period* (it analyzes how funds are generated and utilized during a reporting period. It offers an overview of the activities that have generated or used funds); *Notes comprising a summary of accounting policies and other explanatory notes*. Financial reporting is of utmost importance for investors, creditors, managers, and other stakeholders. It aids them in assessing the financial stability, risks, and opportunities of the enterprise, which, in turn, is crucial for making informed decisions and managing the enterprise in the long run.

→ *non-financial reporting* is a crucial tool for providing information about the non-financial aspects of an enterprise's activities. It complements financial reporting by encompassing social, environmental, and managerial aspects that are essential for measuring sustainability and the corporate social responsibility of the enterprise. A report published by a company about the Economic, Environmental and Social impacts of its operating business activities (Danielsson & Ek, 2020). Non-financial reporting allows companies to provide detailed information about their social and environmental impacts. This enhances transparency and accountability towards stakeholders, enabling them to better assess the enterprise's activities and commitments. Also, non-financial reporting has a significant role in building and strengthening the company's reputation. When a company demonstrates commitment to sustainability and responsible behavior, it can create a positive impression and instill trust among customers, investors, and the public. From another perspective, in many countries and regions, non-financial reporting is either required or recommended by

regulatory bodies. Enterprises need to preserve and adhere to standards, which can enhance their sustainability and interaction with society. We must not forget, that non-financial reporting enables companies to measure their social and environmental achievements and identify areas for improvement. This aids in planning improvement actions and building a more sustainable business model. All these means, that non-financial reporting contributes to the overall narrative of the enterprise and how it interacts with the world around it. It shows the company's commitment to sustainability, social responsibility, and societal contribution, which is becoming increasingly important in the modern business world.

→ *ecological reporting* allows enterprises to demonstrate their commitment to environmental responsibility and sustainability. This enhances transparency and builds trust among stakeholders such as investors, customers, and the public. Incorporating environmental aspects into reporting helps companies to identify potential environmental risks and opportunities. This improves their ability to anticipate and adapt to changes in regulations, climate factors, and societal expectations. Providing ecological reports enables enterprises to develop innovative solutions and products recognized as sustainable and meeting environmental standards. This can lead to new opportunities for market positioning and competitive advantage.

→ *sustainable reporting* is the broadest concept encompassing the view of a company's sustainability. Both financial and non-financial aspects are integrated, including environmental ones, providing information about the enterprise's efforts to achieve sustainability. Sustainable reporting is a process of collecting, analyzing, and providing information about various aspects of a company's sustainability. It encompasses a wide range of issues related to economic, social, and environmental aspects that impact the business's operations and its role in society. The aim of sustainable reporting is to offer a clear and objective picture of how the enterprise manages its social and environmental responsibilities, as well as the measures it takes to create positive and sustainable impacts. It includes information about diverse aspects, including environmental practices, employee relations, community engagement, ethical standards, and corporate responsibility. Sustainable reporting not only informs about the company's activities but also facilitates its interaction with stakeholders (investors, customers, regulators, the public, and others). It helps the enterprise to demonstrate its commitment to sustainability and build trust and loyalty among the stakeholders. With the increasing focus on sustainability and corporate social responsibility, sustainable reporting becomes a more crucial tool for companies aiming to be leaders in caring for the planet, society, and future generations.

The reporting requirements set out the type of environmental and social information that should be reported in mainstream reports for investors, resp. they are based on existing reporting provisions and on CDSB's input where there are gaps in those provisions ((CDSB), January 2022).

The transitioning from traditional reporting to sustainability reporting underscores a fundamental transformation in how enterprises perceive and communicate their performance. Traditional reporting primarily focuses on financial metrics, offering insights into profits, losses, and economic outcomes. However, as societal awareness of environmental and social challenges deepens, the need to report for broader impacts becomes increasingly evident. This transition represents an acknowledgment that a company's success is no longer solely defined by financial gains. Instead, it recognizes that addressing environmental stewardship, social responsibility, and ethical considerations are crucial aspects of achieving long-term prosperity.

Sustainability reporting enhances transparency and accountability by providing a comprehensive view of an enterprise's operations, encompassing environmental, social, and governance factors. By disclosing the ways in which a company manages its resources, engages with communities, and navigates ethical complexities, sustainability reporting fosters trust among stakeholders. Investors, customers, regulators, and employees demand greater insight into a company's commitment to sustainability, making the adjustment essential for maintaining credibility and relevance. Moreover, embracing sustainability reporting positions a company at the forefront of responsible business practices, attracting conscious consumers and investors while aligning with global sustainability goals.

From all the above-explained, it implies that transitioning to sustainability reporting signifies a transformation beyond limited financial perspectives. It shows the strategic change towards integrating environmental, social, and ethical considerations into an enterprise's core activities, recognizing that sustained success necessitates balancing economic viability with responsible and conscious practices that contribute positively to society and the environment.

4. DISCUSSION AND RESULTS

Our research focuses on a highly relevant issue for business practice – Environmental Reports in the Management System of the modern Enterprises. In this context, we will systematically analyze Sustainable Strategic Planning, the necessity of Integrating the Sustainability into the Management System of the Company, Environmental reports as a communication tool and tool for continuous improvement and accountability. As a result, we will assess the attitudes and readiness of businesses for this crucial step towards sustainability.

4.1. Sustainable Strategic Planning

Strategic planning is a significant action that determines the organization's future goals and performances; it enhances the opportunity to maximize business performances and provides possible alternatives as decisions or route map (Anbarasan, 2020). Sustainable Strategic Planning involves the process of integrating ecological, social, and economic aspects into the vision and activities of the enterprise. Environmental reports are a crucial source of information for formulating and implementing a strategy for non-financial reporting by the company. They provide data about the company's current environmental status, analyze trends and issues, and support the making of strategic decisions related to environmental protection. In this way, the company's priorities and improvement opportunities are visualized. Environmental reports provide historical data and trend analysis related to the environment. This data assists companies in identifying the most significant environmental issues affecting their operations. For instance, if the reports indicate an increase in harmful gas emissions, this could redirect attention towards the need for more efficient energy practices or investments in green technologies.

Based on data from environmental reports, companies can make informed strategic decisions that support their sustainability. For instance, they can invest in cleaner and more efficient technologies, implement sustainable practices across all aspects of their operations, and set goals for reducing their carbon footprint. These decisions not only contribute to environmental conservation but also enhance business profitability and sustainability. Environmental reports, among others, serve as a tool for communication with stakeholders, including clients, investors, regulators, and the public. Through clear and transparent reporting, companies demonstrate their commitment to sustainability and social responsibility, which reflects on their image and reputation.

Sustainable strategic planning, supported by environmental reports, is a crucial element for businesses transitioning to sustainable and innovative practices. This integration not only enhances companies' environmental responsibility but also prepares them for a more sustainable and successful future endeavor.

4.2. Integration of Sustainability into the Company's Management System

Integrating sustainability into the company's management processes is an essential step towards achieving sustainable and responsible business practices. Environmental reports have a pivotal role in this process by providing information and structure for embedding sustainability across all aspects of the enterprise. Environmental reports contain detailed data on the environmental impacts of the company. This empowers the leadership to identify potential risks related to environmental conservation and resource sustainability. Conversely, the reports visualize new opportunities for innovation, efficiency, and competitive advantage through sustainable practices.

This type of report typically encompasses key indicators reflecting the ecological and social impact of the company. These indicators serve as tools to track progress and report on sustainable objectives. The leadership can utilize these metrics to assess the effectiveness of current practices and identify areas for improvement. Based on the information from environmental reports, companies can formulate sustainable goals, including reducing carbon emissions, optimizing resource usage, enhancing sustainable supply chains, among others. Establishing measurable goals and actions to achieve them is a crucial step towards integrating sustainability across all management aspects.

Environmental reports provide a mechanism to monitor progress towards achieving these goals. Regularly preparing and updating these reports enables the leadership to analyze the degree of expected results and adjust their strategy as needed.

The integration of sustainability into management processes relies on facts and data extracted from environmental reports. These reports act as catalysts for change and innovation, helping companies craft sustainable strategies that blend profitability with environmental responsibility.

4.3. Stakeholders – management and communication

Environmental reports serve as a significant management and communication mechanism with stakeholders (Guttermann) (both external and internal information consumers) crucial for the successful functioning and development of enterprises. These reports play a crucial role in establishing dialogue and interaction with these groups. Environmental reports are used to provide information regarding the environmental performance of the company. This encompasses data on carbon emissions, energy efficiency, resource usage, and other key parameters. The reports contribute to presenting the real impact of the enterprise on the environment and allow stakeholders to assess its environmental commitment.

Environmental reports serve as a communication tool with investors and customers who are increasingly interested in the environmental and sustainable practices of businesses. These reports provide information about their strategies and practices concerning environmental conservation. This can enhance investor trust and support customer attraction, especially those who share similar environmental policies and values.

Environmental reports play a vital role in connecting with the public and other interested groups. Offering transparent information about the environmental aspects of the company contributes to establishing the enterprise as a responsible and engaged participant in society. This leads to a positive influence on public support and reputation. Communication through environmental reports not only informs about current practices and achievements but also aids in setting future plans and goals. Stakeholders have the opportunity to familiarize themselves with upcoming sustainability improvement initiatives. Also, environmental reports provide an avenue for companies to build transparent relationships and engage in constructive dialogues with their stakeholders. These reports are a communication tool that assists in developing more sustainable and responsible business practices and in strengthening trust and support for the enterprise.

4.4. Environmental reports as a tool for continuous improvement and accountability

Environmental reports serve as a tool for continuous enhancement of a company's environmental processes and practices. They aid in tracking current results and support the enterprise's pursuit of higher sustainability standards. At the same time, these reports form the foundation for constructing sustainability reporting, providing a clear picture of the company's efforts and progress in this domain. Environmental reports allow companies to monitor and analyze the outcomes of their sustainable practices. This encompasses evaluating achievements in reducing carbon emissions, efficient energy and resource utilization, as well as improvements in sustainable supply chains. This information is crucial for identifying successful areas of operation and pinpointing where additional efforts are needed.

Environmental reports offer insights into potential areas for improvement. By analyzing the data from these reports, companies can uncover opportunities to optimize processes, resulting in more efficient resource usage and reduced negative impact on the environment. They provide the basis for planning and crafting advanced sustainability strategies. By scrutinizing the data from these reports, companies can set specific goals, measures, and timelines for achieving sustainability across various aspects of their business.

Incorporating environmentally conscious practices into an enterprise's operations, supported by environmental reports, can contribute to the integration of sustainability into the company culture. This can be achieved by encouraging innovation, learning from experience, and maintaining a continuous drive for improved practices. Environmental reports serve as the cornerstone for building broader sustainability reporting. These reports are a primary source of information used to compile more comprehensive reports, integrating social and economic aspects of sustainability. They also function as a means for continual improvement of a company's environmental practices. They provide the necessary information for analysis, planning, and execution of sustainable strategies, furthering the company's overarching goal of sustainable development.

5. BASIC KNOWLEDGE OF KEY STANDARDS RELATED TO THE STANDARDIZATION OF ENVIRONMENTAL REPORTING AND SUSTAINABLE DEVELOPMENT

Global standards for environmental reporting, such as the **GRI** (Global Reporting Initiative) **standards**, **SASB** (Sustainability Accounting Standards Board) **standards**, and **ESG** (Environmental, Social, and Governance) **standards** play a significant role in standardizing the way companies present information about their environmental and sustainable practices. They establish common frameworks and principles for reporting, enabling information to be more comparable across different companies.

Global environmental reporting standards define key indicators, structures, and methods for providing information about the environmental and sustainable aspects of businesses. This includes aspects like greenhouse gas emissions, water resource management, social responsibility, and others. These standards establish unified principles and terminology that make information more comparable and allow stakeholders to compare different companies based on their sustainable practices.

If companies do not adhere to global and respective national environmental reporting standards, this can lead to a lack of transparency and comparability of information. Stakeholders, such as investors and clients, may face difficulties in assessing the sustainable performance of companies, leading to the risk of making uninformed decisions.

The absence of compliance with environmental reporting standards can lead to regulatory responses both at the national and international levels. Regulators can impose obligations to adhere to specific standards when reporting environmental information. Additionally, violations of these standards should result in sanctions or legal consequences for the companies.

At the international level, global organizations and initiatives like the United Nations (**UN**) and the Organization for Economic Cooperation and Development (**OECD**) promote the adherence to sustainability and environmental reporting standards. Some countries create their own national standards that complement the global frameworks.

Global and national environmental reporting standards play a crucial role in establishing common reporting frameworks, making information comparable across different companies. Non-compliance with these standards can lead to a lack of transparency and trust from stakeholders, as well as regulatory responses at both the national and international levels.

There is a strong connection between GRI, SASB, and ESG standards as they utilize different approaches and focus on different aspects of sustainable reporting. All these standards share the common goal of helping companies provide information about their sustainable practices and promoting transparency, but they differ in how this is achieved.

GRI is a broader and more general reporting standard that covers a wide range of sustainable aspects, including environmental, social, and governance aspects. The sustainability reporting process begins with the organization identifying relevant topics to report on (GRI). This standard focuses on creating common reporting frameworks that enable organizations to provide information about their sustainable practices within a comprehensive and holistic context.

SASB also deals with sustainable reporting but focuses on specific sustainable aspects relevant to various industries. This standard provides detailed metrics and aspects tailored to different sectors of the economy, allowing companies to present their information according to industry-specific specifics.

ESG standards relate to the overall assessment of companies based on their sustainable and social practices, as well as their corporate governance. They encompass three core aspects – environmental, social, and governance. ESG standards are used to assess investment risks and opportunities stemming from the sustainable aspects of companies. The medium and large enterprises are obliged to report on environmental, social and governance aspects for the first time by 2025. The Corporate Sustainability Reporting Directive (**CSRD**) requires a large number of companies in the EU to provide detailed sustainability reports as part of a digital management report and many other international initiatives around the world are in the process of making this mandatory for non-EU companies as well (ESG Reporting Software Sustainability reporting, 2023).

In general, the connection between these standards lies in their shared goal of improving sustainable reporting and encouraging companies to be more transparent about their sustainable practices and impact. However, they differ in how effectively they are integrated into reporting and what information they provide based on the specifics of companies and industries.

These standards play a crucial role in establishing common criteria and indicators for assessing the environmental and sustainable practices of companies. Adhering to global and national environmental reporting standards enhances transparency and trust among stakeholders, including investors, clients, volunteers, and the general public. When companies provide information in accordance with established standards, it facilitates the analysis and comparison of their sustainable practices. Investors are increasingly focusing on companies with strong environmental and sustainable production practices. Compliance with standards enables investors to assess the risks and opportunities in this aspect and make informed investment

decisions. These standards define common terms and methods for reporting environmental data, allowing stakeholders to compare different companies based on their sustainability. This is particularly important for assessing business risks and opportunities. Many regulators and governments encourage or mandate companies to adhere to specific standards for reporting environmental data. Compliance with these standards not only mitigates the risk of sanctions but also helps companies align with evolving regulatory requirements.

Global and national environmental reporting standards create a shared foundation for reporting sustainability, which encourages industry practices to improve. When companies are subjected to the same standards, it stimulates innovation and the implementation of more effective sustainable solutions. It should be noted that the dynamics of environmental reporting continue to evolve. New standards and initiatives are being created, and existing ones can change and be updated to reflect current challenges and opportunities in the field of sustainability.

6. CONCLUSION

The research presents the significant role of contemporary dimensions of corporate reporting in a rapidly changing business environment. The importance of environmental and sustainable reporting is clearly highlighted, emphasizing the urgent need for businesses to integrate these aspects into their market behavior, policies, strategies, business activities, management and accounting systems. The results definitively demonstrate that companies adopting sustainable and environmentally responsible practices are well-prepared for future challenges and are oriented toward achieving long-term and enduring success. There is a positive trend of an increasing number of enterprises willing to integrate sustainable principles and corporate social responsibility, transitioning toward responsible entrepreneurship to influence a more sustainable business future.

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Impact of work-life balance on burnout of educators

Jūlija Mironova¹

Biruta Sloka²

¹ University of Latvia, mironovai.julijai@gmail.com ORCID: 0000-0002-3090-6220

² University of Latvia, biruta.sloka@lu.lv ORCID: 0000-0003-2129-053X

Abstract: Work-life balance is being discussed among scientific society as one of the main factors influencing mental health of employees. Educators of Higher Education Institutions are facing huge workload, stress and multitasking working environment, what can negatively affect work-life balance, especially since the Pandemic caused by Covid-19 started, when educators were forced to work remotely, without networking with colleagues and different professional events what they were used to participate for the development of the teaching and research career and state serious challenges for higher education institution management.

Burnout, as syndrome, arised on the scientific agenda as important topic related to well-being of all professionals who do work with people. Educators are definitely one of the groups affected by symptoms of burnout the most, as all the aspects mentioned above which have to be taken into account in organizing work of higher education institutions.

The aim of this study is to research theoretical background of burnout and work-life balance of the educators of Higher Education Institutions and good practice studies for efficient higher education management, as well as to analyse data from the surveys of educators.

Research methods: analysis of the scientific articles and survey results of the educators, where 790 educators from Higher Education Institutions were surveyed on the topic related to burnout and organizational culture to determine factors important for higher education institution management.

Research results shows how life-work balance influence burnout of educators as well as several good practice cases to be considered for implementation in higher education institutions for more efficient management realisation.

Keywords: burnout, work-life balance, management of higher education institution, decision-making for management

1. INTRODUCTION

Educators are one of the professions highly associated with stress and burnout, similar to medical workers. A widespread discussion in the scientific community revolves around the factors that cause stress among educators in Higher Education Institutions, as well as different techniques to mitigate it. However, various pieces of research show how high the level of stress is among educators. The high level of stress certainly has an explanation, as the professional duties of educators in higher education institutions encompass various aspects, including not only delivering lectures but also various academic duties, administrative tasks, and research. The combined workload from these mentioned duties does indeed influence the health of educators.

Discussion in the academic society also continues not only about influence of the stress and burnout on the health of the employees, but also about what impact does stress and burnout on the employees has on the economy in general.

Study aims to identify how work-life balance is linked to the symptoms of burnout of the educators on the higher education institutions. Research is valuable contribution to the management of the higher education institutions in order to emphasize the importance of burnout within the educators and develop strategies of its avoidance.

The structure of the study is organized as follows: Second section describes theoretical background of the well-being, burnout and stress, including recent scientific findings, followed by research methodology and analysis of the survey of the educators. Last section highlight results of the study and theoretical and practical implications of the results.

2. THEORETICAL ASPECTS OF BURNOUT

Since last century 70's, when burnout emerged as concept in research of J. Freudenberger about well-being of employees (Freudenberger, 1974), many researchers discussed the nature of burnout, it specifics and reasons. One of the most influential researchers in field of burnout is Cristina Maslach, who defined burnout as "Syndrome of emotional exhaustions and cynicism that occurs frequently among individuals who do "people

work” of some kind” (Maslach, Jackson, 1981). Later, in 2019 World Organisation, included burnout in the 11th revision of the International Classification of Diseases (ICD-11) as an occupational phenomenon, and defined it by a adapting Maslach’s definition as “a syndrome conceptualised as resulting from chronic workplace stress that has not been successfully managed” (World Health Organisation, 2019).

There are three aspects of Burnout, what are mentioned in the research of Cristina Maslach and widely used in different research: emotional exhaustion, depersonalisation and reduced personal accomplishment (Maslach, Jackson, 1981).

Work-life balance was mentioned as one of the aspects of prevention and treatment of burnout by Cristina Maslach and Paul Leiter (Maslach, Leiter, 2016). Druge and others in on of the latest research state analysis of work-life balance can be used in the prediction of burnout (Druge et al., 2021). In research done by Heras and colleagues in 2020 it is said positive work-family balance has positive impact on employees and helps to reduce burnout.

Educators is one of the professions highly associated by burnout, as it comes from Maslach’s definition mentioned above, as educators do “people work”. Many authors state increasing chronic stress among teachers is one of the factors influencing rise of burnout (Alvadaro, Bretones, 2018), (Davidaviciene et al., 2019), (Raudeliuniene, Szarucki, 2019), (Tang, Zhang, 2016). Many other researchers world-wide are performing their research on this important issue which is becoming more and more topical in many countries and in many higher education institutions.

3. INFLUENCE OF BURNOUT AND STRESS ON WORLD’S ECONOMY

Stress and burnout, as it was stated previously, has huge influence on the health of the employees. Working effectiveness reduces, which leads not only to the dissatisfaction of the employee itself, but also to the economic loss for the enterprise.

According to the analysis done by American Institute of Stress, total economic impact of stress to employees in US was 300 billion of dollars, influenced by such factors as turnover, diminished productivity, increased mental costs and absenteeism (The American Institute of Stress, 2022).

Latest research done by European Agency for Safety and Health Work on cost of work-related stress was done in 2014. In year 2002 calculated cost of work-related stress in EU by European Commission was 20 billion euros per year. In 2013 EU funded project my Matrix calculated cost of depression as 617 billion euros per year. Costs were calculated from abseneeism and presenteeism as 272 billion euros, loss of productivity as 242 billion euros, health care costs of 63 billion euros and 39 billion euros as social welfare costs as the disability benefit payments (European Agency for Safety and Health at Work, 2014). It can be seen that in 11 years cost of stress increased more than 30 times.

Latest research done by Deloitte shows increase in labor turnover for 25% in 2022 compared to 2019, as well as 53 - 56 billion of pounds cost of stress in 2021-2022 (Deloitte, 2022).

Another research done on mental health costs in general by Mental Health Foundation (UK), London School of Economics and Political science shows that mental health problems costs to the economy of UK at least 117,9 billion of pounds annually (Mental Health Foundation, 2022).

In the report of European Parliamentary Research Service, called Mental health in EU, it is said 84 million people in EU are struggling with mental health. It is stated that before pandemic mental health problems affected 84 billion of people in EU , which is 1 in every 6 persons, but at the moment of release of the report in July 2023, it is said that number is increased, however, without specifying how exactly (European Parliamentary Research Services, 2023).

OECD research shows that mental health ill care can rise up to 4% of EU GDP, which is 600 billion or euros per year, includes reduced productivity, healthcare costs and social welfare expenditure. However, it is important to mention that all above mentioned costs do not include indirect costs, such as care provided by family members of the affected person, emotional distress and suffering experienced by affected persons an persons closely related to them (OECD, 2021).

According to the research of Blackburn and colleagues it is stated that in average, burnt-out clinician is 81,000 dollars less productive than it’s non-burnt out colleague (Blackburn, et al., 2023). Productivity in relation to burnout is also discussed by Letaio and colleagues, where authors conclude burnout affects 13%-25% of

working population influencing employees performance and productivity of the enterprise. Authors suggest for the decrease of burnout such actions as benefit programs and appropriate payment schemes, what would positively influence job effectiveness and productivity of the enterprise (Letaio et al.,2023).

It is clear that discussion in society about economic cost of the stress and burnout of the employees will continue, as grow of the economic impact and cost of stress and burnout is forecasted in many research. Definitely, burnout influence job effectiveness of the employees, which effects economic indicators of the enterprise. If employee leaves workplace, there are additional costs for recruiting and training of the new employee, was also is calculated in the costs of the economic impact of burnout. Medical costs of the burnout related to the person affected by this syndrome should also be taken into consideration when discussion about economic cost of the burnout in the society. Nowadays, when stress on the workplace in well-known problem of educators and other professions, it is crucial to understand its importance and develop strategies on national level and enterprise level in order to avoid burnout and avoid all the costs may rise when dealing with it.

4. METHODOLOGY OF THE RESEARCH

Methodological basis if this study is analysis of the scientific findings and analysis of the survey results. During the analysis of the recent scientific findings, goal of the authors were to cover theoretical basis of the burnout and highlight importance of the work-life balance in the prevention and burnout. During the analysis of the survey, 944 answers of the educators of higher education institutions on the topic related to burnout and organizational culture were analysed for most of questions in the scale 1-10, where 1-the lowest evaluation and 10 – the highest evaluation. Survey was organized in survey platform *QuestionPro* after the pilot survey where the questionnaire was tested and after the preparation of final version of the questionnaire. Respondents were selected using random sample with personal invitation for each respondent which was sent to hi/her personal e – mail. Analysis of the data was done using SPSS where there are analysed indicators of descriptive statistics, testing statistical hypotheses by use of t-test and analysis of variance – ANOVA, as well as correlation analysis.

5. RESULTS AND DISCUSSION

Results on respondent evaluations how *Personal values match values of the organization* in the scale 1-10, where 1- do not match; 10 – fully match are included in table 1.

Table 1. Main statistical indicators on evaluations how *Personal values match values of the organization*

Statistical indicators		Value
N	Valid	944
	Missing	0
Mean		6,77
Standard Error of Mean		0,070
Median		7
Mode		8
Standard Deviation		2,139
Variance		4,577
Range		9
Minimum		1
Maximum		10

Source: Authors calculations based on Julija Mironova conducted survey

Survey data indicate that arithmetic mean of the evaluations was 6,77 with standard error of mean 0,07. Half of respondents gave evaluations 7 or less and half of respondents gave 7 or more (characterized by median). Most often chosen value was 8 (mode). For evaluations it was used all values in the evaluation scale. Distribution of evaluations by respondents are included in table 2.

Table 2. Distributions of evaluations on how *Personal values match values of the organization*

Evaluations	Frequency	Percent	Valid Percent	Cumulative Percent
1- do not match	14	1,5	1,5	1,5
2	31	3,3	3,3	4,8
3	49	5,2	5,2	10,0
4	52	5,5	5,5	15,5

5	106	11,2	11,2	26,7
6	101	10,7	10,7	37,4
7	162	17,2	17,2	54,6
8	219	23,2	23,2	77,8
9	160	16,9	16,9	94,7
10 - fully match	50	5,3	5,3	100,0
Total	944	100,0	100,0	

Source: Authors calculations based on Julija Mironova conducted survey

Data indicate that the share of respondents who gave low evaluations with 3 or less are 10 percent.

Main statistical indicators on evaluations by male and female respondents are reflected in table 3.

Table 3. Main statistical indicators on evaluations by gender on how Personal values match values of the organization

Gender	Mean	N	Std. Deviation	Median
Male	6,94	413	2,106	7
Female	6,57	469	2,165	7
Total	6,74	882	2,144	7

Source: Authors calculations based on Julija Mironova conducted survey

Data indicate that the evaluations by male and female respondents are alike, but for female respondents the average evaluations were higher and there were differences in evaluations more than for male respondents – characterized by standard deviations.

Table 4. Main statistical indicators on evaluations by age group on how Personal values match values of the organization

Age group	Mean	N	Standard Deviation	Median
less than 30	6,64	33	1,884	7
31-40	6,72	202	2,202	7
41-50	6,61	272	2,096	7
51-60	6,91	252	2,023	7
61-70	6,87	154	2,337	7,5
71-80	7,08	24	2,448	8
more than 80	5,00	1	.	5
Total	6,77	938	2,142	7

Source: Authors calculations based on Julija Mironova conducted survey

Data indicate that the evaluations by age groups are different with higher evaluations for older respondents, differences for evaluations are bigger for respondents in age group 71-80 years – characterized by standard deviations. Results of analysis of variance on statistical significance of the evaluations by age group performed with analysis of variance – ANOVA are included in table 5.

Table 5. Main statistical indicators on statistical significance on differences in evaluations by age group with ANOVA on how Personal values match values of the organization

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	20,272	6	3,379	0,735	0,622
Within Groups	4279,597	931	4,597		
Total	4299,869	937			

Source: Authors calculations based on Julija Mironova conducted survey

Data of ANOVA results indicate that the differences of evaluations by age groups differ statistically significant. Results of correlation analysis on how *Personal values match values of the organization* and age group are included in table 6.

Table 6. Main statistical indicators on correlation analysis of evaluations on how Personal values match values of the organization and age group

Analysed aspect	Indicators of correlation analysis	Personal values match values of the organisation	Age group
Personal values match values of the organisation	Pearson Correlation	1	0,043
	Sig. (2-tailed)		0,185
	N	944	938

Age group	Pearson Correlation	0,043	1
	Sig. (2-tailed)	0,185	
	N	938	938

Source: Authors calculations based on Julija Mironova conducted survey

Data of correlation analysis indicate that the correlation between the evaluations of respondents of how *Personal values match values of the organization* and the age group of respondents do not show statistically significant relationship.

6. CONCLUSIONS

Burn-out in higher education become more and more important issue where several activities of higher education institutions are important to involve teaching staff different activities in higher education including their feelings alike the values of the higher education institution. Management of the higher education institutions can take into account that male and female personal matches with the values of the organization do not differ, but differ by age groups: older employees at the higher education institutions have more alike personal values with the organisation.

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Artificial Intelligence in Higher Education – Challenges and Opportunities

Jūlija Mironova¹

Viktoriia Riashchenko²

Olga Verdenhofa³

Valentina Djakona⁴

¹ ISMA University of Applied Sciences, julija.mironova@isma.lv ORCID: 0000-0002-3090-6220

² ISMA University of Applied Sciences, viktoriia.riashchenko@isma.lv ORCID: 0000-0003-1783-3079

³ ISMA University of Applied Sciences, olga.verdenhofa@isma.lv ORCID: 0000-0002-7906-3463

⁴ ISMA University of Applied Sciences, valentina.djakona@isma.lv ORCID: 0000-0002-9199-3559

Abstract: Over the past few years, Artificial Intelligence (AI) has emerged as one of the most discussed topics in scientific society and education. The rapid development of technology has resulted in diverse opportunities and changes within Higher Education (HE). Without a doubt, the usage of AI can be observed from two distinct perspectives.

On one hand, it serves as a valuable tool that aids students in managing vast amounts of information, aiding in its organization, and providing innovative solutions for a variety of tasks. For educators, it offers additional methodologies for teaching and enhances creativity in the design of the study process. On the other hand, significant concerns prevail within society about the ethical use of AI by students. Educators within Higher Education Institutions are apprehensive whether students are genuinely leveraging their subject knowledge and cultivating creative thinking, or whether their submissions merely reflect outcomes generated by AI.

Debates within the field of Higher Education continue to focus on determining the appropriate models of educational processes to prevent the undue substitution of AI for authentic comprehension and original creative thinking. Nevertheless, it is unequivocally evident that the implementation of AI within the educational process should be viewed as a supplementary tool. This tool can be harnessed to cultivate creative thinking, inspire innovation, and expand the intellectual horizons of students.

The aim of this study is to research the theoretical background of Artificial Intelligence (AI) in education, accompanied by an analysis of surveys conducted with students regarding their utilization of AI in the study process.

Research Methods: The study involves examining scientific articles and analyzing surveys conducted with students.

Research Results: The findings of this study provide a theoretical analysis of the concept of AI in education. It also sheds light on how students are using AI and their opinions about its integration into the study process.

Keywords: Artificial intelligence, education, chat GPT, higher education institutions, challenges.

1. INTRODUCTION

Artificial intelligence (AI) was on the agenda for many years, however, it emerged for the past few years in education. Tools, like Chat GPT, Microsoft Bing and others are rapidly changing learning environment from both perspectives – student's and educator's. Definitely, when assignment can be done by generative AI application in few seconds, it is extremely important for Higher Education Institutions (HEI) to adapt to the changes and create new environment with adapted tools and techniques. Generative tools can inspire students, boost their creativity. However, AI tools can be widely used by students to completion of assignments, and this fact cannot be ignored. Nevertheless, understanding specifics and opportunities of AI tools can bring education process to new, more attractive level. From new perspectives of learning both parts – students and educators can benefit, if used correctly.

2. UNDERSTANDING AI AND GENERATIVE TOOLS

Generative AI tools, like chat GPT, are created to generate text, what is indistinguishable from text, written by human. Understanding definition of generative AI tools and AI in general is crucial for understanding possibilities of AI.

One of the definitions of AI is written by John McCarthy in 2004 – "It is the science and engineering of making intelligent machines, especially intelligent computer programs. It is related to the similar task of using computers to understand human intelligence, but AI does not have to confine itself to methods that are biologically observable." (McCarthy, 2004). The same definition is being used nowadays by IBM when explaining what AI is. Generative AI is defined by McKinsey & Company in following way: "Generative artificial intelligence

(AI) describes algorithms (such as ChatGPT) that can be used to create new content, including audio, code, images, text, simulations, and videos” (McKinsey&Company, 2023).

Chat GPT, as an interactive system allows to answer questions, challenge incorrect premises and admit mistakes (OpenAI, 2022). However, generative Chatbots, like ChatGPT are not something new. Idea of interaction with computer using language goes back to the beginning of computing and AI research, and one of the most popular examples of chatbot is ELIZA, programmed by Joseph Weizenbaum in 70's of 20th century (Weizenbaum, 1997). However, after release of ChatGPT in the end of 2022, education society rapidly became aware of possibilities of the generative AI tool and discussion of it's use arised.

Authors of Harvard Business review Eapen, Finkenstadt, Folk and Venkataswamy analyse how generative AI tools can boost human creativity. It is stated generative AI tools can promote divergent thinking, challenge expertise bias and assist in idea evaluation. It is crucial to understand that generative AI potential can be used to assist humans in their creation of unimaginable solutions, not replacing them at all (Eapen et. Al., 2023). However, there is a discussion in scientific society about replacing human by AI. Dwivedi and colleagues in their recent research discuss how generative AI can enhance productivity, however, it has potential by replacing human employees. Authors state policies of implementation of AI are critical and extremely important (Dwivedi et al., 2023).

However, when speaking about generative tools of AI like chat GPT, ethical concern arises. Stahl and Eke in their recent research discuss such ethical concerns about usage of generative AI like social justice, environmental issues, cultural identity and individual autonomy. Authors highlight much wider perspective of ethical discussion related to generative AI then usual authorship concerns, what arise when it is discussed about generative tools of AI (Stahl & Eke, 2023).

3. ARTIFICIAL INTELLIGENCE IN EDUCATION

Research done by UNESCO in May 2023 showed, that from 450 surveyed schools and universities, only 10% developed guidelines and rules of work with generative AI Applications. However, despite low awareness of the importance of work with AI, UNESCO states how important it is to understand that developers of AI do not regulate usage of the tools, so education institutions and governmental bodies should regulate critical aspects of generative AI applications and tools in education (UNESCO, 2023). Authors of one of the most cited paper of AI Dwivedi and colleagues agree that despite the fact that Generative AI can increase productivity and creativity in different fields, there are numerous challenges, as ethical and moral, especially if there are no guidelines and policies of its use in the education (Dwivedi, 2023). One of the challenges in the use of AI in education is nuances of language and context, what can be not accurately enough captured by AI, what can lead to the misinterpretations in the student works (Walczak & Cellary, 2023).

Interesting results are shown in the recent research of Smolansky and colleagues, as it shows that students are careful in usage of AI, as they are afraid of losing creativity, but educators are more ready to use AI in the study process (Smolansky et al., 2023). Mentioned research proves that implementation of the student opinion in the policies and guidelines is crucial. Similar opinion is shared in the research of Mills, Bali and Eaton, where authors state collaboration with students on AI approaches enables emergent, student-centered and student-guided approaches, and is valuable in situations with implementation of AI in studies, where students and educators are learning together (Mills et al., 2023).

Figure 1 summarizes all principles should be taken into consideration for implementation of generative tools of AI in the education process.

Figure 1. Principles of usage of AI in HEI (contribution by authors)



Five principles stated by authors are supporting one each other and ethical use of generative tools of AI, however, most crucial is to start with when implementing generative tools of AI are clear policies and guidelines of the use of AI by all included stakeholders – students and educators.

Despite all scientific discussion and doubts on ethical use of generative AI, it should be considered not only from the perspective of the undermining of academic integrity, but definitely also from perspective of it as an essential part of pedagogy and research (Eke, 2023). With adequate assessment oversight, ChatGPT is not dangerous in terms of increase in fraud cases if work of student is done in presence of educator (Moritz et al., 2023).

4. METHODOLOGY OF RESEARCH

In line with an aim of the research, the chosen methodology was chosen in order to analyse data from the survey of students -quantitative design was used. The research instrument was questionnaire, which contained questions about usage of generative AI tools by students in education process. Questions were multiple – choice and open ended questions.

Thirty one participant took part in the study, all of them bachelor degree students.

The study was conducted in the September-October 2023. Survey was created using Question Pro and distributed online. Survey was completely confidential.

Descriptive statistics were used to analyse questions, and content analysis by keyword and frequency was used to analyse open-ended questions.

5. RESULTS AND DISCUSSION

All multiple questions were answered by all participants, whereas open-ended questions were answered on average by 55%.

The results on Question 1 “Do you use Artificial Intelligence tools (Like chat GPT etc.) in the daily study process?” are summarized in Table 1.

Table 1. Results on Question 1 “Do you use Artificial Intelligence tools (Like chat GPT etc.) in the daily study process?”

	Respondents	Answers
No	15	46,88%
Yes	17	53,13%
Grand Total	32	100%

Source: Authors calculations based on authors conducted survey

Data indicate that results are very similar within those who use generative tools like ChatGPT in study process, and those who do not use it.

The results on question 2 “Please rate your knowledge of possibilities of how to use Artificial Intelligence in study process from 1 to 10” Are summarized in Table 2 and Table 3.

Table 2. Main statistical indicators on evaluations how students rate their knowledge of possibilities of how to use Artificial Intelligence in study process.

	Statistical indicators	Value
N	Valid	28
	Missing	0
Mean		5,36
Mode		8
Variance		5,42
Standard Deviation		2,33
Median		5,5

Source: Authors calculations based on authors conducted survey

Question was answered by 28 students. Survey data indicate arithmetic mean of 5,36. Most often chosen value was 8 (mode). For evaluation all values in the evaluation scale were used. Distribution of evaluation of the respondents are included in Table 3.

Table 3. Distribution of evaluations on how students rate their knowledge of possibilities of how to use Artificial Intelligence in study process.

Evaluations	Number of respondents	Percentage of answers
1	1	3,57%
2	2	7,14%
3	4	14,29%
4	4	14,29%
5	5	17,86%
6	1	3,57%
7	4	14,29%
8	6	21,43%
9	0	0,00%
10	1	3,57%

Source: Authors calculations based on authors conducted survey.

Data shows that most often chosen value is 8, it was chosen by 6 respondents (21,43%). More than a half of respondents (57,15%) evaluate their knowledge of AI less, or equal with 5 (median – 5,5).

Definitely, it is clearly seen from the data, that students value their knowledge very different, however, there is a significant share of the answers of students who do not value their knowledge high.

The results on Question 3 “Do you need additional training provided by the University about use of AI” are summarized in Table 4.

	Respondents	Answers
No	9	29,03%
Yes	16	51,61%
I don't know	6	19,35
Grand Total	31	100%

Source: Authors calculations based on authors conducted survey

Data reflects distribution of answers, more than the half of the respondents (51,61%) answered that they need training on AI provided by the University. However, 6 respondents (19,35%) are not sure if they need training, and 9 respondents (29,03%) answered that they do not need it.

6.CONCLUSIONS

Generative tools of AI like ChatGPT and others are not new, however, after launching free version of ChatGPT, education institution faced many challenges. Ethical use of generative tools, risk of plagiarism and misinterpretation of the results are main aspects why educators are looking at the generative tools of AI as on threats. However, these tools are widely used by students and are becoming more and more popular, and cannot be ignored by education institutions. Analysed data show that more than a half of surveyed bachelor degree students use generative tools like ChatGPT and more than a half agree that they need training on use of these tools organised by HEI.

HEI should develop policies and guidelines on ethical use of AI and its generative tools in the education and adapt assignments to avoid unethical use and minimise risk of plagiarism. It is important to rise awareness about opportunities of generative tools of AI, such as boosting creativity within students and educators.

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Macro and Micro Perspectives of Innovation Performance of the Slovak Republic

Katarína BELANOVÁ¹

¹ University of Economics in Bratislava, Slovakia, e-mail: katarina.belanova@euba.sk, ORCID: 0000-0003-2634-9238

Abstract: Modern economic theories consider new technologies and knowledge to be the main source of economic growth. Likewise, many surveys confirm that countries that can develop commercially applicable innovations are the winners in international competition. The aim of the contribution is to compare the innovation performance of the Slovak Republic using the Global Innovation Index and the Community Innovation Survey. The basic method used in the processing of the issue is descriptive statistics and quantitative comparative analysis. According to the Global Innovation Index, Slovakia significantly worsened in 2022 compared to the previous assessment and has achieved worse results than expected. Environmental performance, import of top technologies, high-tech production, export of top technologies and export of creative goods are considered to be Slovakia's strengths. Weaknesses include business policy and culture, low risk capital investments and gross capital formation. According to the Community Innovation Survey, the Slovak Republic is among the countries whose companies innovate significantly less than the average of the European Union. The CIS survey also showed that, compared to the EU average, Slovakia is below the average in categories such as shares of innovative companies, shares of companies that invest in innovations and shares of companies that use new technologies. However, it achieves above-average results in the categories of cooperation between companies and institutions in the field of R&D. Our recommendation is to increase the proportion of total expenditure incurred for research and development (and thus for innovation) in both the public and private sectors.

Keywords: innovation performance, the Global Innovation Index, the Community Innovation Survey.

1. INTRODUCTION

Innovation is an important driver of economic progress that benefits consumers, businesses and the economy as a whole. Since innovations fundamentally affect macroeconomic environment, it is important for every country to monitor their development and recognize the economic and social conditions necessary for their creation and support. In this regard, the need to measure the innovation performance of the economy is gaining importance.

The aim of the contribution is to compare the innovation performance of Slovakia using the Global Innovation Index (GII) and the Community Innovation Survey (CIS).

The choice of these two surveys is not random. The Global Innovation Index is a recognized measure of innovation activity at the global level, and its results are often used in decisions about investments in research and development (R&D) and in the creation of innovation support policies. The innovative behavior of enterprises plays a central role in shaping of innovation performance at the sectoral and national level. Since its first launch, the Community Innovation Survey has been a source of information for business analysts and policy makers by focusing on a wide range of aspects of the innovation process carried out by European businesses.

According to both indices, the innovation performance of the Slovak Republic is weak and requires improvement. To improve the current situation, the author suggests to increase R&D expenditure as R&D is the main driver of innovation.

2. LITERATURE REVIEW

Compared to other policies that have already been implemented at national or regional levels, innovation policies are rather a new issue (Halásková, M. and Halasková, R., 2015). Moreover, there have not been many empirical studies realized in Slovakia yet. Ivanová and Masárová (2018) evaluated the innovation performance of regions of the Visegrad Group with an emphasis on human capital. According to their findings, the best values in innovation performance within the V4 countries are recorded in Bratislava region and Prague region, where the scientific potential of regions is concentrated.

Kučera and Fiľa (2022) proved a significant interdependence between R&D expenditure, innovation performance and level of economic development of the EU countries. Higher R&D expenditures are a basic

precondition for faster economic growth which is basically represented by GDP per capita. Technological progress influences GDP and dynamic growth is not possible without innovation.

The contribution continues in evaluation of innovation performance of the Slovak republic which the author presented in 2021 (Belanová, 2021). The European Innovation Scoreboard (EIS) 2021 and the Regional Innovation Scoreboard (RIS) 2021 were used. According to the findings, the Slovak republic belonged to the group of Emerging Innovators with performance well below the EU average. However, according to the Regional Innovation Scoreboard, Bratislavský kraj, a region in Slovakia, belonged to a group of Moderate Innovators. Slovakia's strengths were in environmental sustainability, sales impacts and use of information technologies at that time. On the other hand, weaknesses include digital skills, enterprises providing ICT training, design applications, and sales of innovative products.

The author has started to deal with this issue already in 2018. In her survey (2018) she documented that the performance of Slovakia according to the EIS 2016 together with Croatia, Cyprus, Czech Republic, Estonia, Greece, Hungary, Italy, Latvia, Lithuania, Malta, Poland, Portugal, and Spain is below that of the EU average. These countries are moderate innovators. However, the RIS 2016 revealed that Europe's most innovative regions are located in the most innovative countries, although regional innovative hubs exist in moderate innovator countries: Piemonte and Friuli-Venezia Giulia in Italy, País Vasco in Spain and Bratislavský kraj in Slovakia.

The motivation for this contribution was to continue in the topic, to see the development of innovation performance of the SR from the macro, as well as from micro perspective.

3. METHODOLOGY

The basic method used in the processing of the issue is descriptive statistics and quantitative comparative analysis. The main sources of information include the secondary data contained in the Global Innovation Index and the Community Innovation Survey.

The Global Innovation Index is an annual ranking of countries based on their success in innovation. This project was started by Professor Dutta in 2007 with several objectives. His motivation was precisely that innovations are important for economic progress and competitiveness not only for developing but also for developed economies. It is currently published by the World Intellectual Property Organization (WIPO). The index is calculated by a simple average of the scores in two subcategories, the Innovation Input Index and the Output Index. The Innovation Input Index includes 5 basic pillars – institutions, human capital, infrastructure, market sophistication and business sophistication. The Output Index includes only 2 basic categories, namely knowledge and technology and creative outputs. We list the categories of the Global innovation index in a more detail in Table 1.

Table 1: GII indicators

Global innovation index						
Input index					Output Index	
<i>Institutions</i>	<i>Human capital and research</i>	<i>Infrastructure</i>	<i>Market sophistication</i>	<i>Business sophistication</i>	<i>Knowledge and technology outputs</i>	<i>Creative outputs</i>
Political environment	Education /	ICTs	Credit	Knowledge workers	Knowledge creation	Intangible assets
Regulatory environment	Tertiary education /	General infrastructure	Investment	Innovation linkages	Knowledge impact	Creative goods and services
Business environment	R&D	Ecological sustainability	Trade, diversification, and market scale	Knowledge absorption	Knowledge diffusion	Online creativity

Source: The GII, WIPO (2022)

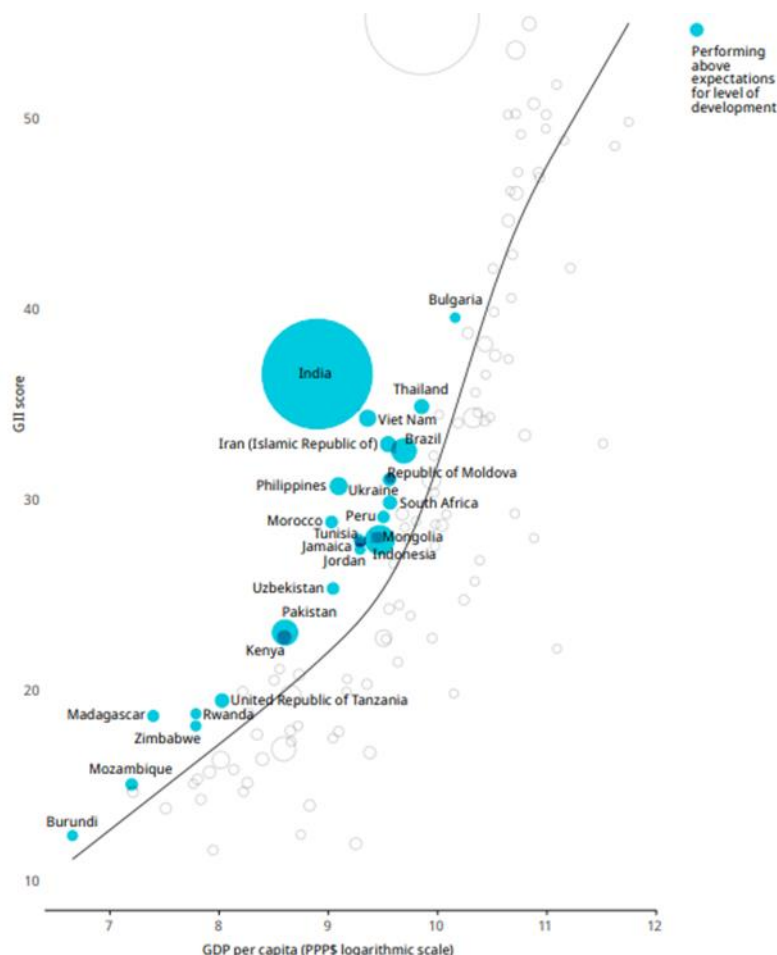
The CIS is a survey conducted within the European Union with the aim of obtaining data on the innovation performance of enterprises. The survey is conducted every two years and includes questions about research and development, innovation activity and innovation results, as well as factors that influence innovation activity.

4. COMPARATIVE ANALYSIS OF INNOVATION PERFORMANCE OF THE SLOVAK REPUBLIC

In 2022, Switzerland became the most innovative country according to the GII for the seventh time in a row, closely followed by the USA, Sweden, the United Kingdom, and the Netherlands rounding out the top five. The Global Innovation Index tracks innovation trends against the backdrop of the ongoing COVID-19 pandemic. The report shows that on a global scale, research and development and other investments that drive global innovation activity continue to boom (WIPO, 2022).

Slovakia was ranked 46th out of 132 surveyed countries in the GII 2022. However, we achieved worse results than expected, which can be seen in Figure 1. It shows the relationship between income level (GDP per capita) and innovation performance (GII score). The trend line indicates the expected innovation performance by income level. Economies above the trend line are performing better than expected, and economies below are doing worse than expected.

Figure 1: The positive relationship between innovation and development



Source: GII database, WIPO (2022)

Note: Bubbles sized by population. The cubic spline trendline shows the expected levels of innovation performance at different levels of GDP per capita for all economies covered in the GII 2022.

Environmental performance, import of top technologies, high-tech production, export of top technologies and export of creative goods are considered to be Slovakia's strengths. Weaknesses include business policy and culture, low risk capital investments and gross capital formation.

As the innovative behavior of enterprises plays a central role in shaping of innovation performance at the sectoral and national level, we used the Community Innovation Survey to analyze the innovation performance of the SR from the micro perspective.

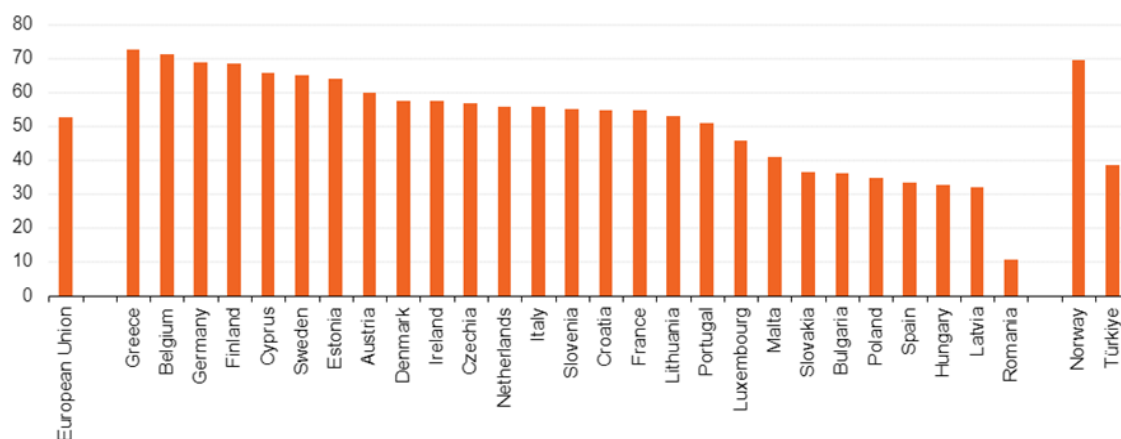
Innovation is essential for any company that wants to be successful in today's competitive economy. Creating an innovation space is therefore crucial for businesses that want to be successful on the market and improve their economic results. Business innovation refers to a wide range of activities that businesses carry out in order to implement innovation processes, develop new goods or services and bring them to market.

The CIS reports on two types of innovation – product innovation and business process innovation.

The CIS is coordinated by the European Commission and implemented in cooperation with national statistical offices in the Member States of the European Union. The survey is conducted through questionnaires that are sent to randomly selected companies. The results of the survey are then used to create innovation support policies within the EU. The survey provides information on various aspects of innovation activity in enterprises, including investments in research and development, use of new technologies, cooperation with other enterprises and research institutions, innovative results and obstacles to innovation activity. This data is then used to assess the level of innovation performance of companies and countries in the EU.

According to the CIS 2020, in the reference period 2018-2020, more than half of all enterprises in the EU Member States reported some form of innovation activity (52.7%). Figure 2 shows the share of innovative enterprises by individual country. Among the EU Member States, the highest proportion of innovative enterprises was recorded in Greece with a share of 72.6% of all enterprises, followed by Belgium (71.3%), Germany (68.8%) and Finland (68.7%). Other countries whose share of enterprises with innovation activities was over 60% are Cyprus, Sweden and Estonia. With its 36.6%, Slovakia ranked 21st out of 27 countries, which is a shift of up to 4 places compared to 2018, when we ranked 25th. Despite this fact, Slovakia still has a lot of areas for improvement. Similar results to Slovakia were achieved by Bulgaria, Poland, Spain and Hungary. The lowest level of innovation activity was recorded in Romania (10.7%).

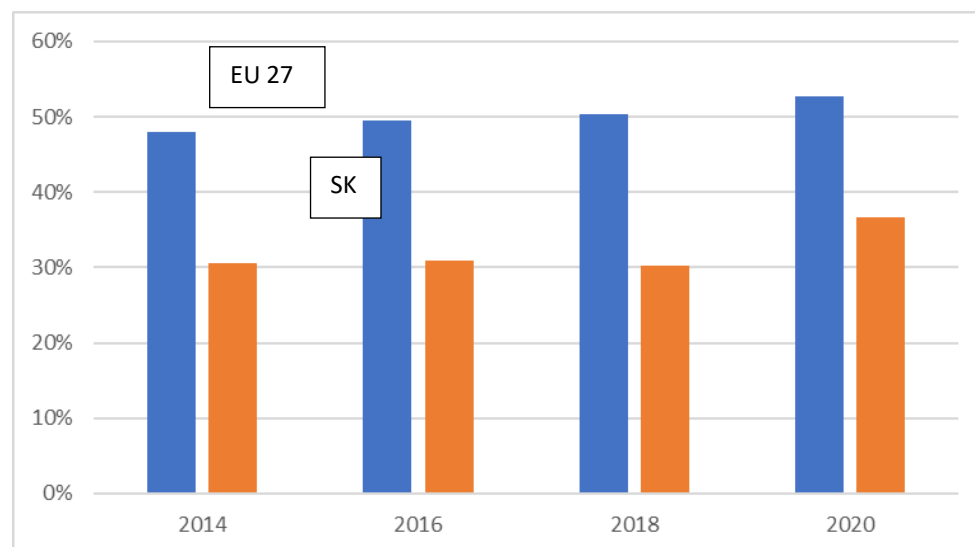
Figure 2: Share of innovative businesses 2018 – 2020 (in %)



Source: Eurostat (2022)

As shown in Figure 3, since 2014, Slovak companies have been gradually improving their innovation activity, except for 2018, when the innovation performance of companies fell from 31% to 30.2% compared to 2016. Despite this, Slovakia is still among the countries with insufficient innovation activity in SMEs. In 2020, every third company in Slovakia was innovative (36.6%), while in the EU-27 it is every second company that implements innovation activities in their business. (52.7%). The CIS survey also showed that, compared to the EU average, Slovakia is below the average in categories such as shares of innovative companies, shares of companies that invest in innovations and shares of companies that use new technologies. However, it achieves above-average results in the categories of cooperation between companies and institutions in the field of R&D.

Figure 3: Share of innovative businesses in EU 27 vs. SR



Source: own processing according to Eurostat data

Interestingly, according to the CIS, larger companies are more innovative.

The breakdown of companies by size in terms of product and business process innovation showed that large companies with more than 250 employees innovated more often (74%) than medium-sized companies with 50 to 249 employees (60%).

However, innovation activity is generally attributed to SMEs. Newly established SMEs often create new jobs and arise as a means of commercializing new technologies and innovative ideas. They are often the carriers of positive structural changes in the economy, increase productivity and help economic growth. There are many small and medium-sized, fast-growing businesses with the potential to become a leader in a certain area of business, in which many new ideas are born. However, these ideas can hardly be transformed into new products, patents, competitive advantages or jobs without effective support.

The European Commission's annual report on small and medium-sized enterprises also confirms that there is a positive relationship between innovation in SMEs and the ability of SMEs to generate growth and employment. Countries with an above-average share of high- to medium-high-technology SMEs achieved a higher average growth in the gross value added of SMEs. The employment rate in countries with an above-average share of knowledge-intensive services in SMEs is also visibly higher than in other EU countries (EC, 2020).

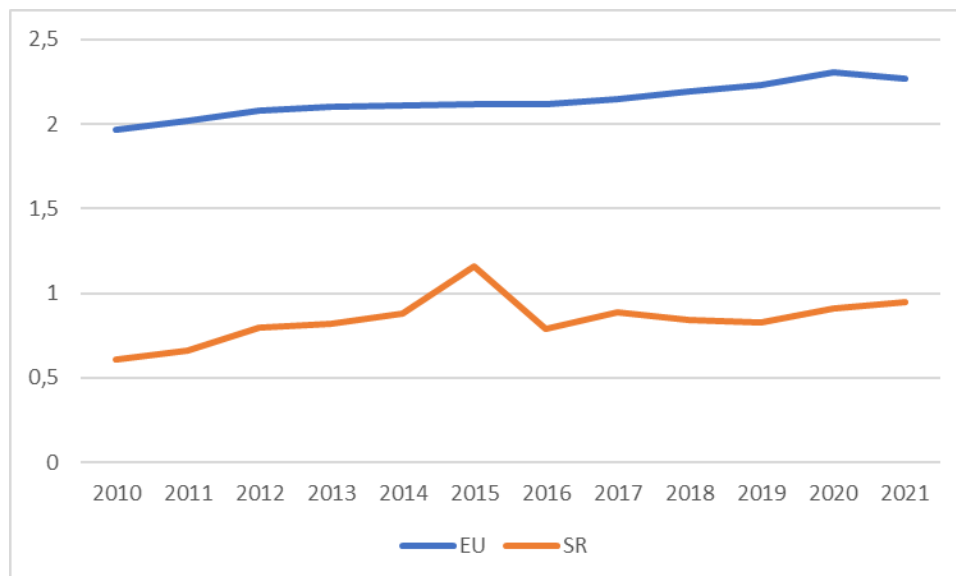
The Statistical Office of the Slovak Republic (SOSR) states that the highest rate of innovation activities is recorded by companies operating in the industry and services sector. It is mainly the automotive industry and the information and communication technology sector. On the contrary, enterprises in the construction sector show the lowest innovation activity. The innovation activity of SMEs lags significantly behind the innovation activity of large - often multinational companies (SOSR, 2022).

The difference in the approach of European and Slovak SMEs to innovation is significant. European SMEs invest much more in qualified people, introduce product and process innovations, improve marketing and dedicate a considerable amount of funds to R&D. Slovak SMEs have significant shortcomings in the introduction of business innovations arising not only from the internal but also from the external environment. In addition to investing in innovation only to a limited extent, they also pay insufficient attention to new trends in the field of digitalization. The low level of innovation of Slovak SMEs is also a result of the undersized education system or low remuneration, which is manifested by the lack or departure of qualified experts. The low rate of qualified people is caused by the poor quality of the education system or according to many experts, due to the weak connection between study and practice.

Regarding the investments into R&D, Slovakia has significantly lagged behind the average for a long time, which has a long-term negative impact not only on the economic competitiveness of the Republic, but also on its overall innovation performance.

Figure 4 shows the development of expenditure on R&D in the period 2010-2021 for the Slovak Republic and the EU.

Figure 4: Development of expenditure on R&D in the period 2010-2021 for the Slovak Republic and the EU



Source: own processing according to EUROSTAT data

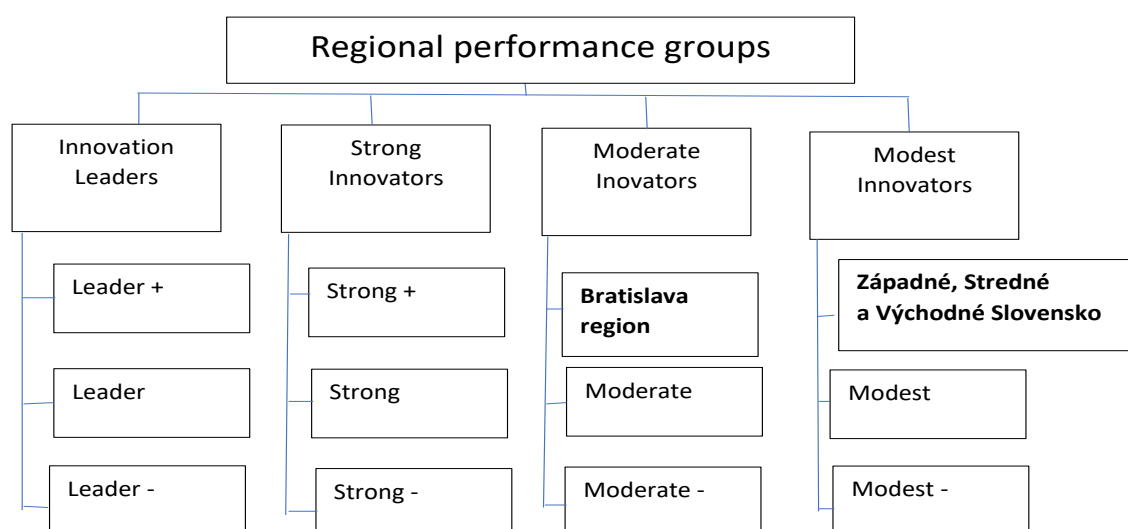
As Figure 4 depicts, the European average of spending on R&D is slightly above 2% of GDP, while the Slovak Republic does not even reach 1% of GDP.

According to Fiľa, M. and Kučera, J. (2015), there is a clear positive correlation between investments into research and development and innovation performance, and thus a higher % of R&D expenditure logically also increases a country's innovation performance especially in the medium and long term.

In this regard, it sounds positively that Slovakia accepted new Strategy for research, development and innovation 2030. Along with private investment in research, the goal is to get the country's R&D intensity – the total R&D expenditure as a percentage of a country's gross domestic product – up to the EU average of 2%.

Moreover, as in the case of the EU, considerable fragmentation can be observed in the introduction of innovations in Slovakia. The majority of innovative SMEs are concentrated in the Bratislava region, which is considered the most innovative region of the Slovak Republic (according to RIS 2023, resp. Ivanová and Masárová 2018). As Figure 5 reveals, Bratislava region (SK01), the capital region, is a Moderate Innovator +, the other three regions are Emerging Innovators +.

Figure 5: Position of SR's regions within regional performance groups



Source: own processing according to RIS 2023

5. CONCLUSION

Innovations are understood as an important assumption for increasing the competitiveness of the economy. Resulting from the conditions, efficiency and other aspects some countries are more, some less successful in innovation activity. In this regard, it makes sense to rank their innovation performance.

According to the Global Innovation Index 2022, Slovakia significantly worsened in 2022 compared to the previous assessment and has achieved worse results than expected. Environmental performance, import of top technologies, high-tech production, export of top technologies and export of creative goods are considered to be Slovakia's strengths. Weaknesses include business policy and culture, low risk capital investments and gross capital formation.

Investing into R&D is an investment in the future of Europe. Most companies operating in the territory of the European Union are aware of this fact. According to the CIS 2020, the most innovations in the field of products and business processes were implemented by companies in Greece, the least in Romania. At the same time, it was also registered that larger companies innovate more intensively than smaller ones. To improve the current situation in innovation performance of the SR, the author suggests to increase R&D expenditure.

Acknowledgments

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Introducing Public Warehousing in Vietnam

Prof. Laszlo Kozar PhD¹

¹Budapest Business University, kozar.laszlo@uni-bge.hu, Hungary

Abstract: This study is based on seven-year-long history of connection building, lecturing and examinations of Vietnamese and international sources, furthermore, based on primary research in acquiring direct information from several academic and non-academic experts and prestigious market participants on the examined market.

Vietnam is one of the most prominent countries of the Southeast Asian region, one of the ten members of the Association of Southeast Asian Nations (ASEAN) that seems to be one of the most rapidly growing economic hubs of the world nowadays. According to its population ASEAN is bigger than the European Union or the United States, it is the third largest market in the world, behind only India and China.

Vietnam has one of the strongest agricultural production potentials in several fields of agriculture: in case of coffee and rice production it is one of the leading producers and exporters. The economy of the country is rapidly developing however the commodity financing system and instruments need considerable development and modernization. Based on my ten-year-long primary and secondary research in this field I propose the development of public warehousing and Lombard financing based on agricultural products.

The use of the functions of this institution could help grain market participants, such as producers, manufactures, traders, and financiers for convenient business decisions, price, and credit risk management, and able to involve extra financing resources to the Vietnamese agriculture.

Beyond market participants advantages, this solution can help to reach market regulation and stockpiling strategy goals for Vietnamese Government. This technique offers a relatively new solutions but could contribute to the further development of this field while this method can eventually be used in other sectors of the Vietnamese economy as well.

Summary: The study is based on a ten-year history of relationship building, presentations, and an examination of Vietnamese and international sources, as well as primary research, from several academic and non-academic experts, and reputable market players in the market under study.

Vietnam has one of the strongest agricultural production potentials and efficient production in many areas of agriculture. The country's economy is developing very quickly, it is one of the world's leaders in the field of coffee and rice production and one of the largest exporters, but its storage is forced to face the lowest export prices in the region due to inventory financing deficiencies.

The country's economy is developing very quickly, in many cases it has modern technology, which includes financing and logistics, but there is an area to be developed, public warehousing, together with Lombard Financing based on agricultural raw materials.

Based on several years of international experience and investigations of the Vietnamese market, this study, after presenting the current market situation, proposes the introduction of public warehousing based on agricultural raw materials, and Lombard Financing, which can help grain market participants, such as producers, manufacturers, traders, financiers in making convenient business decisions, in price and credit risk management, as well as the involvement of additional sources of financing in Vietnamese agriculture.

Keywords: Public Warehouse, Vietnam, cereals, rice, coffee

1. INTRODUCTION

Vietnam is one of the most prominent countries of the Southeast Asian region, one of the ten members of the Association of Southeast Asian Nations (ASEAN) that seems to be one of the most rapidly growing economic hubs of the world nowadays. In its half-century history of ASEAN, its members have been among the most spectacularly developing countries in the world. The member countries in total represent a population of over 600 million people, which - in case of the continuation of the economic growth and increasing incomes – foresees considerable growth in consumption for the coming decades. According to its population ASEAN is bigger than the European Union or the United States, it is the third largest market in the world, behind only India and China.

For more than a decade, authors have been investigating the market opportunities inherent in the Southeast Asian region, publishing results, and based on secondary and primary research, I believe that the introduction

and operation of public warehousing in Vietnam can be a viable business solution from which all stakeholders could benefit.

Vietnam has a very huge potential for crop production. Annually 30 million tons of rice, 10 million tons of maize and 10 million tons of coffee (and several other crops in huge masses) are harvested. This enabled Vietnam to be among the biggest exporters of the world. However, the procurement system of crops, including an advanced form of pre-financing is missing. Therefore, the producers face difficulties in their financial liquidity as well, and there are huge gaps in the logistic system of the supply chain.

In general, it can be underlined that the concept of the electronic agricultural purchasing marketplace may work anywhere that embodies a novel approach to today's agriculture based on modern technologies offering an opportunity to both agricultural producers and suppliers (Erdeiné Késmárki-Gally, 2018). However, in case of Vietnam, the situation is more complex as the market-oriented companies and improving market-friendly regulations are sometimes in contrast with the "old school" socialist political guidelines and leadership. The authors I have been travelled to Vietnam other ASEAN countries several times in the last years and have examined the research topic from a market point of view (contacted several companies, involving banks, brokerage firms, traders, warehouses, ports, and producers to explore the market possibilities; collected data made deep interviews with specialists of financing exchange trading warehousing and investment). As a result of the on-site research the authors verified that there is a market demand for the institution in Vietnam and in other countries in the region.

Vietnam's grain market situation differs from European or American market conditions, as market-oriented companies and improved market-friendly regulations are sometimes at odds with "old school" socialist political policies and leadership. In recent years, I have visited Vietnam and other ASEAN countries several times, contacted banks, brokerage firms, traders, warehouses, ports, and producers. I am convinced that the biggest problem of Vietnamese Agri-export market is the lack of financing.

As a result of the on-site research, it can be verified that there is a market demand for inventory financing based on public warehouses in Vietnam and other countries of the region as well.

2. THE GOAL AND THE METHOD OF THE RESEARCH

The main goal of the research was to draw the attention of Vietnamese research partners and market players and encourage Vietnamese decision-makers to make relevant economic policy decisions and take the necessary regulatory steps with the cooperation of these partners. All this would create a new commodity/trade finance instrument in Vietnam.

The market demand for the appearance and operation of the Public Warehouse seems obvious. The most important barriers to entering the market are the recognition of the benefits of using institutions in the Vietnamese market, and consequently the lack of economic policy decisions and the lack of the necessary regulatory framework.

The present research focuses on the investigation of these factors and the necessary legal background, the areas to be transformed and developed. In addition to direct public storage issues, this requires an in-depth analysis of related areas to prepare a study based on a complex information base.

The authors' firm intention is to present the topic in its full form, starting from necessity and actuality; they present the current situation based on the research and finally present their arguments in favour of the implementation of these institutes.

Finally, the authors would like to make a proposal for commodity financing with the current regulatory system. They believe that the biggest problem in Vietnam's agricultural market is the lack of financing. The possibility of introducing the mentioned institution is the best solution to solve the financing problem, but at the same time the authors are aware that changing the basic rules is a so-called a very complicated procedure in a "socialist" economy compared to a free market situation in Europe or America. On the free market characteristics of the Vietnamese economy vis-à-vis the political system; the authors' last suggestion is based on the current regulatory situation.

The authors believe that with this solution, the emerging financing problems could be handled effectively without complicated regulatory changes, and the result could be like the solution provided by the introduction of market institutions. From the government's point of view, the introduction of a market institution is the

ideal solution, for at least two reasons: on the one hand, it can help regulation and inventory strategy, and on the other hand, they are the best control method in one of the most important areas of Vietnam's national economy.

We have determined to present the subject in its full form, beginning with necessity and actuality; based on the research, I present the current situation, and finally I present my arguments in favour of the implementation of the public warehouse system.

The study consists of primary and secondary research, the conclusions and recommendations are based on the synthesized results of the two closely related studies and the evaluation of the results thus obtained.

The data comes from secondary research from international statistical databases, regulatory and current economic policy information background, banking, and financing databases; the information base of the HOSE Stock Exchange; data of the Vietnam Singapore Industrial Park VSIP, as the largest industrial park, as well as bibliographic sources such as scholarly publications.

As primary research, we conducted numerous interviews and professional discussions with experts in the various fields of the research topic in the fields of warehousing, logistics, finance, regulation, and economic policy.

Locally known managers include the International Relations Director of HOSE (HCMC Stock Exchange); Vice President of VSIP; the former chairman of the State Committee for Financial and Monetary Supervision; the chairman of a Singaporean investment company.

3. THE CURRENT SITUATION OF VIETNAMESE AGRICULTURE FROM THE POINT OF VIEW OF FIELD CROPS

Vietnam's GDP has shown significant growth over the past decade (Fig. 1.), with agriculture contributing to this with a relatively high and stable average annual growth rate of 3.3%. It not only satisfies the food and raw material needs of the domestic industry and service development, but also contributes to the export market (in the last 5 years, about 50% of the agricultural-forestry-water products were exported). Agriculture is the only sector with a trade surplus exceeding USD 8 billion in 2018. Due to abundant supply and extensive international integration, Vietnam's agriculture is closely linked to changes in the world market. (IPSARD, 2019). Vietnam has signed 12 free trade agreements with 56 countries and economies around the world, 10 of which have entered into force, and Vietnam has fully implemented all WTO obligations. (Nguyen N.M., 2018).

Fig. 1. The growth of GDP in Vietnam, 1980-2020 (Billion USD)



Source: IMF 2020 (Actualities)

Vietnam has seen impressive export growth over the past few years through international economic integration and participation in free trade agreements. The total value of AFAP exports reached US\$36.4 billion in 2019, a 14-fold increase from 1995 when Vietnam joined ASEAN, representing an annual growth rate of 12.9 percent. Several AFAP have high export value in the world, however, export prices are relatively low as most exported goods are raw products such as rice, peppers, and cashews (Table 1).

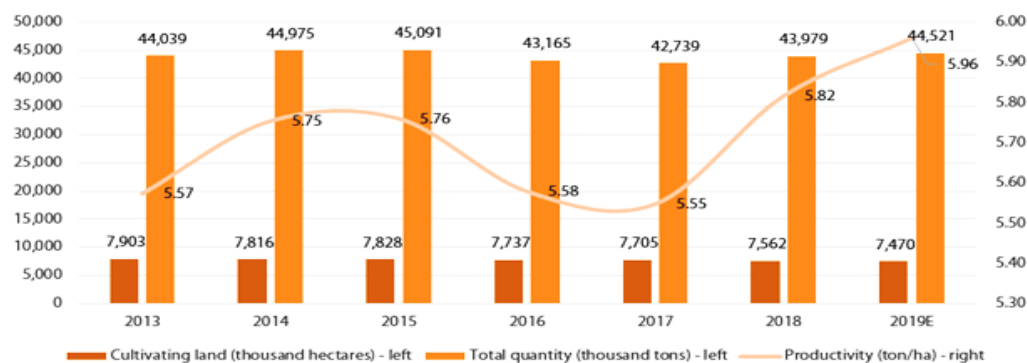
Table 1. Position of Vietnamese agricultural exports in the world

Category	Global Exports (Billions of USD)	Vietnam Export Share (%)	Vietnam export value ranking	Export Price ranking
Rice	20.1	11.3	3	10
Fruits and vegetables	177.6	2.1	19	15
Coffee	30.9	10.5	2	10
Pepper	4.7	23.9	1	8
Cashew (raw)	7.5	46.8	1	6
Rubber	170.2	11.4	3	10
Tea	7.3	2.2	9	10
Shrimp	18.6	16.9	1	2
Pangasius	1.8	95.0	1	1
Wooden Furniture	127.8	6.0	2	4

Source: Nguyen Ngoc Mai (2018) based on ITC-Trade map, GDVC, 2020

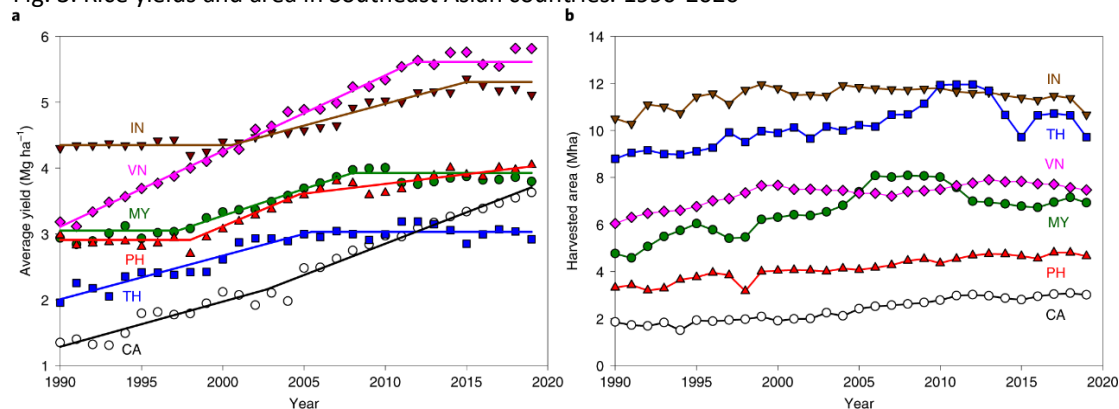
The country has a huge production basis, one of the world's leading producers and exporters in case of rice and coffee and the productivity shows increasing trend. (Figure 2;3).

Fig. 2. The Rice Production Area and Quantity in Vietnam (2013-2019)



Source: Nguyen Tung (2019) on the basis of General Statistics Office of Vietnam, Rong Viet Securities

Fig. 3. Rice yields and area in Southeast Asian countries. 1990-2020



Source: FOSTAT Nature Food (2021)

Fig. 3. Panels show trends in average yield (a) and harvested area (b) for rice in six major rice-producing countries in Southeast Asia: Cambodia (CA), Indonesia (IN), Myanmar (MY), Philippines (PH), Thailand (TH) and Vietnam (VN) during the past 30 years (1990–2019)

Based on recent (2020) information available the potential public warehouse market can be described in terms of agricultural products with the following numbers. (Table 2):

Table 2. The potential Vietnamese public warehouse market

Product	Production/year 1,000 tons	Price USD/ton	Value USD Million
Coffee	1,800	~2,300	4,100
Rice	46,000	~500	23,000
Corn	6,000	~260	1,600
Total	53,800	-	~28,700

Source: Own compilation based on ICE; NASDAQ; IG UK; CME Group and FAO (2021)

As for the Vietnamese rice production prospects recent years, the production in 2020/21 was estimated at 27.0 million metric tons (milled basis), 1 percent lower than the preceding year and 2 percent lower than the recent 5-year average. Harvested area was estimated at 7.4 million hectares, which means 1 percent decrease from the previous year and 3 percent shrink from the 5-year average (USDA, 2020). While the present figures represent still robust production potentials, Vietnam's rice production has declined steadily since 2017/18, and the production area has also declined consistently at a rate of 1 % on an annual basis since 2016/17. However, the growing yields can slightly compensate the mentioned decrease as rice yield is forecasted at a record 5.84 tons per hectare, up slightly from the previous year and 1 percent higher than the same of the preceding 5-year average (USDA, 2020).

The research-based picture about Vietnamese Agri-product market, as well as the evidence above helps in outlining some general insights on the development trends of global agricultural, especially rice and coffee market and the position of Vietnamese agriculture as follows:

Vietnam's agriculture possesses with strong supply capacities, and has been participating in international integration, and is increasingly dependent on the world market.

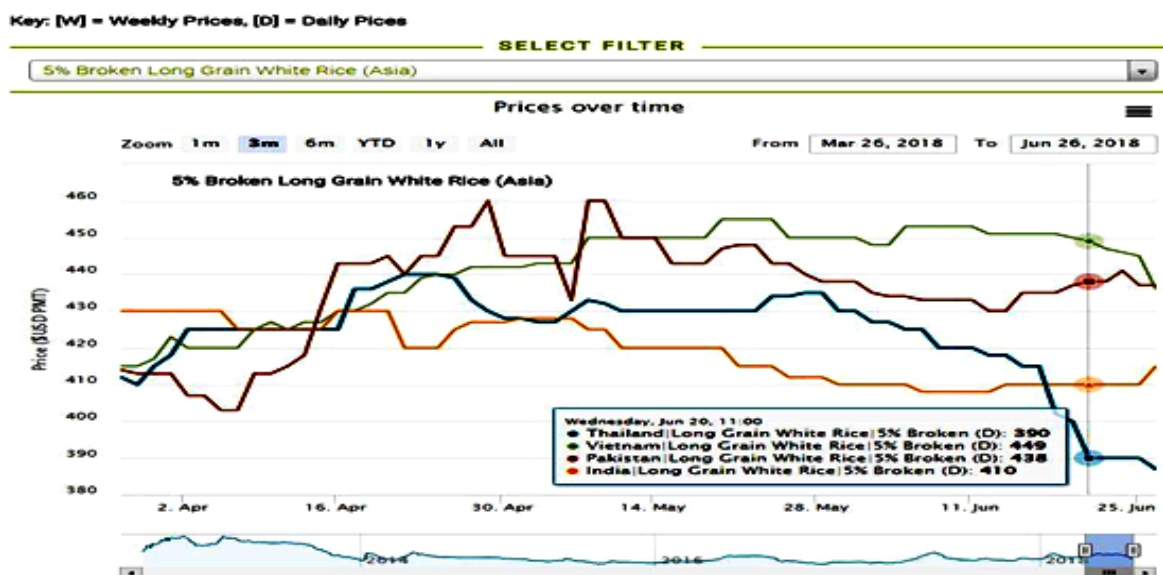
The world has been witnessing a robustly growing demand for rice and coffee along with the global economic growth, particularly since the beginning of the 21st century.

Prices of these commodities have closely linked to the changes in oil prices and other financial investment channels as well, and the trend of short-run fluctuations has become increasingly frequent.

It must be underlined that Vietnamese agriculture sector suffers of the lack of financing. The production sector has serious loss because of the partial lack of enough storage capacities, that causes more than one million tons of wastes just in case of rice, even more than the effect of the low dumping prices of both the rice and coffee as well.

Vietnam has the highest production level in ASEAN region as clearly illustrated in Fig. 4, but it is not reflected in revenues, as Vietnamese average export prices are 20% lower than the same of Thailand, even though the registered exchange market price is higher, according to Fig. 5.

Fig. 4.: Historical exchange prices of Asian rice producer countries

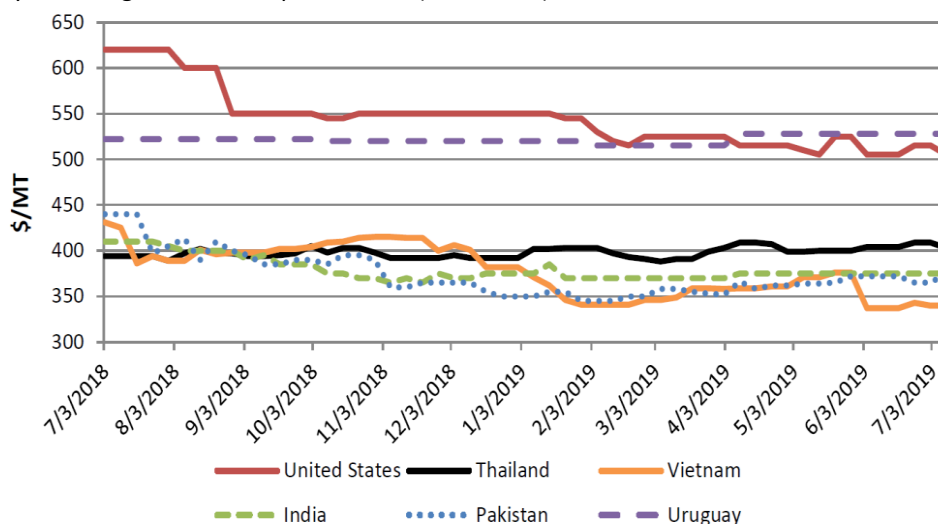


Source: <https://livericeindex.com>

The information of Fig.4 and Fig 5. show that the Vietnamese rice production and export market has still a relatively high 'price reserve' and possible profit reserve for producers, traders, and the whole national economy.

The situation is similar in case of coffee, corn, pepper, and other strategic products of Vietnamese agricultural market.

Fig. 5. Weekly FOB Long Grain Rice Export Quotes (2018-2019)



*Note on FOB quotes: Thailand - 100B, India - 5%, Vietnam - 5%, Pakistan 5%, United States - #2/4 (long grain), Uruguay - 5%

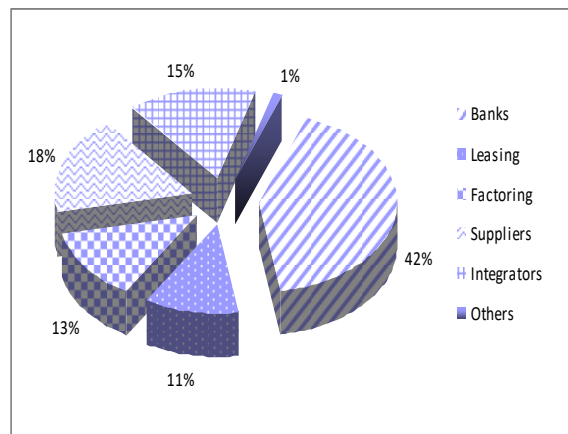
Source: USDA Office of Global Analysis July 2020

4. FINANCIERS OF AGRICULTURAL ENTERPRISES

In Vietnam, unlike to other countries with momentous agriculture, there has not been developed specialized network for institutional agricultural financing. The sector's financing is being done mainly by commercial banks, based on their own regulations, and evaluating system.

Nowadays, the liabilities of private enterprises and corporations in agriculture is close to fifty billion USD. The leading role of commercial banks is evident as shown in Fig. 6. which illustrates the shares of the most prominent financing forms within the sector.

Fig. 6. Financers of Vietnamese agricultural enterprises



Source: Own compilation (2022)

As most of the indirect financers of the sector such as factoring companies, leasing companies, and integrators, are also re-financed by commercial banks. It must be mentioned that in many cases the banks are present on the credit market as intermediaries when the primary financer is the state. The interests of the sector and of the national economy in many cases are in contradiction with the profit-orientation of the financers: the financial sector will only grant credits on strictly commercialized basis for agriculture as well, by guaranteeing the due profit on the credited amount. Thus, even in case of public utilities, no system of preferences can be introduced into the credit system.

Due to their volume and because they can be turned into one's own capital, state subventions are to be regarded one of the most important elements in financing agricultural enterprises. To the enterprises, these

resources are unencumbered and/or work as own resources either indirectly – as they have been accounted as other incomes 'or directly' because of placing them into capital. The system of criteria according to which these subsidizations can be obtained, as well as their form and size is elaborated according to the agricultural political directives depending on the budgetary policy of the given year.

Further examining the diagram above, it looks obvious that the highest percentage of financing is provided by contractors. A matter of a further study would be the growth rate of the days financed by the contractors, and respectively their co-relationship with their winding ups within the sector. Even the logistical aspects play an important role in it.

The working capital loan options offered by commercial banks differ from each other in the terms of the loan's purpose, interest rate, term, currency, collateral structure, and show a rather heterogeneous picture. They cannot solve inventory financing, which results in early sales and low export prices.

5. THE CURRENT SITUATION OF WAREHOUSING MARKET IN VIETNAM

In Vietnam the most important two agricultural crops in volume and value are rice and coffee. Vietnam is one of the world leaders in both products in quantity of production and exports as well. Price volatility is one of the biggest problems in Vietnam, which affects both domestic and export markets.

Warehousing capacity regarding the main agricultural products is very 'colourful' regarding the size and the quality, as well as the storage technology. One can find outdated, malfunctioning machinery and cutting-edge robotic technologies in parallel. Warehousing market in Vietnam develops noticeably fast and it is expected to reach over USD 8 Billion by the end of 2022 according to analysts of Ken Research.

Warehousing facilities play a vital role in the overall supply chain process. In Vietnam, the companies operating within this segment witnessed adopting a warehouse management system that supported multi-location management, through effective order management, auto-refilling of inventory, auto-generate purchase order to supplies and receiving automatic updates against inbound orders (MONRE, 2019).

Vietnam warehousing market is expected to register a positive CAGR (Compound Annual Growth Rate) of 13.4% during the forecast period 2018-2022. The market is further expected to be driven by continuous flow of FDI (Foreign Direct Investment) from foreign multi-nationals and the government's efforts towards the development of logistics infrastructure and consistent economic growth (Tilton, 2010).

6. CONCLUSION/THE ADVANTAGES OF INTRODUCING PUBLIC WAREHOUSING IN VIETNAM

Despite the situation mentioned above, the leading producer's role is to handle the price and storage risks and the fast-developing logistic background. Vietnam does not have public warehousing (PW) system and there is no current legal solution for PW. This is a regulatory shortage. The government should act as a bridge between local businesses, business organizations and markets, and large processing and trading companies by providing market information.

The public warehouse-based Lombard financing could have great importance in financing the rice, coffee, and other agricultural commodities market in the future in Vietnam. The method is very similar to the characteristic of US or European methods.

The most important basic information required to do business is the price of the commodities. This determines the profit of the business. There is no such a thing as "average" price information because it can vary according to the parity and the ways of storage, finance, and logistics. Knowing the special conditions of a given market, it is possible, however, it needs exact and accurate price calculations for selling, purchasing or production decisions for that market (Zakic, et. al, 2014).

The three main agricultural products worth nearly USD 29 billion according to Table 2. and the amount and volume grow year by year. Vietnam exports an additional 5-6 million tons of table wheat, worth USD 1.5 billion and there are several other agricultural products that are possible to be included in public storage system.

Just as a comparison, it can be underlined that the total Hungarian grain market is about 10-12 million tons, the value of which is approximately USD 2.8 billion, - less than ten percent of Vietnam's, grain market and its overall value is USD 1.2 billion less than just the Vietnamese coffee market. In the years before the EU accession of Hungary (2004), about 200 billion HUF (USD 0.7 billion) of liquidity was provided to Hungarian

agricultural market due to the lack of resources with public warehouse-based Lombard credits, which was a great help for the production sector, which was difficult to finance with traditional banking instruments that time.

Based on the Hungarian and European experiences, 65% of the total storage and financing of the crops has been solved by producers, traders, and manufacturers, and approximately 35% of it is the potential quantity for public warehousing and Lombard financing. In the United States the latter is over 50%.

There are no accurate statistics for Vietnam, but the ratio is likely to be much worse - that is, the public warehousing and Lombard financing ratio is higher, it could be around USD 15 billion.

Vietnam needs new regulation to be able to the public warehouse as a new market institution for two reasons. In one hand, a well-managed public warehousing system, which exists according to the method above, could force commercial banks to step into the commodity financing, while in the other hand it could support governmental stockpiling activity as well (Coulter, Onumah; 2002). The authors believe that market-based regulation can be used, and it would be the best solution to achieve pricing, regulatory and stock piling goals.

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E-model in Price Risk Management

Prof. Laszlo Kozar PhD¹

¹Budapest Business University, kozar.laszlo@uni-bge.hu, Hungary

Abstract: Agricultural companies have different options for risk management. The risk of agricultural production consists of several components. Protection against production risks requires different tools than protection against price or market risks. It is known that farmers consider market risks more important than production risks. Farmers spend a maximum of 40 percent of their working time on production and a minimum of 60 percent on sales, and the latter percentage increases every year.

This shows that farmers have realized that market risk management should be part of their business activities. If there are adequate marketing institutions, such as a Commodity Exchange or Public Warehouse, commercial and financial risks can be managed, reaching a much lower level than natural risks such as drought or infectious diseases.

The main goal of this paper is the joint application of two market institutions: public warehousing and the futures exchange, and the beneficial effect of this for the actors of the grain market. Based on a theoretical foundation, a calculation model was developed to assist short and long-term marketing decisions.

Summary: The principal achievement of this paper is to introduce the combinative use of two market institutions: public warehousing and commodity exchange and how their joint application is beneficial for the players on the grain market. The electronically developed and working model, presented in the paper, 'using excel background' allows all the three participants of the market: producers, consumers, and traders, to use this model in immediate calculations price decisions and business transactions. In addition, it helps to establish the own business strategy. The model can be used to analyze factors influencing the establishment of price; therefore, it can be also used for policy-making decisions.

Keywords: E-model, public warehousing, Commodity exchange, Lombard financing

1. INTRODUCTION

The grain market is one of the busiest markets for all participants. Prices can double or halve from season to season. Market participants very often suffer losses, even though they have two very important institutions at their disposal for managing market and price risks, the Futures Exchange, and the Public Warehouse. The combined application of these also provides opportunities for risk management and business planning. By actively using the activities of the two institutions or even using only the available and other market data from them, pre-calculations can be made for business decisions, which is what the presented model was made for.

2. THE GOAL and conceptual framework

The main goal of the research was to raise the risk problem, to introduce market Institutions and pre-calculation model and draw the attention of market players for the possibilities of price risk management, using their functions.

The most important goal of the paper is to present a calculation model which can be useful for any participant at the same time in the grain business. The model is a useful tool to calculate the basic price information for the short-term business decisions and for mid-term strategy. Through an analysis of the combination of the techniques of the two institutions a calculation model has been presented based on extensive databases which utilizes both methods. The model introduced is the product of several years of research.

Data about the costs of public warehousing have been drawn from three public warehousing companies; information on commodity exchange costs has been drawn from a brokerage companies; information about price was drawn from futures contracts of the Budapest Stock Exchange.

Storage costs used in the calculation model were obtained from two warehousing companies, each with a storage capacity of several hundreds of metric tons. Interest rates used in banking practices have been used as the cost of financing. The fees of a qualified laboratory have been used as the cost of quality control. The official tariff of MÁV (Hungarian National Railway Company) have been used as railway costs; the tariffs of two Hungarian transport companies, representative of national data, have been included as trucking costs; and the actual tariffs of ports have been used as port costs. Similarly, the costs of various trading documents have been drawn from the fees of the institutions issuing them.

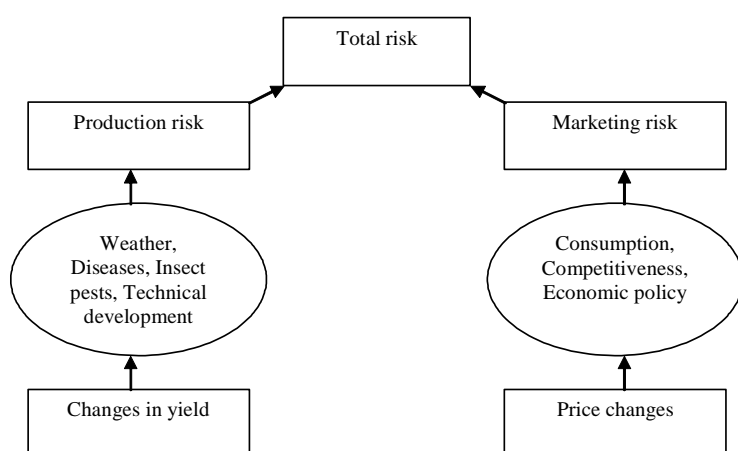
The main goal of the paper is to present the possibilities of different institutions and using the database of different market participants together and to find the possible connections between them from the market members' point of view. Most of dates as Exchange prices; Exchange rates; Public Warehousing fees; railway transport costs are available electronically so the model can use this background on-line form.

The paper focuses on the connections and the possibilities of the technical background of the institutions mentioned above. In the characterization of different commercial methods, the combination of Lombard financing and the futures hedging is illustrated.

3. Secondary literature analysis

Because of the nature of agricultural production, there are several different risks producers must handle. These risks can be production (natural and technical) or economic risks. The probability of the risk causes a problem for the market participants day by day (Krugman, 1994). The risks of agricultural firms can be divided into two big groups, according to their nature, as shown in Figure 1.

Fig. 1: Risk factors and their effect in agriculture



Source: Otmaier, 1972

Managers of agricultural firms use the two categories of **uncertainty** and **risk** as synonyms (Kemény, 2001).

The risk management strategies of agricultural enterprises according to Castle, Becker, and Nelson (1992) are the following:

- Flexibility
- Tenancy
- Marketing possibilities
- Financial management alternatives
- Insurance

Price risk has become a more immediate issue for both farmers and agribusiness companies in the United States and European Union, due to WTO free trade policies and the agricultural policy reforms stipulated by the EU (Pennings and Meulenber, 1997).

The result of the monitoring of the budget CAP in the middle of the fiscal period 2000-2006 (MTR, Middle Term Revenue) led to the new reform CAP. The most important element of this reform is to separate direct payments – the biggest amount of the budget – from production (decoupling) and to transfer to rural these to development goals (modulation). This arrangement is forcing **the development of market circumstances** in the grain sector (Vajda, 2003).

The foundations of current Public Warehousing originated in England (Fisher, 1908). There are three different varieties of storage buildings in England: Docks around a port, Wharfs in ports and Warehouse fares from ports (Minch, 1928).

Warehouses were established for trading purposes in Belgium, the Netherlands, and France, in the 17th century, and their prosperity was successful without any legal regulation (Máygráber, 1865).

Hungary was the first country in Europe where Public Warehousing was handled as a trading activity on Act level. The Trading Act was passed at 1875. According to the act: „Public Warehouse is a company, dealing with the storage of merchandise and issuing warehouse recipes” (Kelényi, 1994, Csőke, 1996). Recently, public warehouses have become special financial institutes with a licence to issue a particular security: Warehouse Recipe (Bács and Kozár, 2002).

Modern futures trading started in Chicago. The Chicago Board of Trade was founded in 1848; trading with futures contracts started in 1865 (Barry, 1984). The „Grain Hall of Pest”, the original Hungarian Commodity Exchange, was founded in 1853; from 1864, the name changed to The Budapest Commodity and Stock Exchange (Bozzai, 1988).

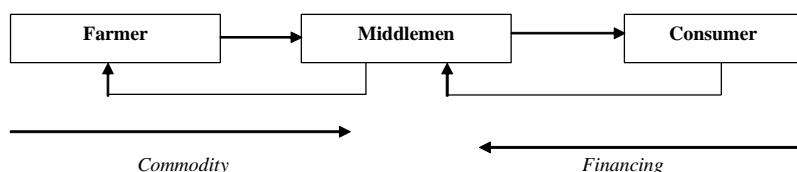
Recently, the Budapest Stock Exchange had more than a hundred members, and the turnover in grain futures contracts are in millions of tons (Fodor, 2022).

Given the increased agricultural price fluctuations, some exchanges in Europe, such as the Amsterdam Agricultural Futures Exchange, the London Commodity Exchange, the Waren-terminborse in Hannover, and the Warsaw Board of Trade, are preparing to introduce new agricultural futures contracts (Pennings and Meulenberg, 1997). It can be established from the literature that protection against price volatility has always been in the interest of the authors.

4. Characterisation of different commercial methods

The traditional method of commodity marketing is shown in *Figure 2*.

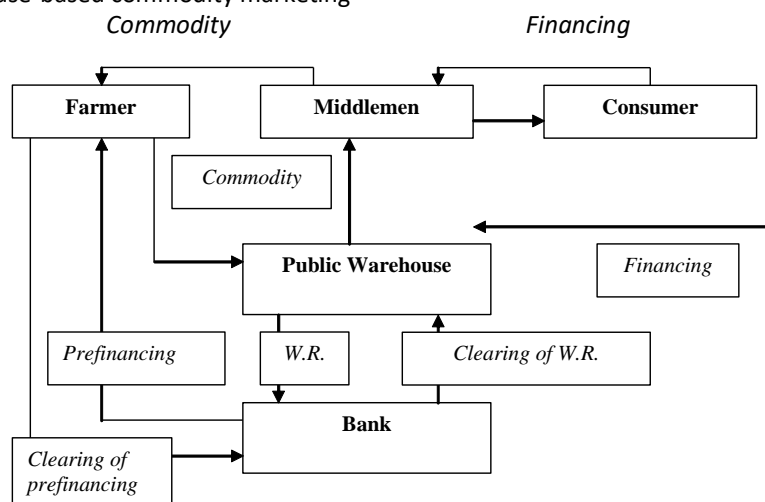
Fig. 2. Traditional commodity marketing



Source: Own figure

The public warehouse-based Lombard financing has had great importance in financing the grain market during the last several years in Hungary. This method is very similar to the characteristic US method and is presented in *Figure 3*.

Fig. 3. Public warehouse-based commodity marketing

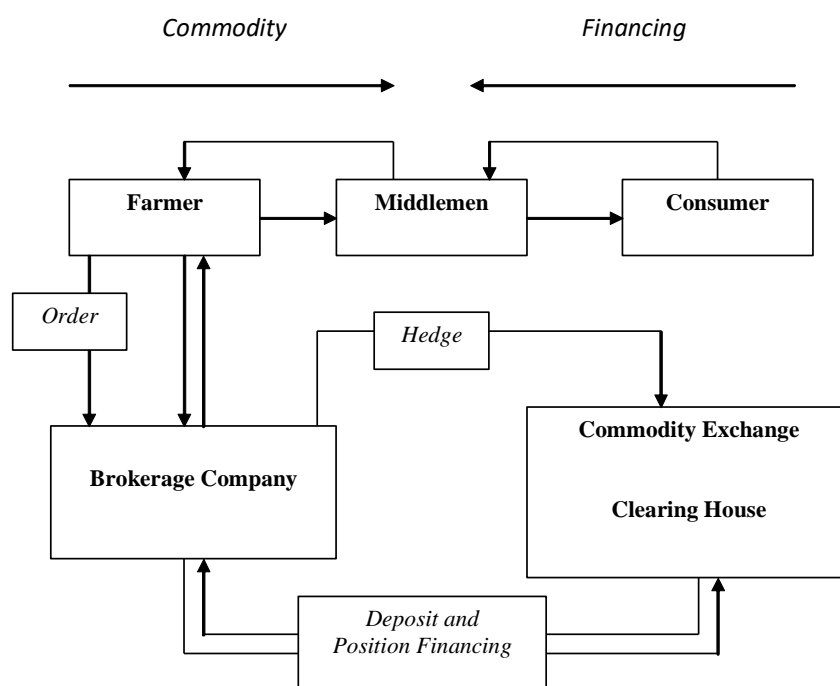


Source: Own figure

The present practice of Lombard financing has been developed for more than twenty years, and by now it has become a day-by-day used financing system. Most of the Hungarian commercial banks are dealing in this type of business.

The Commodity Futures Market in Budapest Stock Exchange is in a special situation in Hungary. This market – organized according to the large American Exchanges – corresponds to the strictest expectations by its service, technique, organization, and guaranties. The entire market uses the prices of the given Commodity Exchange as target prices for production agreements, trading contracts as well as Lombard credit financing, and there are participants on the market, from the hedging to the speculating side, as well. This market has a bigger turnover in grain futures contracts than the other European markets such as *Marché A Terme d'Instruments Financiers* (MATIF), and the other members of the EURONET. The traditional method of commodity marketing with a short hedge is shown in *Figure 4*.

Fig.4. Traditional commodity marketing with a short hedge

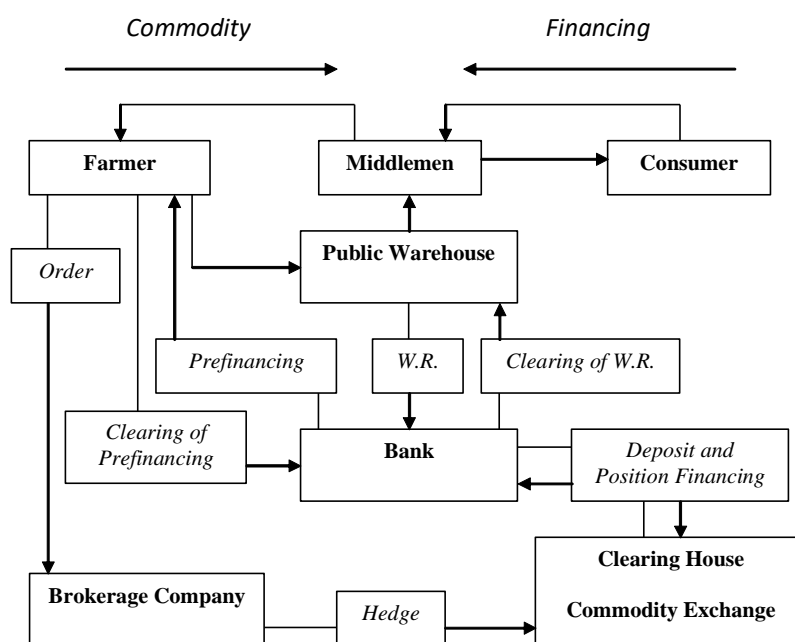


Source: Own figure

The institutes of public warehousing and futures market are available for the participants on the grain market in Hungary and in several other European countries. The combination of possibilities offered by the two institutes gives the biggest chance to eliminate price risks. In the case of Lombard credits, it gives the best opportunity for both the borrower and the bank, namely: the borrower can have the highest credit amount as the lowest risk for the bank. This construction is called as a Lombard credit with a futures hedge background.

The method of commodity marketing by combination of public warehouse and a short hedge is shown in *Figure 5*.

Fig.5. Public Warehouse-based commodity marketing with a short hedge



Source: Own figure

The institutes and the possibility to use the combination of advantages offered by them are available to all producers, traders, and consumers.

The most important basic information required to do business is the price of the commodity. This determines the profit of the business. There is no such a thing as „average” price information, because of the parity, storage, finance, and logistics. Knowing the special conditions of a given market, it is possible, however, to prepare precise price calculations for selling, purchasing or production decisions for that market.

To find the relevant answer to these questions, a calculation model was created and all the price influencing factors are built in. The goal of using this model from the producers', traders' and consumers' point of view is to calculate daily price information to decide on immediate selling/buying or a postponed selling/buying of the commodity, based on public warehousing and futures hedge information.

5. Methodology of the decision-making model

The function of the model is to give up-to-date price information based on the principles described above and daily information about price influencing factors for any participant of grain market.

5.1. Inputs of the model

The inputs of the model can be shared into two parts: the medium-term principal inputs (e.g., railway tariffs), and the daily-modified information (e.g., currency exchange rate).

The main inputs are, as below:

- **Primary cost: Pc:** (€/t) the cost of the production of one metric ton of the commodity (in local currency). This is the basis for the price calculation (in the case of a producer). In case of consumer: **Purchasing price: Pp** (in local currency). In case of trader: **Pp** or **Selling price: Sp** (in chosen foreign currency).

The price calculation is prepared in one direction in the case of a producer and consumer, but it can be prepared in two directions, as well, in the case of a trader.

- **Foreign currency: Fc:** (€/c) the currency of the offer or the contract. It is usually USD, but any other currency can be used.
- **Inputs, connected to the storage:**

Sf: storage fee (€/month), in the case of self – owned storage capacity its primary cost per ton.

St: storage time (month).

Ff: fumigation fee (€/case).

Fp: fumigation period (case).

– **Inputs, connected to public warehousing:**

Wf: warehouse fee (€/month).

Wp: warehousing period (month).

Wo: other additional costs, for example: additional insurance cost (€/t).

– **Inputs, connected to financing:**

Ir: interest rate of the financing (%/year, the real rate according to the credit contract, or the average bank interest rate).

Fp: financing period (month).

Fo: other financing costs: additional bank fees (€/t).

– **Inputs, connected to Commodity Exchange:**

Bf: Brokerage fee, containing the direct fee of Brokerage Company, the fee of Exchange and the fee of Clearing House (€/t).

Id: interest of daily exchange rate differences: (%/year) = **Ir**.

Pr+, Pr0, Pr-, direction of financing of the daily exchange rate differences.

Fp: Futures period (month), the real open period of the futures contract.

– **Inputs, connected to transportation:**

Rd: Railway distance: (km), distance from the actual loading point to the border.

Cl: Carriage loading: cost of the loading of railway carriage (€/t).

Rf: Railway freight: the official freight tariffs of the actual Railway Company (€/t).

Tf: Truck Freight: (€/t/km), freightage of the Truck Company.

Td: Trucking distance: (km), the exact carriage distance by truck.

Tl: Truck loading: cost of the loading of truck (€/t).

– **Inputs, at the port (€/t):**

L: Loading, from truck or rail carriage into the ship/barge.

S: Scaling, the fee of official scaling.

W: Wharfage, the fees of using wharf during loading.

D: Documentation, costs of documents issuing at the port (duty, etc.).

– **Quality and health certificates (€/t):**

Q: The fee of Quality Certificate.

Pl: The fee of local Phytosanitary Certificate.

Pe: The fee of export Phytosanitary Certificate.

Ve: The fee of export Veterinary Certificate.

– **Profit: P:** the amount of desired profit (€/t).

5.2. Outputs of the model

The model uses the information of principal database first. The pre-calculator outputs of this calculation gives immediate information for the user, and the final cost and price calculation will be based on these results, as well as the other primary inputs (see above).

The pre-calculation outputs are, as follows:

– **Storage cost, S:** (€/t)

- **Public Warehousing cost, W:** (€/t)
- **Financing cost, F:** (€/t)
- **Cost of the Commodity Exchange, E:** (€/t). The model calculates the cost of the daily financing based on the daily exchange rate differences. In case of:

E1 (Pr+): the futures position needs financing during the whole period, which is not more than 50 per cent, according to long-term practice.

E2 (Pr-): the opposite situation, the exchange price difference generates income.

The possibilities of E1 and E2 are the similar in the daily business.

E3 (Pr0): the costs and incomes eliminate each other.

- **Railway cost, R:** (€/t)

Railway costs cannot be calculated on a €/km basis because the freight cost is not linear with the length of transportation. Because of this, the model uses the official freight tariffs of the actual Railway Company as a principal data base and chooses the actual cost according to the railway distance. The loading of railway carriage is not the part of the railway cost since it is an independent output.

- **Trucking cost, T:** (€/t)
- **Cost of the port, P:** (€/t)
- **Agent's cost, A:** (€/t)
- **Foreign currency, Fc:** (€/c) the currency of the offer or the contract. It is usually \$, but any other currencies can also be used.

Final calculation can be prepared after the pre-calculation phase, using the chosen pre-calculation outputs and the other chosen inputs, as a database.

Final outputs are, as below:

- **Primary cost, Pc:** (€/t) the cost of the production of one metric ton of the commodity (in local currency). This is the basis for the price calculation (in case of a producer).

In case of a consumer: **Purchasing price: Pp** (in local currency).

In case of a trader: **Pp** or **Selling price: Sp** (in chosen foreign currency).

- **In case of a producer** the final output is the **selling price: Sp** in €, and in the given foreign currency, as well. The model shows the actual parity of the INCOTERMS, too.
- **In case of a costumer** the final output is the **Purchasing cost: Pc** in € which contains the purchasing price and the additional costs of purchasing.
- **In case of a trader** the final output is the **selling price: Sp** in the given foreign currency if there is **Purchasing price: Pp** in the input side, or **Purchasing price: Pp** in €, if there is a **selling price: Sp** at the input side.

If there is no price information on the input side, the output is the **logistic cost: Lc** in the given foreign currency. The model shows the parity of INCOTERMS, too, according to the actual price information.

6. Results of the model

Calculations have been prepared in two different parts:

6.1. The first part of calculation has been prepared using real price information from the Budapest Stock Exchange. The goal to use this information was to provide a background for futures business decisions.

In this theoretical case, the calculation was prepared from the producers' point-of-view for milling wheat. Selling decision between immediate selling (selling price: 98.80 €/t, containing 10 €/t profit) or postponed selling by May (in EXW parity) and the possibility to make a (May-term) futures hedge by August. Storage and Lombard financing period is 270 days.

Inputs of the calculation:

Primary cost of wheat:	Pc: 88 €/t
Storage:	Sf: 0.76 €/t/month
Fumigation (4 cases):	Ff: 0.88 €/t/case
Warehouse fee:	Wf: 0.14 €/t/month

Other warehousing costs:	Wo: 0.1 €/t
Interest rate (according to Hungarian practice):	Ir: 13 %
Brokerage fee:	Bf: 0.44 €/t
Interest of daily exchange rate differences: (=Ir)	Id: 13 %
Profit Expected:	P: 6.8 €/t

Outputs of the calculation:

Primary cost of wheat:	Pc: 88 €/t
Storage cost:	S: 10.36 €/t
Public warehousing cost:	W: 1.36 €/t
Financing cost:	F: 8.58 €/t
Cost of the Commodity Exchange:	E: 4.73 €/t
Profit Expected:	P: 6.8 €/t

Calculated selling price: **Sp: 119.83 €/t**

The possible immediate selling price: 98.80 €/t

The May-term futures price is: 142 €/t. The calculated selling price is: 119.83 €/t with 6.8 €/t profit in it. The futures price contains 28.97 €/t profit. The relevant business strategy is the postponed selling, hedging in the futures market and a bridging finance by Lombard credit.

6.2. The second part of calculation has been focused on how the calculated price is influenced by the storage and warehouse period, the costs of financing of daily exchange rate differences, interest rates and foreign currencies.

Inputs of the calculation:

Primary cost of wheat:	Pc: 88 €/t
Storage:	Sf: 0.76 €/t/month
Fumigation 3-month storage (1 case):	Ff: 0.88 €/t/case
Fumigation 6-month storage (2 case):	Ff: 0.88 €/t/case
Fumigation 9-month storage (4 case):	Ff: 0.88 €/t/case
Warehouse fee:	Wf: 0.14 €/t/month
Other warehousing costs:	Wo: 0.1 €/t
Interest rate (according to an average European level):	Ir: 4 %
Brokerage fee:	Bf: 0.4 €/t
Interest of daily exchange rate differences: (=Ir)	Id: 4 %
Profit Expected:	P: 6.8 €/t
Parity:	EXW
The possible immediate selling price:	94.40 €/t

The goal of the calculation is to test the efficiency of different price influence factors. The outcome of the calculation is seen below:

Storage:	3 months
USD currency:	0.8 €/t
Interest rate:	4 %
Calculated selling price:	100.20 €/t
	125.25 \$/t

According to the result of this calculation, the additional costs have been returned on this price level. The futures price should be higher to realize higher profit with postponed selling, in comparison to prompt selling. The result of the calculation is shown in *Table 1*.

Tab. 1. Results of the calculations (price in: € or \$/ton)

Macro factor	Micro factor	Storage:									
		Short term (3 months)			Medium term (6 months)			Long term (9 months)			
		Pr+*	Pr0*	Pr-*	Pr+	Pr0	Pr-	Pr+	Pr0	Pr-	
Exch. rate	3.5%	€	100.04	99.65	99.27	104.77	104.00	103.23	110.39	109.23	108.08
		\$	125.04	124.56	124.08	130.96	130.00	129.04	137.98	136.54	135.09
	4.5%	€	100.37	99.87	99.38	105.43	104.44	103.45	111.38	109.89	108.41
		\$	125.46	124.84	124.22	131.79	130.55	129.31	139.22	137.36	135.51

0.75	3.5%	\$	133.38	132.87	132.35	139.69	138.67	137.64	147.18	145.64	144.10
€/€	4.5%	\$	133.82	133.16	132.50	140.57	139.25	137.93	148.50	146.5	144.54
0.85	3.5%	\$	117.69	117.24	116.78	123.26	122.35	121.45	129.86	128.51	127.15
€/€	4.5%	\$	118.08	117.49	116.91	124.04	122.87	121.71	131.03	129.28	127.54

*Pr+: price fluctuation is + 50 per cent during the whole storage period

*Pr0: no price fluctuation

*Pr-: price fluctuation is - 50 per cent during the whole storage period

Source: Own table

6.3. Evaluation of the results

According to the result of the calculation in *Table 1* it has been found that the additional costs of postponed selling in the first period (3 months) are increasing at a relatively fast rate because of the effect of once-paid costs, while in the next period, the increase of costs is under the linear level. After six months the increase of the costs is higher than on the linear level again, because of the higher percentage of interest and fumigation costs.

It has been found that the financing costs were reduced by time relatively, and that the possibility of a Pr0 situation has even been higher. The effect of change in of the exchange rate of the foreign currency is determinative from the producer's (if postponed selling is chosen) point of view, independently of the length of postponed selling and the storage period. This price influence factor, however, can be managed by the futures hedge technique, as well.

There is no possibility to give a „unified answer” to the question of immediate or postponed selling or the length of the storage period in case of postponed selling. Choosing the „best solution” is the question of the independent business decision of liable market participants on the one hand, and the presented calculation information on the other hand.

Additional costs of postponed selling (especially the direct costs of public warehousing and futures hedge) do not heavily influence the cost of the transaction. Because of the facts above, these costs cannot be considered as hindering factors in development of reasonable salesmanship and price risk management strategy.

7. CONCLUSIONS

The calculation model developed can effectively establish business decisions in grain marketing. Using this model, there are several possibilities to make calculations for different business situations.

Using electronic database this is a real practical tool for calculations. The goal of this model is to give information for all the participants dealing with grain business. The model can present up-to-date information for business decisions based on daily figures.

The institutions, as futures market and public warehouse give a lot of possibilities in price risk management. According to the result of the calculations, it has been found that the effect of changing the rate of foreign currency is the strongest price influencing factor in cases of postponed selling, but it is also manageable in the futures market. Additional costs of using the market institutions cannot be considered as „real obstacles” to engaging in these techniques.

Using the model, it is possible to analyze different price influence factors and to establish a long-term business strategy based on the opportunities offered by public warehousing and commodity exchange.

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Commodity Financing, based on Special Purpose Company

Prof. Laszlo Kozar PhD¹

¹Budapest Business University, kozar.laszlo@uni-bge.hu, Hungary

Abstract: The principal achievement of this paper is to present a special inventory financing scheme that simplifies the joint application of the two market institutions: public warehousing and the commodity exchange, similar, and even provides even greater security from the financier's point of view and is also cheaper.

This scheme greatly helps the financing of the agricultural sector, which is otherwise difficult to get credit for, but it can be used in practically any business area that also carries out stockpiling activities. At the same time, it must be stated that it requires progressive thinking and attitude on the part of the banks!

This is a commercial financing scheme that can be realized with the involvement of SPC, Special Purpose Company, (Trading House, owned by the bank) as the merchant who owns the goods, which I developed to help with short- and long-term marketing and financing decisions, and for price and credit risk management.

The article outlines the advantages of its use, demonstrates the operation and benefits of involving SPC in highly covered commercial loans. In 2009, the financial crisis grew into an economic crisis, in 2020-21 the pandemic and the subsequent economic restart opportunities, in 2022-23 the war and economic sanctions caused extreme economic effects in the global economy. Inside this external financing of the agricultural sector decreased significantly.

As a consequence of this, the banking sector, which has a moderate risk appetite, withdrew/is withdrawing additional sources of financing, loans became more expensive when, due to the impact of the crisis on the overall economy, it would require additional financing in general, but especially in agriculture.

An alternative to the partial solution of this situation is the introduction of the financing scheme indicated in the title.

Summary: The primary aim of the described structured financing is lending under non-standard conditions, within a closed construction, development of a financing solution and its implementation:

- indirect lending by way of goods acquisition from clients,
- the banking client's stocks and balance sheet optimization at the end of year,
- resale stocks that obtained by credit-related call option right (work out activity),
- the purchase and sale of goods acting as collateral, exclusively through closed (back-to-back) commercial transaction.

The financing facility displays considerable differences to general business lending, since there is an extra party – the Trading Company – between the capital provider and capital receiver in this type of financing that could mean a solution to those companies that have limited borrowing capacity however has adequate volume and quality of goods. By the above, with the aid of the sector the client can receive appropriate funds over a short period of time, while the Trading House and/or through which the refinancing bank can realize profits with manageable risks.

The transaction is closed, the price and buyer risks are verified and secured with the appropriate business and legal instruments, and/or the given goods are of commodity type, accompanied by an adequate quality certificate, its trading is carried on organized markets. Furthermore, the trading companies have adequate price reserves in all cases or its equivalent in collateral, contractual background with respect to the acquired goods. The example presented the practical using possibility of the Trading House in case of financing commodities.

Keywords: Trade finance, SPC Company, Lombard Credit, Commodity financing

1. INTRODUCTION

The Hungarian economy, especially the agricultural sector, underwent significant changes in the 1990s. Production and asset structure transformations with the opening of the market for industrial-agricultural products, the narrowing of internal and external market opportunities, and the radical decrease of profitability within the sector. Unfavourable economic effects were often exacerbated by environmental factors affecting production, all of which further worsened the financing of the agricultural sector from a banking perspective, so it was necessary to look for new financing opportunities. Relaunching public storage and the futures exchange was essential. Lombard lending based on public warehouses started and grew to the size of many millions of tons. However, it alone did not provide a solution to the hectic market conditions experienced later (for price risk management). Banks are very wary of using the two institutions together, as it is difficult to fit into the usual banking "products" category.

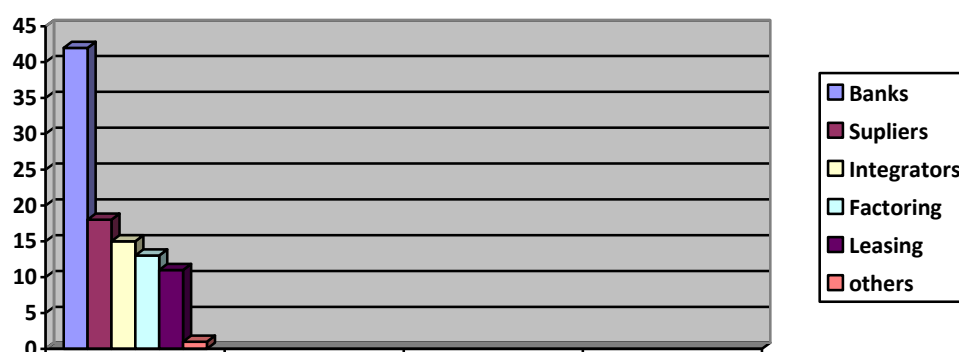
The involvement of the SPC Company promises similar coverage from the bank's point of view and is easier to digest, which justified the development of the scheme presented in this article.

2. FINANCERS OF AGRICULTURAL ENTERPRISES

Unlike in other West-European countries, there has not been developed specialized network for institutional agricultural financing in Hungary. The sector's financing is being done mainly by commercial banks, based on their own regulations, and evaluating system.

Presently, the liability of private enterprises and corporations in agriculture is close to five billion USD. The leading role of commercial banks is evident as shown in Fig. 1 – it illustrates the sharing of the most determining financing forms within the sector.

Fig.1. Financers of agricultural enterprises



Source: own construction

As most indirect financers of the sector such as factor companies, leasing companies, and integrators, are also re-financed by commercial banks, the leader position on the market gains even more importance. I must mention that in many cases the banks are present on the credit market as intermediaries when the primary financer is the state. The necessity of an involvement at such an extent is a consequence of the low profitability already mentioned above.

The interests of the sector and of the national economy are in many cases contrary to the profit orientation of the financers: the bank sphere will only grant credit on strictly commercialized basis for agriculture as well, by guaranteeing the due profit of the credited amount. Thus, even though public utility, no preferences can be introduced into the credit system (Frankovics, 2005).

Because of their volume and because they can be turned into one's own capital, state subventions are to be regarded one of the most important elements in financing agricultural enterprises. To the enterprises, these resources are unencumbered and/or work as own resources either indirectly – as they have been accounted as other incomes 'or directly' because of placing them into capital in excess in par (Zimanyi, 2006). The system of criteria according to which this subsidization can be obtained, as well as their form and size is elaborated corresponding to the agro-political directives depending on the budgetary policy of the given year (Pupos, 2002).

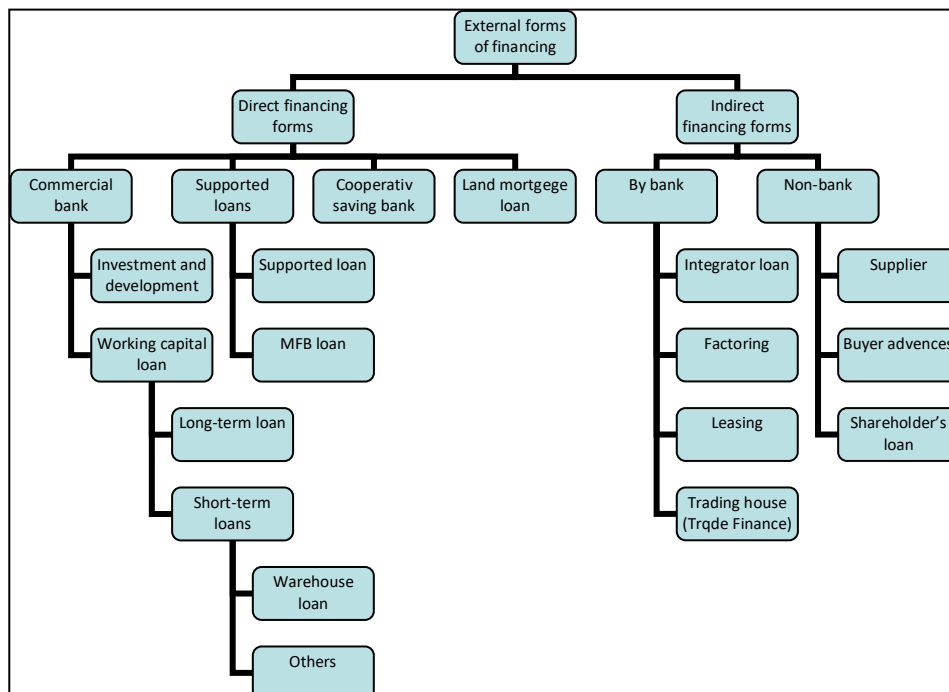
On further examining the diagram, it is obvious the high percentage of financing provided by contractors. By means of this, the enterprises depending on their size and economics can delay the fulfillment of their commitment towards their contractors which results in significantly increasing liquidity. A matter of further study would be the growth rate of the days financed by the contractors, and respectively their co-relationship with their winding ups within the sector. Even the logistical aspects play an important role in it, shown by (Karpati, 2019).

3. FINANCING FORMS OF AGRICULTURE

Regarding its provenance, financing has its internal and external forms (Figure 2). The latter one plays a significant part mainly in the first stage of existence of an enterprise, as a consequence of the poor possibilities of obtaining credit loans. The most common types of internal resources are: accounting depreciation expenses

and laughing back profit. Characteristically, these resources are to be found on an extremely limited scale in the agricultural sector, which is explainable by the low profitability. Financing through internal accumulation is impeded by the fact that the owners usually withdraw the most part of the produced profit from the production in order to achieve an investment generating higher profit, as at the moment the ROE profitability of the sector does not reach even the yield of the government securities.

Fig. 2. Different external financing forms of agriculture



Source: own construction

The financing choices offered by the merchant banks differ in their terms 'the aim of the loan, interest, duration, currency, security structure' and show a rather heterogeneous image. In case of investment and developmental loans the banks examine first of all their income producing capacity on the long run. Another type is the working capital loan when the efficiency of the economy is examined, and the parameters of the collaterals play a decisive role. The shorter the duration, the more important the value of the collateral, its stability and salability opposed to the economic indexes of the enterprise.

The institutes of public warehousing and futures market are available for the participants on the grain market in Hungary and in several other European countries. The combination of possibilities offered by the two institutes gives the biggest chance to eliminate price risks. In the case of Lombard credits, it gives the best opportunity for both the borrower and the bank, namely: the borrower can have the highest credit amount as the lowest risk for the bank. This construction is called as a Lombard credit with a futures hedge background.

4. COMMODITY FINANCING BY TRADING HOUSE

Over the past years the stock financing market – providing the capital demand that is the result of stockpiling and the characteristic strong seasonality observed in the agricultural sector – had increasingly grown and became more "practiced" by the market participants. Its size had reached an annual value of 1 billion USD, of which the agricultural products had received the largest proportion through the various market participants (producers, integrators, traders, feed producers, mills). In the meantime, this market had become part of the competition between the commercial banks that are the largest financiers of the sector, due to which the financing credit institutions had undertaken increasing risk levels, with respect to both degree of financing and the VAT financing related to stockholding.

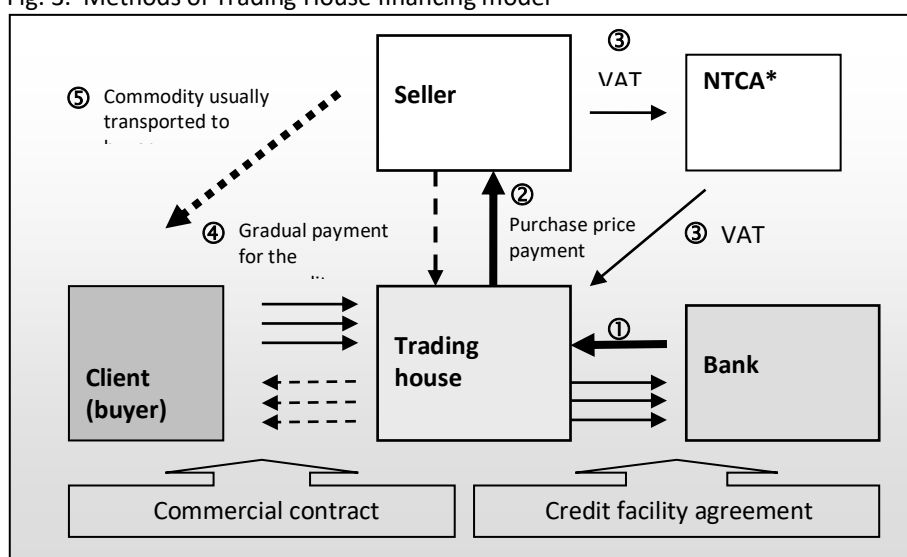
The practice of commodity financing shoves colorful picture in these days. Considering the extraordinary seasonal price drops and the companies' actions that completely ignore business ethics, it seems necessary to explore the full range of risks inherent in commodity financing. The primary aim is to ensure the prudent operation of refinancing commercial banks.

The inherent risks in trade financing – as they had been proven by the experiences of previous years – are not primarily found in the goods themselves, but rather at the actual storage facility and emerge in relation to the clients, and the inadequate and ineffective risk management of price volatility by the financiers. Therefore, the establishment of banking risk management and risk prevention techniques, the development of new procedures become indispensable, minimizing all types of risks that had emerged in previous years.

The optimal combination of applicable banking collaterals in the area of structured commodity finance and commercial transactions allow the client to receive funding even if the client's financial situation and capitalization would otherwise not allow the establishing of a financing limit or if the client is loss-making however the stocks are available in large, homogenous volume, immediately marketable at a traceable price.

Trading House financing also represents a huge competitive advantage for banks, considering that the ownership of the goods acting as collateral provide greater loan security over most banking type (eg. mortgage right) collateral, and the option of disposal over the goods are immediate. It is a further positivity that the clients may be financed over the financing limit and - when necessary - for transactions that are at the stage of work-out and the prior, intensive (restructuring) management can be dealt with rapidly and flexibly (collateral transfer).

Fig. 3. Methods of Trading House financing model



Source: Own figure

*National Tax and Customs Administration

It permits banks to enter into the financing of such companies where the company – due to existing banking relations – cannot offer classic type collaterals (eg. real estate), however with the buy-out of certain assets and stocks additional financing may be provided, with lending of considerably higher yield than applicable to other business sectors, that further expands the market options of banks.

Trading House - like banks' other such type companies, e.g., leasing practice – is a typically project type company, that can perform invoiced commercial activities, acting as an instrument in such financing transactions where the acquisition of the ownership right of goods is preferred or is the only lending method (Figure 3).

It is also important from the prudential supervisory viewpoint, that the banks' commodity financing activities that are carried out through trading companies are performed with the involvement of such companies where the controlling, refinancing credit institution can exert an exclusive competence regarding the management of risks.

The applied workflow during the activities is in every case dependent on the composition of the structure, and the type of goods, however the source of repayment is in all cases are the future cash flow from the sale of the goods.

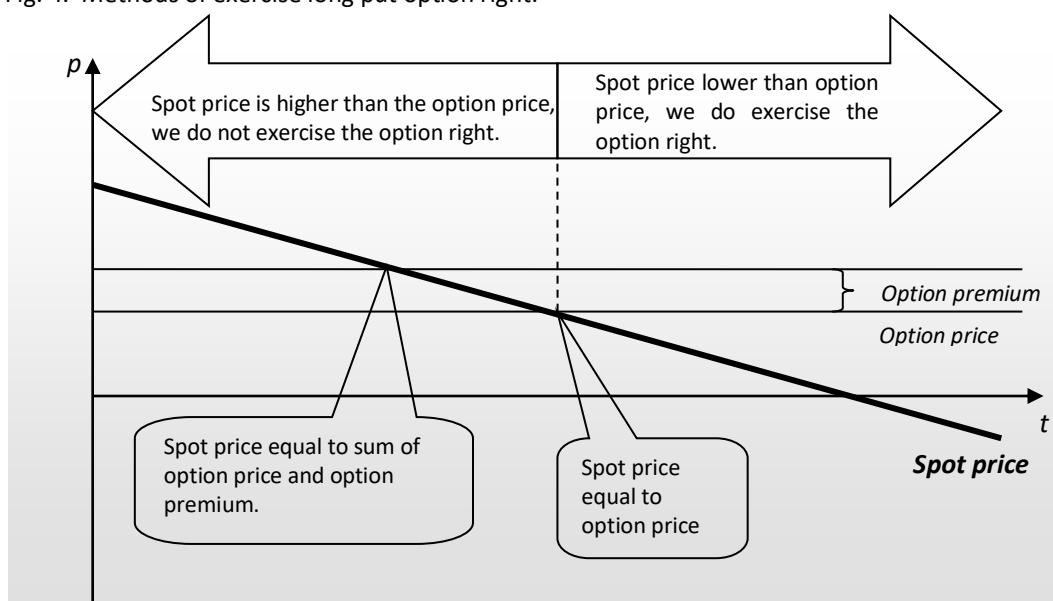
The financing of the client is carried out against a revolving credit facility provided to the Trading House by the refinancing bank. Its degree is determined based on the client's previous financial year's procurement- stock levels- and sales data that are provided by the client. The Trading Company has disposal over the credit facility following the presentation of conditions and documentation proving the closed nature of the construction. In

the case of this type of credit facility the repayment schedule is fixed, the repaid amounts may be used again according to the conditions set out in the financing structure.

During the transaction the Trading Company acquires 'acquires ownership rights' the goods/stocks from the Client, and each time obtains loans from the refinancing Bank for the financial settlement of the gross purchase price. The determination of the purchase price plays a highly important role in every financing facility.

Trading House structured business model is basically based on the price difference of purchased goods and their resale price. Based on the model, the trading house receives the stocks at a specified - compared to the value of goods at a pre-fixed rate, reduced price - that the seller (client) intends to repurchase during the provided option period but at the latest at the last day of the option period, that is maximum one year. The implementation of the option ensures the contractual collateral that – in the case of sufficiently quick reaction - may prevent the loss generating devaluation of stocks (Figure 4). Thus, both the refinancing and the Trading House capital are protected from possible price depression.

Fig. 4. Methods of exercise long put option right.



Source: Own figure

At the time of goods purchase, the Trading House – simultaneously with the purchase-sale contract – also concludes two option contracts. On the one hand the trading house provides a short call option right to the seller of the goods for the repurchase during the term; on the other hand, establish a long put option right to reduce its risks. The latter means a purchase obligation to the seller.

In the case that the Trading House experiences the unplanned increase in risks regarding a given transaction, acting within the options allowed by the contractual framework, utilizing its option right may call upon the client for the repurchase of the goods, in the event of non-compliance by the seller, the trading house the option to sell the stocks on the open market without any sanctions.

With the establishment of the call option, it remains the trading house's discretionary right that in case of default or fraud event steer the closing of the transaction towards commodities risk (possession, sale), or in the case of better borrowing capacity clients placing emphasis on company risk utilizing the put option forcing the client to repurchase the goods.

5. THE PRACTICE OF COMMODITY FINANCING BY TRADING HOUSE

According to the experience of the past years, and the possibility of risk management role of the Trading House, a practical solution is introduced bellow. If the Trading House is involved in the financing business it means, that the credit arrives to the real client 'the producer or any other commodity owner' indirectly. The bank grants the credit to the Trading House who buys the stocks from the client. The Client collects the credit as the revenue of selling and gets a right or an obligation 'depending on the market situation' to buy the stocks back.

What is the main reason of the involvement of the Trading House? The answer is simple: ownership is the strongest collateral! It is forbidden to be stock owner, for financiers. Because of this, the Bank controlled Trading House became the owner of the credit cover stocks 'instead of the bank' assured the collateral of the credit.

There are two solutions for the bank, controlling Trading House:

1. The Trading House is owned by the Bank in 100 p.c.: In this case the control is absolute; the Trading House became the part of the Bank group system. This solution a little bit anxious from the supervising authorities' point of few. The Trading House activity seems crediting activity, which is the privileged pursuit of banks.
2. The Trading House is an independent company. In this case the anxious above is eliminated, but ensuring the absolute control is a bit complicated. The solution is the following: The Trading House has to be involved in the business with its owned resources in 5-10 p.c. as well, at the same time the bank get option to buy majority of Trading House's shares. This solution is much more market friend! Because of the independent position of the Trading House the basis of the potential partners is much wider. In this case the guaranteed background of the financing construction must be precisely solved particularly from price risk management point of few.

There are two possibilities of ensuring of the price of stocks and the value of the collateral at the same time: pre-contracted selling positions for the whole stock with large valuable buyers or hedge in the futures market.

The practical solutions of the financial construction:

Firs solution: This is necessary to establish a 'buying-consignee' contract between the Trading House and the Client (seller of the stocks). In the framework of this agreement the Client takes responsibility to sell the stock 'owned by the Trading House' in his name, but in favor of the Trading House for a pre-contracted valuable buyer or buys it on his own right 30 days before the end of the credit period.

Second solution: The Trading House sells the stock directly to a pre-contracted valuable buyer on his own right.

Calculation of the buying price 'the valuation of the collateral and the volume of the credit' of stocks:

BASIC PRICE (buying price of the pre-contracted valuable buyer)
– profit of Trading House
– fee of quality control.
– costs of warehousing.
– cost of stock insurance
– cost of stock manipulation
– consignee fee
– cost of delivery
– Costs of documentation
= BUYING PRICE

Third solution: The Trading House hedge the selling price of the stock in the futures market. The calculation of the buying price in this case:

BASIC PRICE (the hedged price in the futures market)
– costs as above
– costs of the Exchange
– cost of position financing on the Exchange
= BUYING PRICE

This solution theoretically works any futures market in case of any commodity.

The calculations, using the prices of the financing periods above or in the followings the market above or any other 'Futures Markets' have to result the same price risk management strategy in the financing bank's or the Trading House's point of few.

The adaptation of Trading House based financing construction give a lot of possibilities in price risk management. The ownership of financed stocks is the best collateral in case of financing and the futures hedge is available price fixing possibility.

6. CONCLUSIONS

Overall, it can be concluded that the involvement of the SPC Company greatly facilitates financing from a banking point of view, since ownership is the greatest security. In terms of coverage, it is even safer than public storage. It is a fact that the bank cannot be the direct owner of the goods, but with this solution it can be indirectly. The SPC is the owner of the goods, which is either owned by the bank or the bank has perfect control over it.

If the construction is well put together, this form of financing is simpler than many other commodities stock security solutions. Another big advantage is that the VAT financing is also solved, so it is favourable for the customer as well, not only for the bank.

Among many other advantages, I must mention one more very important one: in countries where the legal framework does not allow public warehousing, or only as a result of very long procedures, stocks can be financed with this construction. Of course, such solutions require open, creative banks.

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Latvian Competitiveness in Processing Sector: Inspired by Michael Porter's Approach

Ludmila LOZOVA¹

Biruta SLOKA²

¹ PhD student, University of Latvia, Faculty of Business, Management and Economics, 5, Aspazijas blvd, Riga, LV-1050, Latvia. Correspondence: ludmila@ludmilalozova.lv; ORCID: 0009-0001-6582-1518

² Dr oec., prof. University of Latvia, Faculty of Business, Management and Economics, 5, Aspazijas blvd, Riga, LV-1050, Latvia. Correspondence: biruta.sloka@lu.lv; ORCID: 0000-0003-2129-053X

Abstract: Present article studies a competitiveness of Latvian processing sector based on Michael Porter's work a "Competitive Advantage of Nations" published in 1990. Since that many researchers world-wide have developed updated versions as well as have proposed reasonable suggestions with innovative approaches. The aim of this studies is to provide an analysis of general situation for target audience of Latvian firms wishing to work in this industry or potential investors. The materials and sources of data are Official statistics portal databases of Latvia and other available statistical data sources, Latvian State Historical Archive, different scientific publications and previous conducted research results, latest researches of the University of Latvia, and other sources. Basic applied method is Michael Porter's work a "Competitive Advantage of Nations" developed in 1990, taking into account some limitations and critics of this approach by many researchers, like Ural, O. in his 2014 publication, Hämäläinen, T. in his 2003 publication, Recklies, D. in 2001 publication and many other, authors have amended it in this article with some more modern additional attributes (for example, electronic governance possibilities, IT infrastructure's quality and other). Authors are structuring the article in four general parts according to initial Porter's publication in 1990 core attributes: factor conditions; demand conditions; related and supporting industries; firm strategy, structure, and rivalry, developing and amending each part with up-to-date parameters. Conclusions show that Latvian industrial heritage in processing industry has historical traditions, infrastructure and plants, and up to 2022 big part of them were still in operations, even if they had changed their produced product or adapted it to a modern market's demand. Up to 2021 a significant grow can be observed in new companies founding, especially in manufacture of wood and products of wood and fabricated metal products (except machinery and equipment). Findings detected also some other competitive attributes: a forehead "e-governance" commodities, harmonized technical regulations between Latvian and European Union standards. Authors see products of wood and metal products as one of most competitive Latvian processing directions.

Keywords: competitiveness, processing industry, Latvia, Michael Porter's Approach.

1. INTRODUCTION

Lot of different theories are offering the approaches to study economic activity of the industries. For this article authors have chosen Michael Porter's work a "Competitive Advantage of Nations" (1990) as basic method. Porter determined the parameters for a country's competitiveness and development of a foreign trade - four attributes that create the national environment in which companies are born and learn how to compete (Porter M.E., 1990). These attributes are:

1. Factor conditions;
2. Demand conditions;
3. Related and supporting industries;
4. Firm strategy, structure, and rivalry (Porter M.E., 1990).

One of limitations is that competitiveness of countries can be expressed also in other ways – by using different indexes, for example: The Global Competitiveness index made by World Economic Forum, "Business and investment climate" index („Doing business") made by World Bank, "Index of Economic Freedom" made by The Heritage Foundation and The Wall Street Journal, and many other.

Another limitation concerns the fact that this theory was elaborated 30 years ago and didn't took into account new drivers of modern time such as globalization (cross border strategic alliances etc.), digitalization (remote work, state e-governance platforms etc.), foreign direct investment and other factors, what cannot be ignored anymore (Ural, O., 2014; and many other academics).

Some critics say that Porter's approach misses the analytical power of the more specific theoretical models (Hämäläinen, T., 2003). Some other on the contrary say that the strategies such as those described by Porter

are possibly more oriented and applied for a specific audience (Miller, A., & Dess, G.G., 1993). Another researchers are dividing discussions on Porter's approach into two schools of thought: the economic school, which ignores Porter's notion of country competitiveness, and the management school, which supports the notion of competitiveness at a country level (Smit, A.J., 2010).

Taking into account mentioned limitations and critics, authors of this article are using only the basic idea of Porter's theory (1990), amending and developing it with some more modern additional attributes (for example, electronic governance possibilities, IT infrastructure's quality and other). Lot of scholars also generally mention that Porter's approach may be applied nowadays yet with the knowledge of its limitations and interpreted as a large framework (Recklies, D., 2001; Smit, A.J., 2010).

Main aim of this article is to provide an analysis of general situation in processing industry in Latvia, structured according to initial Porter's core attributed (1990), yet developing and amending each part with up-to-date parameters as already mentioned above. By processing industry authors frame Latvian industries only with metallurgy, chemical industry, machinery, forestry and construction materials industry, excluding data on light industry, electric power and fuel industries, on weaponry and space industry. Target audience of the present article are firms wishing to work in mentioned industries in Latvia or potential investors.

2. LATVIAN COMPETITIVENESS IN PROCESSING SECTOR

Some German and United Kingdom scholars have guided a research of 50 producers with the goal to find key manufacturing location questions that should be considered before decide of a firm's location (Theyel, G., Hofmann, K., & Gregory M., 2018). The findings of this research are important for the context of the present article, as they indicate key criteria the entrepreneurs are taking into consideration before invest in a production plant. These criteria coming from the entrepreneurs' side are crossed with Porter's parameters (1990) for a state competitiveness side, by that providing a full picture from both sides.

Table 1. Criteria for manufacturing decision-making from the entrepreneur's side (Theyel, G., et al, 2018) and their manifestation in Porter's (1990) initial core attributes

Manufacturing Location Decision-Making Criteria's Summary (describing main findings, whatever the manufacturing approach is (retaining/offshore/reshoring/hybrid)) (Theyel, G., et al, 2018)	Correspondence to Porter's (1990) initial core attribute
New product development (proximity to new/old markets, better understanding of client)	Studied in Porter's (1990) initial core attribute: Firm strategy, structure, and rivalry (paragraph 2.4. of this article)
Customization (proximity to suppliers)	Studied in Porter's (1990) initial core attribute: Factor condition, and amended by sub-attribute "raw materials availability" (paragraph 2.1. of this article)
Delivery (control of supply chain, proximity to client)	Studied in Porter's (1990) initial core attribute: Factor condition, and amended by sub-attributes "supply chain", "logistics (transportation)" (paragraph 2.1. of this article)
Quality (quality assurance, IT protection, regulatory approval)	Studied in Porter's (1990) initial core attribute: Factor condition, and amended by sub-attribute "legislation" (paragraph 2.1. of this article) and Related and supporting industries, and amended by sub-attribute "IT infrastructure quality" (paragraph 2.3. of this article)
Cost (cost advantage for complex products, commodity products, total landed costs)	Studied in Porter's (1990) initial core attribute: Factor condition, and amended by sub-attribute "net costs of a product and PPI (producer price index" (paragraph 2.1. of this article)

Source: Author's constructed table based on Theyel, G., et al, 2018

Findings of other researchers mostly show similar criteria – industrial and educational infrastructure (Manyuchi, A. E., 2016), import licenses for suppliers (Sarkar, A., 2020), product producibility investments, including capital and operational costs (Skärin, F., Abdelmageed, M.E., Linnéusson, G., & Rösiö, C., 2022), in some recent researches an e-governance criteria also becomes emphasized: industry 4.0 innovation policy, connectivity, cyber security etc. (Ats-Tsauri, M.I., Kusumah, L.H., & Purba, H.H., 2022).

Authors are structuring the following part according to initial Porter's four core attributed (1990), developing and amending each attribute with some modern and up-to-date additional parameters. The processing sector in this article is framed only by metallurgy, chemical industry, machinery, forestry and construction materials industry.

2.1. Factor conditions in Latvia

This parameter corresponds to nation's position in factors of production, such as skilled labor or infrastructure, necessary to compete in a given industry (Porter M.E., 1990).

Authors study this attribute in Latvia through:

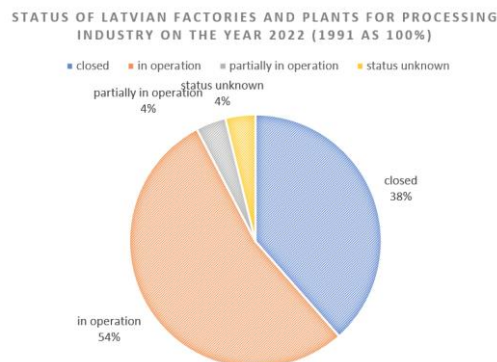
- historical heritage of a processing industry, providing a base for infrastructure;
- raw materials availability;
- net costs of a product and PPI (producer price index);
- legislation as a factor, influencing production;
- supply chain;
- logistics (transport infrastructure);
- labour.

- Historical heritage of a processing industry

The historical heritage of a processing industry authors look from two main angles: tracking the status of Latvian historical factories in 1991 and 2022; and completely new factories opened since 1991 till 2022.

For the first angle authors have taken data for the factories and plants that existed historically before 1991 and authors have tracked their status ("in operation/closed") until year 2022. As previously mentioned, the data related exclusively to processing industry (metallurgy, chemical industry, machinery, forestry and construction materials industry). In a result authors tracked that 54% of historical factories, being in operation in 1991, continue to be in operation also in 2022 (see Figure 1). Need to say that all these factories were privatized and some of them are owned not by Latvian citizens, for example a "Brocenu cement plant" (latv.-Brocēnu cementa fabrika), was in operation since 1938, privatized in 1993 and now continues its activity under German owned holding "Schwenk" ("Schwenk Latvija"). Or an old metallurgy plant "Liepāja metallurgist" (latv.-Liepājas Metalurģs), which was historically in operation since 1882, since 1991 several times bankrupted and partially privatized, and now the premises are partially used, but not for initial purpose. For example, some of premises are used by 18 privately owned companies for handling equipment (conveyors) production and metalworks, for textile and chemical industries. Or another example of Riga Radio Factory VEF (Latv. - VEF Radiotehnika RRR Rīgas Radio Rūpnīca), which was historically in operation since 1926, privatized in 1992 (under 3 divisions: JSC SWH, JSC Interlatvija and IE Komutators) and in 2005 they were forced to focalize their activity on much simpler type of works like production of metal structures, conveyor belts and welding. Finally, nowadays most part of ex- Riga Radio Factory VEF activity is a rent of premises. Authors also tracked that 38% of historical factories, being in operation in 1991, were closed until 2022 (see Figure 1). For example, paper fabric "Jugla" (latv.-Papīra fabrika "Jugla"), historically in operation since 1810, privatized in 1991 and closed due to bankruptcy in 2000, or Moped Manufacturer "Red Star" (latv.-Sarkanā zvaigzne), in operation since 1927, privatized in 1991 (name changed to "Riga Motor Plant") and closed in 1998).

Figure 3: Latvian factories and plants status in 2022 for processing industry that existed historically before the 1991



Source: Author's collected data and constructed diagram

To conclude the tendency from this angle authors can say that almost half of historically operating factories and plants were closed at the year 2022, the activity of the second part of the factories who were still in operation in 2022 does not always corresponded to their initial purpose – some ex-factories are renting their premises or perform much simpler works, or are owned by foreign citizens.

For the second angle authors have taken data on a completely new factories opened since 2005 till 2021. The data taken from the Official statistics portal of Latvia, more earlier data from 1991 are not available. Data shows quite significant grow in new companies forming, especially in manufacture of wood and products of wood (from 12 entities in 2005 to 100 entities in 2021) and in manufacture of fabricated metal products, except machinery and equipment (from 5 entities in 2005 to 78 entities in 2021).

- Raw materials availability

As seen above, most frequently Latvian entrepreneurs were opening new firms in wooden and metal products (except machinery), so authors look to a raw material benchmark through these two group's perspectives – availability of wood and metal in Latvia.

Forest is the biggest natural resource of Latvia – sometimes it is even called “Green Gold” of Latvia – it occupies 48.44% of Latvia land (data from Official statistics portal of Latvia, Natural Resources in 2021).

Metal (iron and steel): in first quarter of 2023 it was imported on amount 130.3 mio EUR (what made 2.3% from whole Latvian import in that period) and exported on amount 158.4 mio EUR (what made 3.2% from whole Latvian export in that period) (data from Official statistics portal of Latvia, Foreign trade of Latvia, see full reference in the list). Raw metal materials were imported and metal products exported: it seems to be more or less equal volume of materials, the difference of amounts covers supplemental expenditures (design, components, labour work, margin).

- Supply chain

Supply chain management, as the name suggests, intends a management of suppliers, that influences a company's performance, competitive advantage and profitability; it integrates partners throughout the supply chain and intends a governance of inter-firm relationships (Cragg, B., 2016). For Latvian realities the flow of materials between raw materials and the end client is taken as basis. In this regard authors can state that Latvia doesn't have mining and metallurgy industries so the country is far from raw materials end. Nor Latvia is in the end client chain as here aren't so many finish clients or finished products' consumers. The situations of companies are different and therefore they have to be evaluated also in different groups, yet on average Latvian machinery industry is rather closer to the end customer chain (Rungainis, P.R., 2023). Latvian, being part of the European Union, can use European supplier's potential for complicated components ordering, at the same time profiting different other markets (e.g., Turkey, United Arab Emirates etc.) for different type of metalworking works.

- Logistics (transport infrastructure)

Transportation of timber and metal products (as was defined above – two most focalized directions in Latvian processing industry) can be realized only by railway, truck and sea vessels (no aviation). Latvia has a developed network of the railway trails (of 1520 mm gauge) connecting international routes, biggest Latvian cargo ports

(Riga and Ventspils) and old infrastructure zone where previously historical manufactures were functioning. Latvian railway lines generally allow to deliver a product from a production plant to a port for a further shipment what makes logistics of a good more attractive. Sea ports of Latvia are mostly expertized in dry bulk transshipment, having appropriate terminals, equipment, knowledge and capacities. Large scale structures and machines can be also transported from or to Latvian ports by barges and other heavy-duty vessels, having the pre-assembly of the structures right in the port zone. Truck logistics routes are most common for smaller size products and timber, being connected to EU auto-routes network.

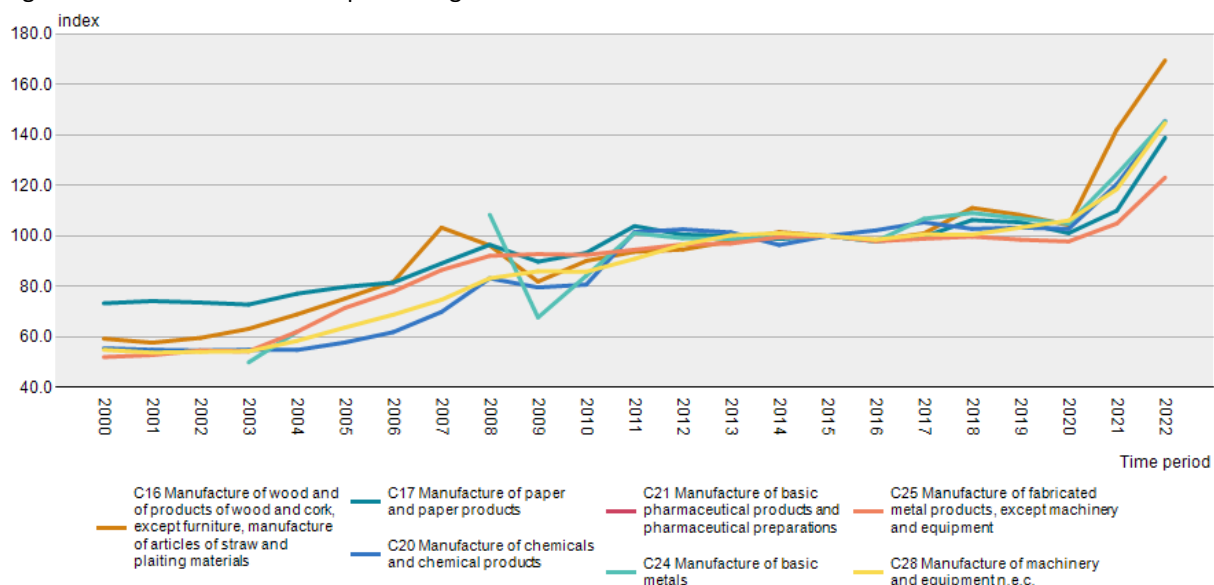
- Labour

Amongst all chosen processing industry occupied posts, manufacture of wood and products of woods is in the top of the list. Data are taken by kind of economic activity on average per year from 2005 to 2022 (data from Official statistics portal of Latvia, labour market, see full reference list). The number of occupied posts in 2022 was around 23 thsd. and similar number was for last 10 years. Next follows manufacture of fabricated metal products, except machinery with 12 thsd. and then manufacture of machinery and equipment with 3 thsd. of occupied posts in 2022.

- Net costs of a product and PPI (producer price index)

By net costs of a product, authors mean costs of raw materials, components, transportation costs, labour salaries, electricity, heating, fuel, administrative expenses like taxes, insurances etc.). In the frame of this article this attribute actually can be presented by PPI (producer price index). PPI doesn't show exactly the net costs of a product, however it measures average changes in prices received by domestic producers for their output. In Figure 2 are included data on moderate changes for Latvian producers around 1%-3% in period of 2012-2020 years and a significant grow in years 2021 (11%-20%) and 2022 (20%-26%) to each previous year accordingly. This in consequence may influence either a consumer price either a margin, or both

Figure 2: Industrial inflation for processing sectors in Latvia via PPI in 2000-2022.



Source: Data and diagram created by Central Statistical Bureau Republic of Latvia. Retrieved from <https://data.stat.gov.lv:443/sq/18747>

In general, authors can say that production expenditure in Latvia in processing sector has a slowing down tendency due to high industrial inflation. However, authors can see also a tendency for growing number of new opened companies in this sector, mostly in wooden products and metal products (excluding machinery). Referring to Porter's theory, perhaps, these parameters are most competitive Latvian processing directions.

- Legislation as a factor, influencing production and labour

Similar to all European Union (EU) countries, in Latvia there exist in parallel national and EU regulations, and lot of works had been done to harmonize them. Regulations concern raw and premier material certification (e.g., CE marking, confirmation of reused material application (reused steel, for example), confirmation of material origin country etc.), confirmation of standard application during technological processes, confirmation that a

specific product's parameters correspond to a regulation requirement (e.g., heavy machinery equipment produced in EU shall correspond to a Machinery Directive 2006/42/EC), and diverse other.

2.2. Demand conditions in Latvia

This parameter represents the nature of home-market demand for the industry's product or service. As example for better understanding, the Japanese firms are given - inhabitants living in small rooms, focused on the consumption of cheap energy-saving air conditioners, which the Japanese industry began to produce. Subsequently, such air conditioners were widely used throughout the world, which ensured their export by Japanese companies (Porter M.E., 1990).

For Latvia Authors haven't found such specific home-market demand that would lead the country to international leadership in that product's production.

2.3. Related and supporting industries in Latvia

For this parameter Porter mentions related and service industries. The presence or absence in the nation of supplier industries and other related industries that are internationally competitive. This parameter characterizes the presence of an effective production environment that directly affects the activities of the company. For example, Italian jewellery firms thrive because Italy is the world's leading manufacturer of machines for working precious stones and metals (Porter M.E., 1990).

For Latvia, authors can name some following production environment's benchmarks:

- EU and Latvian funds support

Different types of support usually may be available – grants, loans, non-financial support etc. In Latvia the funds are mostly managed by Ministry of Economics of Latvia, Investment and Development Agency of Latvia, ALTUM - a state-owned development finance institution, and some other.

- Trade supporting organizations

These organizations mostly help Latvian producers with networking, foreign expositions, PR support, advertisement materials, and also with some more practical issues like managing documents for non-EU shipment, help with local non-EU regulation in specific sector, communication between clusters etc. Here can be mentioned Investment and Development Agency of Latvia, Association of Mechanical Engineering and Metalworking Industries of Latvia, Latvian wood construction cluster, Enterprise Europe Network Latvia, and many other.

- High schools' programs, teaching relevant professions

As defined above, authors suppose that wooden products and metal products (excluding machinery) are most competitive Latvian processing directions and therefore for high schools' programs authors look only in these directions. Basically, for forestry and wooden sciences authors can mention Latvian University of Biosciences and Technologies (latv.-Latvijas Biozinātņu un Tehnoloģiju Universitāte) and for metal proceeding sciences – Riga Technical University (latv.-Rīgas Tehniskā Universitāte).

- Electronic governance possibility (e-signature, state e-portals etc.) and IT infrastructure quality (speed of Internet, availability of PC's and computer tools etc.)

Generally, Latvia is quite progressive and afore in "e-governance" solutions: beginning from a possibility to sign electronically documents, manage administrative issues in a remote mode and finishing with e-Health system. According to "Wavestone" consulting agency (2019), Latvian citizens using the Internet for interacting with public authorities show higher indicators in comparison to the EU average (The Digital Government Factsheet Latvia prepared for the European Commission, 2019), for example: 52% Latvian individuals were using Internet for sending filled forms to public authorities when only 32% were in EU28.

2.4. Firm strategy, structure, and rivalry

Finally, the conditions in the nation governing how companies are created, organized, and managed, as well as the nature of domestic rivalry (Porter M.E., 1990). Meeting client's needs is about being flexible and customization, and this in its turn means 1 - Direct access to manufacturing (with possibility to quickly changeover, prototyping, trail modification etc.) (Theyel, G., et al, 2018); 2 - agile management structure.

3. CONCLUSIONS

Latvian foreign trade's competitiveness analysis was studies based on Michael Porter's article "Competitive Advantage of the Nations" (1990), however not fully following Porter's ideas. Present article provides a descriptive analysis of Latvian foreign trade's competitiveness in processing industry, meaning metallurgy, chemical industry, machinery, forestry and construction materials industry and excluding data on light industry, electric power and fuel industries, on weaponry and space industry. The aim of the present article was to study Latvia's foreign competitiveness of mentioned industry within three big angles: a) Factor conditions in Latvia, b) Related and supporting industries in Latvia, c) Firm strategy, structure, and rivalry. Porter mentions also d) Demand conditions in Latvia as an attribute, however authors haven't found any specific home-market demand so this parameter is excluded from conclusions (Porter M.E., 1990). In his theory Porter mentions also two more attributes: e) government and f) laws/legislation, authors studied them both indirectly looking through legislation as a factor, influencing production and labour (p.2.1) and funds supporting programs (p.2.3.).

Present article's findings are of a descriptive type, from mentioned three angles they describe a general situation in Latvia for target audience of Latvian firms wishing to work in this industry or potential investors.

Findings show that:

- a) Latvian industrial heritage in processing industry has historical traditions, knowledge, infrastructure and plants, and up to 2022 big part of them were still in operations. However, lot of them have changed their produced product or adapted it to market modern demand. Up to 2021 a significant grow can be observed in new companies forming, especially in manufacture of wood and products of wood and in manufacture of fabricated metal products, except machinery and equipment. On the other hand, authors can observe also a growing industrial inflation in these segments. So, in general, equilibrating all findings, authors can say that production expenditure in Latvia in processing sector has a slowing down tendency.
- b) Latvia's modern production environment has quite a forehead "e-governance" commodities – lot of administrative questions can be solved in a remote mode, several technological high schools graduating according professionals, trade supporting environment from governmental organizations side and harmonized (EU and national) technical regulation. However, mostly all iron and steel raw materials, what were used for products manufacturing, were imported. And a PPI (producer price index), showing changes in prices received by domestic producers for their output, had significantly grew for Latvian producers (in 2022 on 20%-26% relatively to 2021).
- c) It is complicated to state something clear for Latvian companies' export strategies, however authors can see that some researches are happening in academic field of this direction. There exist also several commercial marketing strategies agencies in Latvia, but it is not possible within the frame of this article to track if the firms really implement export strategies and on what level.

PROPOSALS

In regard of mentioned conclusions, the authors recommend to Latvian processing industry firms to look for an export market with significantly higher purchasing power. Taking into account a significant grow of the PPI and in consequence, most probably, a higher consumer price – a market, capable to buy such products, should be found in order to continue export and not to lose a competitive advantage.

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Criminal and Contravention Liability in Environmental Law. Ecological Balance, Pollution and Environmental Damage

Luminita DIACONU ¹

PhD candidate, lecturer at The Academy of Economic Studies of Moldova, diaconulumi@yahoo.com, ORCID
ID:0000-0002-6736-6344

Abstract:

Aim

A major problem of mankind is the continuous degradation of the environment. It is often quite complicated to identify the boundary of environmental law regulations, especially since the norms of this branch are not always compactly found in environmental legislative acts. It must be recognized that the legal mechanisms for environmental protection change their appearance over time, becoming much more aggressive and relentless. They are often applied without taking into account certain traditional rules and presumptions that often do not ensure effective protection of the environment.

Material

In order to protect the environmental components, it was necessary for the competent authorities to adopt specific legal norms, which could sanction the possible behaviors of the people towards the environment. Due to the national ecological situation increasingly affected by the consequences of industrialization and automation, by the irrational exploitation of natural resources, a legal liability for the environmental law was necessarily established.

Method

The article tackles the aspects concerning criminal and contravention liability in environmental law, ecological balance, pollution and effects on environmental damage.

Conclusions

We cannot deny the usefulness of the criminal and contravention liability in environmental law, but it also has a great shortcoming, in the sense that it allows the contravention "recidivism", so that by repeating the illegal acts, a situation with negative impact on the environment, which is perpetuated, with the price of repeated payment of fines, that in certain cases may be convenient for the offender. As the jurisprudence also shows, the punishment of legal persons is much more effective by applying complementary sanctions because, according to statistical data, the courts have shown leniency when the question of applying deprivation of liberty penalties for the representatives of the legal person were applied, even in the case of serious acts that resulted in major environmental damage. We need to revise the environmental laws, to make them stricter, the fines bigger, more severe, so as to raise the awareness of people and business entities' responsibility to protect the environment.

Keywords: ecological balance, legal norms, resources, pollutant liability, contravention.

Introduction

In daily use, parallel to the notion of environment and ecology, we increasingly use terms such as ecological balance, pollution, pollutant, ecological crisis, etc.

Ecological balance. Ecological balance represents a state of balance between the components of the environment and the processes that contribute to the long existence of natural and artificial systems or to their successive

development, while the ecological imbalance in the environment is considered as an abnormal state, a state of pollution.¹ (Dediu I.1990)

Pollution, pollutant, environmental damage. The notion of pollution represents a term specific to ecological science and especially environmental law. This notion can be understood in several senses. On the one hand, it is perceived as an activity that destabilizes the ecological balance, manifested by the damage to the environment, having the effect of endangering the health of life, property, peace and comfort of people. In another interpretation, this would represent a state of affairs, a finality, where an ecological imbalance is found following a harmful activity. In the definition brought by *The Montreal Rules of 1982* regarding transboundary pollution, it is said that pollution is "any introduction by humans into the environment, directly or indirectly, of substances or energies with harmful effects, of a nature to endanger human health, to harm biological

resources, ecosystems, and material property, to diminish the benefits or prevent other legitimate uses of the environment." This definition reduces the meaning of the term "pollution" only related to human activities. If we look at the etymology of the word pollution, which means dirtying, desecrating, defiling, such a notion renders the result (effect), which in fact implies the possibility of pollution through other categories of acts, than those of a human nature.

The fact of pollution is determined by the presence or absence of the pollutant. In everyday use, a pollutant can be perceived as a certain substance, the presence of which has the effect of unbalancing the environment. The greater the difference between the concentration of the pollutant in the environment and the tolerance limit, the bigger is the fact that the pollutant is considered more dangerous. In the same way, the source from which the substance emanates, which produces the imbalance, is also called a pollutant.

Pollutants can be classified into several categories. Thus, depending on the nature, let's distinguish between pollutants as substances (CO₂, sulphur, etc.) and pollutants as a source (generator) of pollution, as an example using an enterprise. Depending on the origin of the pollutant we distinguish pollutant of human origin (transport units, companies) and pollutant of natural origin (volcano, storm). Depending on the form of formation, pollutants can be primary ² (CO₂) (Lupan E.1993) and secondary ³ (smog) (Lupan E.2009). Depending on the nature of the influence, pollutants are physical (radiation), chemical (nitrates), biological (oil, dung, waste) and of another nature.

Therefore, we can state that pollution is any change of the environment, which has the effect of breaking the ecological balance, and as a result, the production of damage to the components of the environment, and as an effect, also to humans.

At the same time, it would be incorrect to say that the term "pollution" is applied to all cases of destabilization of the ecological balance. Thus, if in the case of water, soil, underground, the term "pollution" is easily applied, but if we are talking about killing a deer or an eagle, it is difficult to use the term "pollution". In this sense, the term **environmental damage** is used. The term environmental damage incorporates the notion of pollution and, as a result, represents a broader content of this.

According to the statement of the law professor E. Lupan, (1993)"the specificity of criminal liability in the field of environmental protection is determined by the nature of the object protected by the law.⁴ In this sense, we find that the involvement of the criminal law in the protection of the environment, one of its fundamental functions, comes in support of the desire for the best possible protection of it - the preventive function. ⁵ (Marinescu D.1992). According to the statements of some researchers, the dangerous character of the deed can be determined by the social values that are damaged, the dangerousness of the author of the deed for society, by his subjective attitude towards the deed. ⁶ (Lupan E.1993.p.188). In the opinion of the author E. Lupan, it is indisputable that from the point of view of environmental law, the object of the crime is the natural or artificial environment, the health or life of people. ⁷ (Dutu M.2007). He confirms that damages caused to natural factors lead to the establishment of an ecological imbalance, which in turn causes damages and injuries provided as constitutive elements of the crime. For example, if a person causes damage to environmental factors or causes environmental pollution and as a result other persons are caused or are exposed to the danger of causing damage materials or bodily injuries provided in the constitutive elements of the crime as damages and injuries, then the actions of the person who caused damage to the environmental factor will be qualified as a crime. At the same time, those illegal actions on the environmental factors that will cause damage provided in the components of contraventions and do not involve the amount of damage and actions provided by the constitutive elements of the crime will be met within the components of contraventions that cause damage to the environment. Establishing the difference between liability civil and contravention legal and criminal law for violating the provisions of the legislation regarding environmental protection, we must also determine the specifics of the criminal liability for violating the provisions of the rules regarding environmental protection and the criminal legal liability for violating other provisions of the criminal legal rules.

Peculiarities of Criminal and Contravention Liabilities in Environmental Law

Finding the possibility of applying criminal and contravention liability, its application, release from liability take place according to the general rules, but being classified as a separate category, it has its own specifics, which consist of the following:

- a) *The object of the crime. The general object* of these crimes is the protection of the environment. As a direct object, it fundamentally serves the environment, including natural resources, health, life, property (land, forest massifs, aquatic objects) of the person, etc. *As a material object* of the crime

against environment, we can mention nature or natural resources. For example, water and air pollution, cruel treatment of animals, damage to crops and damage to plantations, illegal cutting of forests, illegal hunting, etc. In all these components, actions are directed at natural resources concrete (water, forest resources, air, animals, etc.). Out of all the illegal acts provided by the criminal law, these concern environmental factors, only some of them directly concern the life, health, and bodily integrity of the person. Most of them directly concern to natural resources, and as a direct consequence to the life, health and property of the person.

- b) *The subject of the crime.* Subjects of the crimes, according to the legislation of the Republic of Moldova, can only be natural and legal persons. They usually meet the quality of the perpetrator. However, the legal person as the subject of the environmental crime has a special peculiarity. Thus, the legal entity with a profit-making purpose, is attributed the quality of the subject of the crime, regardless of whether the committed act pursued a profit goal or another interest through which its proper functioning is ensured.
- c) *The objective side.* This is expressed through actions or inactions targeted neither at the person directly, nor at the patrimony of the specific person, but at the private objects of nature as a whole, at the relations of use of natural resources that lead to the establishment or creation of an environmental imbalance, and, as a result, causing damage to the person, property, etc.
- d) *The subjective side.* This represents the subjective element of the environmental crime and contravention component, where for the moment it does not represent a special feature, noting that criminal and contravention acts damage the environment, that can be caused in all forms of guilt.

Therefore, as a basis and condition for holding people accountable for environmental crimes and contraventions, the commission of actions prohibited by environmental legislation, the guilt of the people who committed the crime or contravention and the possibility of harmful consequences and consequences following the commission of environmental contraventions are used (ecological).

At the same time, it is necessary to mention certain shortcomings related to the effectiveness of criminal and contravention law regulations in ensuring the goals of protecting the environment. Thus, examining the new criminal and contravention law regulations in the chapter Environmental Crimes and Contraventions (ecological), we note certain circumstances that characterize them positively, just same as we note certain circumstances that characterize them negatively. We will refer to the following:

- The criminal legislation in force introduces a component of the crime as "Ecocide".⁸(Neagu M.2007) Thus, the legislator establishes as a component of the crime "Intentional mass destruction of flora or fauna, poisoning of the atmosphere or aquatic resources, as well as the perpetration of other actions that can cause or have caused an ecological catastrophe". This act falls into the category of crimes against the peace and security of mankind. The introduction of such a principle component represents an important step in the imposition of environmental protection values on a legislative level, but at the same time, it offers a lower level of importance of these categories of reports, a matter that can only be observed through the lens of the sanction established for such a category of crimes⁹(Dutu M.2007,p.75) that we consider particularly inadequate to the nature and consequences of the act provided by the criminal law.

- All the components of ecological crimes represent material components. This is a big minus in terms of ensuring the effectiveness of the application of criminal liability through the prism of criminal law norms regarding the application of liability measures. And this is because when developing the criminal law norms, the specifics of environmental law relations was not taken into account, more than that, the specifics of natural phenomena to which the criminal acts against the environment are related were not taken into account. In this sense, we must understand that natural phenomena, although they occur over time, they do not obey the time limits established by the law. In other words, the law is not for nature. On the contrary, nature dictates certain laws, resulting from the environmental conditions it offers. Thus, some natural phenomena, including those related to the production of damages, as a result of the act of pollution, occur in a time interval different from the time intervals provided by the criminal legislation. At the same time, the criminal legislation, establishing for environmental crimes the same rules for calculating the prescription terms, as for the other categories of crimes, makes it impossible to apply criminal liability measures for environmental crimes. We can cite as an example the substances Freon-11 and Freon-12, which, being in a gaseous state and being emitted into the atmosphere, do not immediately cause negative effects. They reach the stratosphere in a rather long period. Thus, if we consider that the gases of Freon rises in the stratosphere after 10-15 years, then their effects occur

after 50-100 years. It is obvious that the harmful effect ¹⁰ (Lupan E.2009), taking into account the time period for the evolution of diseases with people, will be ascertained at the earliest within a period of about 60-65 years, and at the latest after 115-120 years. In this sense, not only the ascertainment of the act, within the examination of a criminal act, but also the perpetrator himself is impossible to be established over 60-65 years.

More than that, considering the provisions of article 60 of the Criminal Code, as well as the sanctions in articles 223-235 of the Criminal Code, which do not exceed more than 10 years of deprivation of liberty ¹¹ (Iancu Gh.1998), we find that at the time of the occurrence of the harmful effect (60- 65 years old), the statute of limitations for criminal liability has already expired. Thus, this excludes any possibility of applying criminal liability for such acts.

We consider that the solution in such a case is the consecration of the formal character of the environmental crime components, where the main index will be the creation of danger of causing a damage, and the existence of a damage should be ascertained as a variety of the component.

- The size of the criminal sanctions is extremely small, in relation to the danger created by the criminal acts
- In perspective, the principle of presumption of innocence will be applied to the criminal responsibility for environmental damage, as well as to the contravention for environmental damage, where the burden of proving innocence will be placed on the perpetrator. ¹² (Lupan E.1995).

The categories of contraventions are set in different normative acts regarding the environmental protection. These normative acts are targeted at protecting the different environmental factors such as: air, soil, water, forest vegetation, fauna, human settlements, protecting and preserving the landscape and maintaining the ecological balance. The protection of the environment is regulated by a legislative package that requires a series of monitoring concerning the impact that the activity carried out by the companies has on the environment. In environmental law, contravention liability is often resorted to administrative (contravention) liability for preventing or combating non-compliance with legal requirements, given the advantages of such a form of liability. ¹³ (Dutu M. 2007, p.283)

Contravention liability occupies an important place in the system of legal liability regulations. Contravention liability has a double role: economic role, but also a preventive role. Liability for contravention is a type of the administrative liability, the contravention being a form of manifestation of the administrative illicit, its legal regime being in general an administrative one. ¹⁴ (Ticlea A.2006)

Natural and legal entities who carry out activities that violate the rules contained in the environmental protection rules, or that do not fulfill the legal obligations arising from the environmental legal reports are liable for contravention. Each is liable based on the degree of pollution caused. A number of specific obligations are incumbent on legal entities, in order to carry out normal social relations regarding the environment ¹⁵ (Neagu M.2007). Usually the local councils establish and sanction in many areas: sanitation, maintenance of parks and green spaces, maintenance of streets and sidewalks, schools and other institutions of education and culture, storage and collection of garbage and household waste. The finding of contraventions and the application of sanctions (fines) are made by the commissioners and authorized persons within the National Environmental Guard, the authorities of the local public administration and their authorized personnel, The Ministry of Ecology, The Ministry of Defense and the Ministry of Internal Affairs by the authorized personnel in their fields of activity, in accordance with the duties established by law, as well as the personnel of the administrative structures, etc. The contravention fine in environmental law is applied by the persons empowered on behalf of the administrative bodies. Responsibility for pollution has an objective character, being able to intervene whenever the environment has been polluted. The legal responsibility in the field of environmental protection must also be included among the coordinates that lay out the regulation of the content of a fundamental right to a protected environment. ¹⁶ (Iancu Gh.1998)

The penalties that apply to acts considered contraventions can be: main and complementary. The main sanctions are:

- *the warning,*
- *the fine and*
- *the provision of an activity for the benefit of society.*

Complementary contravention sanctions are:

- a. *Confiscation of goods intended, used or resulting from contraventions.*
- b. *Suspension or annulment, as the case may be, agreement or authorization to exercise an activity*
- c. *Closing the company*
- d. *Locking the bank account*
- e. *Suspension of economic activity*
- f. *Withdrawal of the license or notice for certain transactions for foreign, temporary or permanent trade activities.*
- g. *Cancellation of works and bringing the land back to its original state.*

By enforcing environmental sanctions, the aim is to determine the polluting agent to promote technologies and techniques that protect the natural and anthropic environment. The sanction that is established must be proportionate to the degree of social danger of the act.

For an unlawful environmental offense, a single main contravention sanction or more complementary sanctions may be applied. The limits of the fine are relatively small, given that those who violate the rules can sometimes be multinational companies with very high turnover and can afford without problems a payment of money that is often symbolic for them. This fact makes the fine a relatively inefficient sanction, which allows them to pay relatively small amounts, thus acquiring a true "right to pollute"¹⁷ (Dutu M 1998, p.200). The contraventions can be ascertained by the personnel of the administration structures and the custodians of the protected natural areas, only in the territory of the administered natural area. The contravention sanctions represent measures of coercion and re-education that are applied to the offender in order to rectify and prevent the commission of other crimes.

Conclusions

In conclusion, we cannot fail to remember the fundamental principle of environmental law: "the polluter pays". In addition to applying the fine, the offenders must repair the damages brought to the environment through committing the offense. The means available to the public authorities in the member countries of the European Union, in order to enable the polluters to ensure an adequate depollution are: pollution taxation, the establishment of anti-pollution technical norms and the application of various compensation mechanisms. The amount of fines should increase considerably, the difference between the fines applied to individuals and legal entities being also 6-8 times higher. Here, three categories of contraventions are foreseen:

- *contraventions consisting of violations of the legal provisions,*
- *contraventions consisting of violations of some legal provisions such as, the obligation of the natural persons to request and obtain the regulatory acts, as well as;*
- *contraventions to the environmental protection regime, considered the most serious, at least from the perspective of the fines applicable (the obligation of natural and legal persons to diminish, modify or cease the activities causing pollution to apply the required measures in full and on time, in accordance with the regulatory acts and the legal provisions, following the environmental inspections, etc.)*

We cannot deny the usefulness of the criminal and contravention liability in environmental law, but it also has a great shortcoming, in the sense that it allows the contravention "recidivism", so that by repeating the illegal acts a state with negative impact on the environment is perpetuated, with the price of repeated payment of fines, which in certain cases may be convenient for the offender. As the jurisprudence also shows, the punishment of legal persons is much more effective by applying complementary sanctions because, according to statistical data, the courts have shown leniency when the question of applying deprivation of liberty penalties for the representatives of the legal person were applied, even in the case of serious acts that resulted in major environmental damage. We need to revise the environmental laws, to make them stricter, the fines-bigger, more severe, so as to raise the awareness of people and business entities responsibility to protect the environment.

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The Efficiency Of Students' Teamwork In The Online Classroom During Covid-19

Mihaela Mikić¹

¹ University of Zagreb, Faculty of Economics and Business, mmikic@efzg.hr, ORCID: 0000-0003-3966-2530

Abstract: The Covid-19 pandemic and quarantines led to drastic changes in the experiences of students and teachers, by replacing the traditional classroom for online learning and education. This set numerous challenges for higher education, such as ensuring that high standards for students and teaching effectiveness were met in the new virtual environment, amongst others. The purpose of this paper is to investigate the efficiency of students' teamwork during the Covid-19 pandemic through the example of the course Entrepreneurship at the Faculty of Economics and Business, University of Zagreb. This course used teamwork as a core teaching method before the pandemic and continued to do so as the course transition into an online format during the lockdown. Generally, teamwork is considered to be beneficial for education in terms of acquiring and retaining knowledge, while also providing students with the opportunity for collective learning and socializing outside the classroom boundaries. Thus, by comparing students' points gathered through teamwork assignments both before and during the lockdown, the paper assesses the success of teamwork in its transition to the online classroom. Additionally, modifications to teaching methodology and technological practices will be discussed in relation to online teamwork, which were used and employed to ensure the smooth transition for both students and professors in the online classroom.

Keywords: Teamwork, Covid-19, Virtual Classroom

1. INTRODUCTION

The Covid-19 pandemic created a plethora of challenges and obstacles for education. To ensure everyone's safety, governments implemented lockdowns which were mandated for educational institutions as well. This constituted a major hurdle for education (UNESCO, 2020), as students and professors were affected in their work and performance (Toquero, 2020). In response to this new paradigm, virtual or online education was implemented by educational institutions to replace the traditional classes, which were now impossible to be carried out in-person (Liguori and Winkler, 2020). This option was selected because online education was considered the optimal path for learning during the pandemic (Yabin, 2020), while also considering that the quality of education can generally be improved by using the internet and other multimedia technologies to encourage remote learning and collaboration (Ehlers & Pawlowski, 2006: 22). The European Commission has defined e-learning as accessing information through technology and services which encourage remote communication and cooperation for the purposes of pedagogy (Bai, 2023).

E-learning can be accomplished via two primary methods, synchronous and asynchronous. The first allows students and professors to meet at specific pre-scheduled times. The second allows students to use materials which have been planned and posted ahead of time, allowing them to access such as any time of their choosing (Almahasees & Quassem, 2022).

The transfer to online education was possible to accomplish in a short period of time because the technology already existed. In fact, technological developments had already been employed by institutions to change the format of courses into online learning long before Covid-19 (Siau, 2018) and online education had started to be developed before the pandemic began (Keengwe & Kidd, 2010, Xie, 2020). Despite the development of such technologies and access to them, few educational institutions had made the attempt to exclusively adopt online programs (Kuleto et al., 2021). Therefore, the difficult situation everyone found themselves in necessitated an immediate adoption of pre-existing online learning tools (Tang et al., 2020) as a vital reaction to the global health crisis (Ayala, 2021). However, due to its unplanned nature, professors and students did not experience a smooth transition to the online environment (Ratten, 2020), placing additional pressure on educators to maintain the quality of their classes while also ensuring that students received adequate levels of interaction as they did before (Weick & Sutcliffe, 2011).

A vital point in ensuring preservation of educational quality was in project-based teaching, as it is understood that small group-work is a beneficial teaching method (Mennenga & Smyer, 2010; Wong, 2018) because it offers students the ability to engage in learning and enhances professional and personal development (Edmunds & Brown, 2010; Feichtner & Davis, 2016), and is linked to improved learning outcomes (Pezos et al., 2019; Park et al., 2015) by promoting mutual learning, acceptance, recognition and understanding through trust building and social networking (Shaw et al., 2015; Wong, 2020). Furthermore, group work skills have a

high transferability of skills to the workplace environment (Vogler et al., 2018), by offering group work, problem solving skills, time management, interpersonal communication, and critical thinking skills (Wong, 2020; Langegard et al., 2021; Terzi et al., 2021). Teamwork and communication skills are essential competencies for a future workforce (Halfhill & Nielsen, 2007; Pazos et al., 2016; Ritter et al., 2018) because they guarantee results in project and product outcomes (Kilty & Burrows, 2022) and offer skillsets for employees which will have to deal with a rapidly changing global business environment (Halfhill & Nielsen, 2007), making them an invaluable activity for educational curricula. In other words, educators had to guarantee that student group work continued unabated and did not lose educational efficiency in the online environment.

2. LITERATURE REVIEW

As teamwork shifted from a traditional format to the new virtual environment, a number of educational aspects shifted as well. Communication was now exclusively electronic, technology became fundamental to learning processes, and virtual teams were formed, encouraging students to adapt and develop a new form of trust and collaboration through these new mediums (Shrivastava & Prasad, 2020; Valente & MacMahon, 2020; Hikamah et al., 2021). Online classes could be held synchronously and asynchronously (Gillis & Krull 2020), allowing for additional student flexibility. Many modern students may even prefer the use of technology for their group work and online choices of education, as they find it more efficient and are more familiar with tools, being deemed 'digital natives' (Prensky, 2001).

However, research on how student teams adjusted to their new environment is scarce. While, earlier research on group work has examined it in the traditional context, that is in-person, today research can additionally focus on online group work and blended formats (Saldanha et al. 2021). There is debate within the literature about the effectiveness of completely virtual classrooms, especially when considering group work as a key factor in educational success.

Research suggests that online group work can be just as effective for collaboration (Smith et al. 2011), especially in larger classes, where managing too many students and groups in person may become unwieldy (Wright & Lawson 2005). Furthermore, research from the business sector indicates that virtual groups have less need of immediate management and may even outperform traditional in-person teams.

On the other hand, other research suggests that in person group work outperforms virtual groups for many reasons. First, are the challenges related to virtual social interaction. Online exchanges may result in limited visual cues, creating miscommunications and delayed feedback due to the nature of the technology used (Chang & Kang 2016). This may result in less motivation for students to work together in online groups or to take online classes at all (Smith et al. 2011). Second, are the challenges related to participating in an educational program while observing a mandatory lockdown. It is often difficult for students to maintain a collaborative approach in a group while constantly staying at home, as the home environment does not necessarily inspire an educational atmosphere for everyone (Korzycka et al. 2021; Langegard et al, 2021; Suliman et al., 2021). This further results in a lack of self-initiative, which is a necessary requirement for online at-home learning (Anwar et al., 2020), and indeed studies reported a decreased level of motivation for accomplishing schoolwork during the lockdown (Slykerman et al. 2022; Stevanović et al. 2021). This may also be contributed to increased distractions which reduce focus and inhibit time management skills (Gillis & Krull 2020). This may further be exacerbated by screen fatigue, as the lockdown resulted in excessive screen use due to its use for socializing, entertainment, and education simultaneously (Saldanha et al. 2021). Third, students are challenged by the transition and adjustment to virtual teamwork (Gillis & Krull 2020; Maqableh & Alia 2021). Students must be prepared to have clear goals and priorities to accomplish their projects more effectively. Roles amongst team members must be clearly set, and an environment of cooperation and trust must be fostered between them. All students in the group must be willing to engage with the project and their team members. Without these characteristics, virtual teamwork is deemed more challenging than traditional teamwork (DeRosa & Lepsinger 2010; Lencioni 2002).

As a result, student experiences of group work during the pandemic and lockdowns were viewed less favorably, noting an overall decrease in motivation for school work. Specifically, students rated satisfaction, workload, motivation and efficiency poorly in comparison to their experiences with in-person group work (Slykerman et al. 2022; Stevanović et al. 2021).

These mixed results highlight a need to further examine the efficiency of online group work, especially during the pandemic, where options for in-person, blended, or fully online education were no longer available. Finally,

while the literature concerning student perceptions of virtual education continues to grow, there is no research concerning how group work in their various contexts and environments were experienced by students (Vogel & Wood, 2023).

3. CASE STUDY OF EFFICIENCY OF STUDENTS' TEAMWORK - ENTREPRENEURSHIP COURSE

Educators in field of Entrepreneurship, maybe even more than their colleagues, faced the challenges of teaching online (Ratten, 2020), because teaching entrepreneurship requires developing both hard and soft thinking skills, business knowledge, personal development and task-specific skills (Dana, 1992), and should provide experiential learning, which is harder to ensure with online learning. Base of Entrepreneurship course is project-based learning, the learning strategy that stimulates and develops a set of skills. In this case it involves students in the learning and assessment process, where they collaborate and work in teams to solve four assignments, prepare business model and business plan in order to be ready to deal with real problems and plan, develop, and implement projects that have practical applicability (Fruchter, 2001; Marquez & Jimenez-Rodrigo, 2014).

The Entrepreneurship course at the University of Zagreb, Faculty of Economics and Business, was introduced in 2006 as a mandatory course. Until the Covid-19 pandemic it was exclusively an in-person course. During the pandemic, the course was transferred entirely online, necessitating updates to the grading elements (Table 1). Changes were made in order to encourage team work and to reward students for extra work they needed to put in. For example, more points were redistributed toward student work throughout semester, and less for the final exam. This student work now included using digital tools to prerecord Powerpoint presentations which require more coordination and are more time consuming than traditional in-class presenting. All student assignments were the result of teams of 4-5 students. The teams were formed by using down to top principle, ie. students were choosing their team mates on their own. Because the course Entrepreneurship is on third year, this ensures that the teams should not have trust issues, as students already had an opportunity to get to know they classmates throughout the previous years.

Table 1: Grading elements – Entrepreneurship Course Before Covid-19 and During Covid-19

	Before Covid-19	During Covid-19
Assignments (4)	10	10
Business model	10	15
Business model presentation	0	5
Business plan	10	15
Business plan presentation	0	5
Final exam	70	50
Total	100	100

Source: Author

Table 2: Digital tools used in online teaching

Digital tools	Purpose
Google Classroom	To ensure that all students have access to teaching materials and the way of formal communication
E-mail	One of the possibilities of formal communication
Moodle	Final exam
Websites, videos, journals, magazines and other online sources	Information source
Social networks	Used by student as the way of informal communication

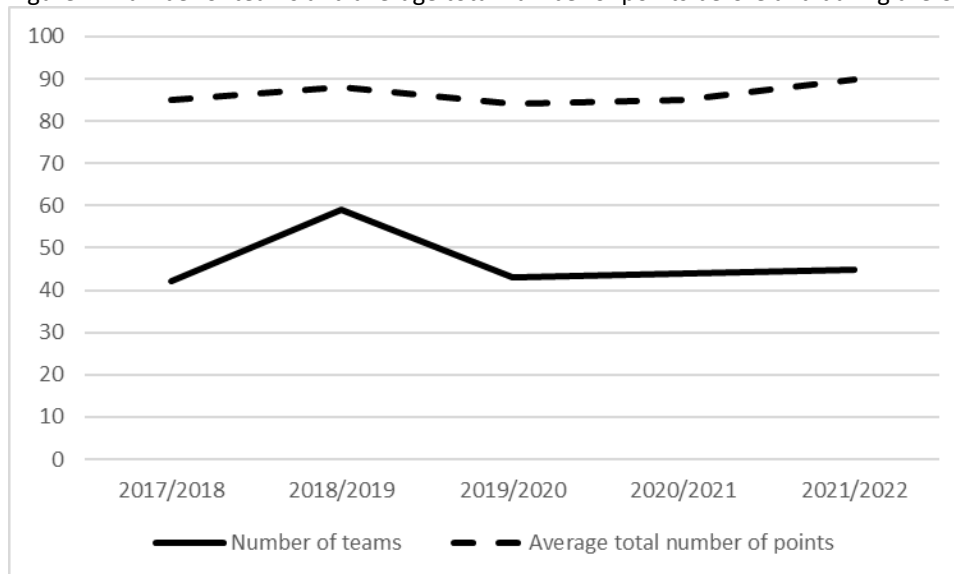
Source: Author

Online teaching was supported by a number of digital tools, of which Google Classroom and Moodle were most important (Table 2). Most of the digital tools used in online classroom were there to ensure formal way of communication. Students also used social networks, as informal channel to communicate with their peers.

The number of teams and average total number of points, as objective measure of teams' efficiency, is shown in Figure 1 over a period of five academic years, before Covid-19 (academic years 2017/2018 and 2018/2019) and during Covid-19 (academic years 2019/2020, 2020/2021 and 2021/2022). It can be noticed that the

efficiency of team work fell in the first two academic years during Covid-19, specially in the first year, and then rose in academic year 2021/2022. This can be due to time necessary for student and teachers to adapt to the new teaching methods and environment.

Figure 1: Number of teams and average total number of points before and during the Covid-19



Source: Author

Looking at the detailed data on teams' efficiency according to specific tasks, which is shown in Table 3, it can be noticed that the efficiency of team work was on its lowest at the beginning of the Covid-19, i.e. the first two assignments, because everyone needed time to adjust to a new way of working in teams. Students needed time to find the effective way of communication, outside the usual face to face, in order to successfully finish given assignments. The means of communication students used, were outside formal communication channels and were mostly Viber and WhatsApp. And the teachers needed to find more appropriate methods of managing teams and solving usual problems that occur within from the distance. As it is visible, there is no significant difference in teams' efficiency in other assignments, business model and business plan.

Table 3: Teams efficiency according to specific tasks before and during the Covid-19

	Assignments				Business Model	Business Plan
	I	II	III	IV		
2017/2018	70	77	92	92	92	85
2018/2019	78	81	94	93	91	90
2019/2020	71	74	92	90	95	84
2020/2021	80	79	93	93	90	77
2021/2022	86	84	98	93	90	88

Source: Author

4. CONCLUSION

This paper has discussed the efficiency of students' teamwork in the online classroom during Covid-19. This transition was specifically challenging because on one hand project-based learning is based on collaboration and work in teams, and on the other hand it was hard, for teachers and students, to adapt to new ways of communication, because face to face communication was not possible. Results of analysis showed that in the first two years of Covid-19 efficiency of working in teams slightly fell, specially at the beginning of the pandemic. Two academic years passed before the students' teamwork efficiency rose above the one before Covid-19. This paper is limited in its research as just one Entrepreneurship class was observed and not the entire course and analysis included just determining the efficiency of students' teams during Covid-19 and online classroom, without going into depth analysis of the reasons why efficiency dropped or was later improved. Recommendations for future research include detailed analysis of the factors that influenced the decrease in

students' team work during Covid-19, from the perspective of teacher and student, and the prerequisites that are necessary to ensure the efficient students' team work.

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Entrepreneurship in Silver Economy

Muhammad ADNAN¹

Biruta SLOKA²

¹ University of Latvia, madnanaq@gmail.com, ORCID: 0009-0009-5121-2074

² University of Latvia, Biruta.Sloka@lu.lv, ORCID: 0000-0003-2129-053X

Abstract: This research aims to explore different aspects of entrepreneurship in Silver economy by analyzing different models, scientific publications, good practice discussions on motivation of persons for silver economy especially in Europe where it is a very important aspect and applying statistical data analysis. From one side persons have worked already all working life and deserve to enjoy results of this work life and take benefits of retirement but from other side required workforce for economy. Specifically, it focuses on the identification of the main characteristics of entrepreneurs, their motivation and the elements of successful entrepreneurship in silver economy. The research methods used in this paper include scientific publications analysis and a statistical data analysis. For the statistical data analysis, indicators of descriptive statistics (indicators of central tendency or location, indicators of variability) are applied to select economic data for further deeper analysis. The results of this research are used to determine the impact of various elements of entrepreneurship in silver economy. In addition, there are covered valuable insights into the effectiveness of different relations. Entrepreneurship in silver economy is essential for social and economic success especially in countries with big share of elderly population.

Entrepreneurship involves creating and managing business ventures. Entrepreneurship in silver economy may help to elevate pensioners income level, lifestyle and financial liberty. Making the aging population contributing to the economy effectively is a challenge for many countries especially European Union which has the fastest growing share of people over 60 years of age.

Keywords: silver economy, entrepreneurship, pensioners, European Union.

1. INTRODUCTION

With an increase in aging population implementing silver economy due to falling birth rates and higher life expectancy is a global challenge. Entrepreneurship in silver economy is an opportunity for creating employment and rather providing employment.

Ageing population is one of the main policy challenge of the 21st century, especially in the Western countries. Old-age population growth, increasing old age dependency ratio as the result of increasing life expectancy and declining fertility rates are some of the alarming trends in Europe. In the European Union, the proportion of the old age population will reach 30 per cent of total population, while the old-age dependency ratio will increase from 4:1 to 2:1 by 2050. Henkens, K, Schippers, J.(2012).

An ageing population means a growing number of healthy older people with human capital, financial resources, and time available to contribute to economic activities. In the literature it is pointed out that this growing part of the population can be seen as a main driver for further economic development under the catch phrase silver economy. Significant growth potential has been associated with the silver economy, based on the rise in consumer spending in this age group and increasing efforts by public and private organizations to cater for the needs of the elderly.

The economic potential related to the 'silver economy' in Europe is based on the fact that the retirees of the baby boom-generation will be wealthier and better educated than their predecessors, which may lead to an increased demand for high quality services. Therefore, the EU should strengthen intergenerational solidarity by increasing the awareness of the contribution made by the elderly people to the society, and by developing entrepreneur attitudes among the elderly which could help to mobilise the full potential of the ageing cohorts.

The aim of this paper is to determine the relation between the level and dynamics of population ageing and the development of entrepreneurship seen here as the economic activity of population running their own businesses by the old age groups.

Tasks of the research are: 1) analysis of scientific publications on applications of silver economy and old age entrepreneurship in different countries; 2) analysis of good cases in application of silver economy.

Research methods applied: scientific publications analysis and case studies.

2. THEORETICAL FINDINGS

The concept of entrepreneurship in silver economy has been developed only during last decades: analyses regarding old age entrepreneurs, researchers have emphasised the motivation to undertake entrepreneurial activities (including by the older generation). In general, literature on the subject identifies “pull” and “push” factors. A pull factor (described as positive) refers to the need to strive for independence, autonomy, income increase, a chance to put one’s own ideas into action, as well as the need to remain active and socially useful. A push factor (described as negative) refers to situations where an individual is not happy with his or her current professional career and has no social benefits in the form of a pension (Kautonen, 2008: 6).

In OECD *the Missing Entrepreneurs* series of publications, the Organization for Economic Co-operation and Development (OECD) and the European Union: discuss how public policies and programs can support inclusive entrepreneurship. This includes:

- refining regulatory and welfare institutions;
- facilitating access to finance;
- building entrepreneurship skills through training, coaching and mentoring;
- strengthening entrepreneurial culture and networks for target groups, and
- putting strategies and actions together for inclusive entrepreneurship in a co-ordinated and targeted way (OECD, EU, 2019: 7).

Researchers devote more and more their attention to silver economy aspects including longer working lives (Aidukaite, Blaziene, 2022). Researchers have stated question – longer working life is necessity or opportunity (Leporati, et al, 2021) where discussion is rised about the situation in Chile. An individual with healthy mind and body is capable to achieve an opportunity of better living and earning instead of being a retiree or pensioner.

The prolific scholar, on the subject of ageing and the opportunities for enterprises, Florian Kohlbacher considered that changing demographics gives rise to golden opportunities for silver innovation (Kohlbacher et al., 2014). In past preferred careers and trades are no more considered viable or interesting for the new generation thus leaving a vacuum that has to be filled or taken by someone.

Increasing longevity, falling fertility rates and migration are considered drivers of population ageing. These statistics are similar in virtually every developed country in the world and is set to lead to a significant social transformation of the twenty-first century, impacting on all sectors of society (UN, 2020). Zero or controlled birth rate is a key factor of ageing population, also there is population age gap which may take decades to replace the older ones with the grown ones. People migrating from one country to another search opportunities in entrepreneurship and jobs regardless of the age bracket, the reason is survival and beginning of a new life abroad.

The term of Senior Entrepreneur is commonly referring to people aged 50 or over, who are planning to start a business, are currently in the process of starting one, or have recently started one (OECD, 2013). Through their business start-ups or existing ones, seniors are contributing to value creation for the community and themselves, to job creation, to the fiscal system, and to a higher social inclusion. Also, active seniors tend to stay healthy longer, thus reducing pressure on social services and associated public costs.

When analyzing senior entrepreneurship or self-employment in older age, four factors are of high relevance for describing and explaining the economic behavior. These are income and wealth, time sovereignty, work experience and previous occupations and the institutional framework. It is argued that it is necessary to consider older people which are retired as a group or cohort in its own right (Lewis & Walker, 2011).

Work experience, previous occupations, and employment history of older people are also positive factors for senior entrepreneurship or for becoming self-employed (Solinge, 2014). When starting a business, older people may have potential prior work experience in the relevant industrial sector which provides them with important background knowledge.

The trades which can better meet the elderly needs; the trend already stimulated many new businesses (for example: telemedicine; domotics; motion sensor lighting; integrated care services; remote medical assistance, Internet of Things (IoT) applications etc.), including social entrepreneurship ones, addressing age differentiated expectations; for example, European Innovation Partnership on Active and Healthy Ageing (EIPonAHA) was launched as a cross cooperation entity (industry, research institutions and healthcare professionals) aiming at improving elderly peoples' quality of life (European Commission, 2015).

The 2016 LE Report is underlining a growing presence, in the US, of senior entrepreneurs who started one third of all new ventures, during the last 10 years. The 55-65 demographic segment displayed the highest entrepreneurial activity during the same time span. Older entrepreneurs can demonstrate skills to properly assess the environment and can contribute, along with the younger ones to the diversity of offerings on the market (GEM, 2014).

Regarding senior entrepreneurship, in what follows, older people are defined as those who are retired from the labour force. That means that the transition from one life stage to the next, i. e. retirement, has already taken place, but this happens not always at the same age, it differs between occupations, industrial sectors, as well as gender within and between countries.

In economic literature, it is undisputed, that an increase of older people becoming self-employed will have positive economic and social effects (Kautonen, 2013). Older people constitute a reservoir of the work force with high human capital, high work experience, high permanent income and wealth, as well as availability of time. However, little is known about the entrepreneurial behaviour and the reasons to become self-employed in older ages. To those aspects is devoted publication (Crossen-White, et al, 2020) with special attention to innovations for elder people in their entrepreneurship. The consequence of population ageing in many EU countries are the financial difficulties, such as problems with balancing the budget of the pension systems, which result from the growing dependency ratio of the old-aged professionally inactive to the working-age population. This deepens the public debt, but many countries are threatened with a total break-down of the existing pension systems.

Several countries find different solutions with innovative approaches (ElTamimi, R.A., Sweis, N.J. (2021) with entrepreneurship development for older part of population, (Kamberidou, 2020) for innovative approaches in involvement in entrepreneurship of older women, (Viljamaa, et al, 2022) for part-time involvement in entrepreneurship after retirement, (Dragusin, et al, 2015) for older part of population in Romania, in other research results (Ivanić, 2019) for active ageing in Serbia, researchers (Stephens, Hegarty, 2022) have analysed cases of involvement of retired employees in public sector and their involvement in entrepreneurship after retirement.

3. CONCLUSION

Theoretical and empirical analysis can be characterised as being disparate. The differences between people being retired or not, their time sovereignty and their income security are not taken into account. Even more, in the analysis, the relevance of country-specific institutional regulations and the importance of life cycle effects are often neglected. Therefore, it is unclear what the main driving forces for becoming self-employed after retiring are. It could be out of necessity, to continue doing the same thing they have been doing previously in dependent work. The reasons for becoming self-employed may be interest and curiosity to explore new opportunities in life, to change to new uncontested terrains of activity, or a mixture of the mentioned factors.

Numerous courses at universities, business schools etc. try to convince and prepare young people to take the risk of becoming self-employed and running their own businesses. These measures cannot be used for fostering older people to start a business. The learning behavior of the elderly is different, they warrant separate educational measures which are established in geragogy, i. e. the educational theory regarding older adults.

In conclusion, fostering entrepreneurship of the elderly may be a way to tackle the problems of an ageing population. By becoming self-employed, older people stay in the labour force and generate economic growth. Overall, the relevance of older people in the field of business and entrepreneurial economics will increase. Given the ageing population from an economic point of view, it seems necessary to take into account the large and still growing economic potential of the elderly. There seems to be a treasure in waiting.

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Pandemic Crisis and Digital Transformation: Implications for Electronic Consumer Behaviors

Panagiota XANTHOPOULOU¹

Alexandros SAHINIDIS²

¹University of West Attica, School of Administrative, Economics and Social Sciences, Department of Business Administration, Athens-Greece, pxanthopoulou@uniwa.gr, ORCID: <https://orcid.org/0000-0003-2503-3901>

²University of West Attica, School of Administrative, Economics and Social Sciences, Department of Business Administration, Athens-Greece, asahinidis@uniwa.gr, ORCID: <https://orcid.org/0000-0001-7564-5813>

Abstract: Consumer behavior during the current pandemic crisis is certainly a subject concerning businesses as well as consumers. The purpose of this research is to provide a holistic view of consumer behavior through a content analysis of secondary data. Secondary data content analysis is a flexible and effective method which provides additional information and understanding about a research topic. The main findings show that during the pandemic crisis, consumer behavior in Greece has changed. Older people started to trust e-commerce and the percentage of online orders was increased. However, even though most people want to maintain a part of this new consumer behavior, during the post pandemic period they do not wish to fully continue this way of purchasing. Another observation is that consumer behavior has not changed completely yet. There are still more changes to happen before a unified pattern emerge. Finally, it appears that e-commerce during the pandemic had positive impact on the market, as it allowed it to continue moving even during the lockdown. This research highlights the importance of studying electronic behavior of consumers in different times. The impact of the pandemic to the society has been extensive but focusing on electronic behavior provides important indications of trends and changes in consumer behavior. Understanding those changes is vital for organizations as it can help them to understand these new trends and implement more effective strategies to promote their products and increase their sales. Research results can also help organizations adapt to the changes caused by the pandemic and improve their online services in order to be aligned with the new demands and behaviors of consumers.

Keywords: pandemic crisis, consumer behavior, electronic consumer behavior, e-commerce

1. INTRODUCTION

Undoubtedly, the last fifteen years constituted a period characterized by important reforms and phenomena that ultimately changed the daily lives of people and the organizations globally. Since 2009, a global economic crisis appeared which has stigmatized many nations and had a negative impact both in terms of the national and of the adaptation of citizens to the new conditions of the market and their daily living. Also, during the last years and specifically from 2019, there is a new challenge. This is the Covid-19 pandemic crisis which brought new measures with which organizations and people had to deal with (Tisdell, 2020; Xanthopoulou & Kefis, 2019). In the new data and contexts of the daily life, the need to find new ways and methods of serving the daily life of both natural persons and businesses, which due to the limitation of their economic activity, were called upon to find ways to survive and thrive in a highly changing business environment. Organizations therefore, proceeded to adopt and integrate digital tools in their activity, to continue their business and commercial activity (Gerard, Lakhani, & Puranam, 2020). Essentially, organizations turned to e-commerce by creating online stores (E-shops) as well as other innovative services, to meet the ever-changing needs of the consumers and the public (Bhatti, et al., 2020). On the other hand, the tough measures brought significant changes in consumer preferences, beliefs and behaviors of consumers worldwide (Di Crosta et al., 2021; Patitsa, Sahinidis, Tsaknis, & Giannakouli, 2021; Sahinidis & Tsaknis, 2021). Many consumers have now turned to the use of digital tools (Vargo, Zhu, Benwell, & Yan, 2020; Xanthopoulou, 2022) in order to buy (or sell) goods and services useful for serving their daily lives. Of course, the reason is the rapid development of e-commerce and online shopping through online stores. The pandemic played a very important role in this development.

The purpose of this research is to study in depth the effects of the Covid-19 pandemic on consumer behavior, with an emphasis on consumer electronic purchases. Through this study and based on the already existing scientific research (such as the research of Gu, Ślusarczyk, Hajizada, Kovalyova, & Sakhibieva, 2021; Ali, 2020; Sayyida, Hartini, Gunawan, & Nur Husin, 2021), the authors will evaluate and interpret consumer behavior for online shopping at both national and European levels. The aim is to collect sufficient and reliable data and information, which can reasonably answer the following research questions:

1. What has been the impact of the Covid-19 pandemic crisis on consumer behavior?

2. How has the Covid-19 disease affected consumers' online shopping?
3. How has the use of technology changed during the pandemic and after that?
4. Which are the new market trends on e-commerce?

The ultimate aim of the study is to provide general conclusions based on the existing research regarding the changes on consumer behavior during the last years. A content analysis of secondary data was used as a research method. The content analysis of secondary data is a method of content analysis which is used to evaluate the quality as well as the quantity of information contained in specific secondary data. Such data include written texts, electronic messages, reports and other documents (Boslaugh, 2007). Content analysis of secondary data follows a set of objective rules and procedures to be able to determine the parameters of the contents and evaluate their effects. This process includes managing categories of content, analyzing content patterns and themes that appear in the data, and evaluating results against pre-defined metrics (Harris, Coles, & Davis, 2003). The data come from electronic sources such as scientific journals and statistics sources. The main contribution of this research is that it highlights the reactions of consumers as well as the way the pandemic affects their online shopping.

The research design included the following steps:

1. *Data collection.* Data collection came from various sources such as surveys conducted by independent agencies, data from online stores and social networks.
2. *Content analysis.* No specific software was used for content analysis. The themes were identified and related to the research topic through the analysis of different studies and secondary data.

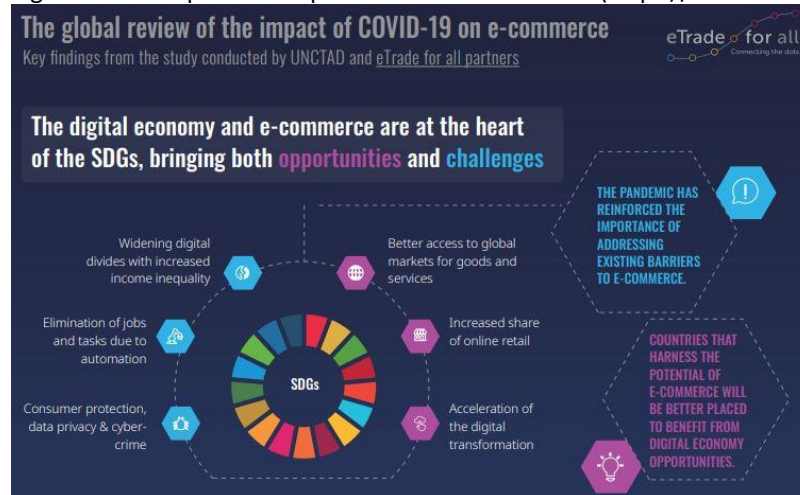
2. LITERATURE REVIEW

2.1 E-commerce and consumer behavior during the pandemic period

In an effort to limit the spread of the virus, governments around the world imposed restrictive measures and in many cases quarantine on the people of each country (Xanthopoulou & Plimakis, 2021). Of course this had a huge impact on consumer spending behavior. The first observation during the first months of the pandemic was the rapid development of the online stores and of the e-commerce (Hossain, Wicaksono, Nor, Dunay, & Illes, 2022). People all over the world began to realize the importance of being able to buy products via the Internet so that they could avoid any personal contact with another individuals and protect their health (Din, Han, Ariza-Montes, Vega-Muñoz, Raposo, & Mohapatra, 2022). The fear of the pandemic combined with the various offers, the ease of ordering products or services from their homes and the fact that they had no time limit on when to place their orders, sparked the idea of e-commerce (Susmitha, 2021).

Major changes were seen in the way mainly older people began to view the internet. People who did not know how to properly use computers or portable mobile devices and were not very familiar with the internet, started to become more involved as a result of learning exactly how they can take advantage of these electronic services. They started getting products and services that they never thought they would buy online (such as food, medicines, and more others from a variety of sectors) (Kawasaki, Wakashima, Shibasaki, 2021). Equally important is the fact that many people have chosen ways of entertainment at home which can also be achieved through online shopping (Yabe, Hanibuchi, Adachi, Nagata, & Nakaya, 2021). Purchases of subscriptions to movie and series libraries as well as satellite TV services soared during the crisis in Europe and other countries (Fandrejewska, Chmielarz, & Zborowski, 2022). We could say that the way in which consumers in Greece started to use the internet is very similar to the usual way of consumption in countries such as the USA where electronic commerce has been a very popular way of buying for many years. Too many organizations around the world chose to invest in e-commerce during the pandemic crisis. They also invested in their targeting and marketing strategies to increase their revenues. Even during the post pandemic period, it seems that e-commerce continues with similar or even better performances. Figure 1 below describes that the digital economy and e-commerce in general is an integral part of sustainability, which has been promoted in recent years by the European Union. With the pandemic crisis most organizations were forced to switch to this type of sustainable development which gave them many positive outcomes. We see how the pandemic has reinforced the importance of eliminating borders in e-commerce and at the same time has enabled entrepreneurs to increase their clientele by becoming part of the global market and of course to increase the development of digital transformation.

Figure 1: The impact of the pandemic on e-commerce (<https://www.fao.org>)



2.2 E-commerce and consumer behavior in the midst of a pandemic

Consumers were influenced both in what kind of products they would buy and in the quantity of products they choose to buy. There are a lot of studies which underline that e-commerce has blossomed during the pandemic and can now be considered as one of the most essential shopping ways worldwide (Hadasik & Kubiczek, 2022; Kurniasari & Ryadi, 2021; Bellini, Zerbini, Vergura, & Luceri, 2023). This is because e-commerce excludes the limitation of time and travel for the purchase of a product or service. There is also a major increase in sales through online platforms and also in the volume of orders during the pandemic period (Dinesh & MuniRaju, 2021). Taking into account a study done by PwC, specifically the study "March 2021 Global Consumer Insights Pulse Survey", we can see that the pandemic had a huge impact on physical stores and shopping (Amoils, 2021). Nevertheless, until today, the physical purchase of a product seems to be the first choice of every consumer. This has to do with whether the consumer trusts a product or the company that sells it. In many cases, the consumer wants to see the product first before buying it (Jílková & Králová, 2021). By reviewing the above mentioned research we can conclude in three specific groups of consumers with very specific consumer behaviors. One group is that of consumers who work from home. This particular group seems to prefer an electronic friendly lifestyle. Those individuals will spend much more money on products such as supermarket items even health and beauty items, clothing and sports items even household appliances and also various electronic devices. A second group that was created is that of younger consumers. This group mostly refers to people of Gen Z but also to the Millennials, who seem to prefer to do their daily shopping or their weekly shopping via their mobile phone. For this particular group, it appeared that the pandemic did not affect their consumer spending as much as it affected older consumers. Finally, a third group that emerged is the group of consumers who put their personal health and safety first. This group is much smaller compared to consumers who do not seem to be completely aware of the dangerousness of the pandemic and who did not think that buying products from physical stores is as dangerous during that time as it actually was. This third group will choose to shop for products from a physical store taking all possible measures that can ensure their health and safety. This particular group will at the same time make sure to choose stores that also promote their personal health and safety by taking all the necessary measures.

2.3 New trends in e-commerce due to pandemic

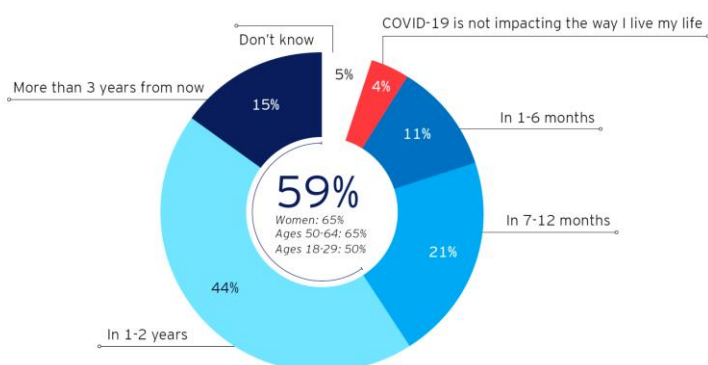
During the pandemic, surveys showed that in Greece 6 out of 10 buyers use online platforms to make their purchases (Bogevska, Berjan, El Bilali, Allahyari, Radosavac, & Davitkovska, 2022). The pandemic crisis revealed the potential of e-commerce as it seemed to increase even more both the consumption of consumers via the Internet and the way in which they reshape their behavior. Through social networking platforms, a lot of research was done by various companies and research centers to give a clear picture of consumer preferences during the pandemic. At the same time, an attempt was made to create new trends in e-commerce that could meet consumers' needs. Regarding the Greek consumers, there was a certain period of time during the week when they chose to make their purchases. This period was the end of the week and specifically Friday, Saturday and Sunday (Anastasiadou, Anestis, Karantz, & Vlachakis, 2020). This created new trends in online stores that

tried to promote specific products and services at the times they knew that consumers will mostly be interested in seeing these products. Marketing campaigns were set up based on these preferences, they started offering deals and more goods at specific times and days, and they started giving consumers the ability to order even faster and easier by facilitating their platform. There was a big difference in the ease of paying for goods as many stores started offering installments to consumers, sometimes without even using credit cards. However, several other companies decided to adopt this model and apply it to their own products and services. The basic model of e-commerce has not changed much as online stores have remained the same however they have become much friendlier and much easier for the consumer (Ingaldi & Ulewicz, 2019). At the same time there was the possibility for consumers to communicate with physical stores either by phone or online in real time so that they could ask their questions before making their purchase. This optimization of e-shops and services and in general the research which is done continuously so that the consumer experience can be further improved, seems to be one of the most important new trends in e-commerce which was appeared during the period of covid- 19.

2.4 E-commerce in Greece during the covid 19 pandemic

It has already been mentioned that the way e-commerce has affected the world has drastically changed the way consumers think and act. Greece has always been a country whose consumers did not trust online shopping as much as the physical store. However, this changed during the pandemic (Skalkos, Kosma, Chasioti, Skendi, Papageorgiou, & Guiné, 2021). Figure 2 shows the speed with which Greek consumers, depending on the age group they belong to, are rebuilding their lives so that they can respond to the pandemic. We observe that in some cases consumers not only change their habits but their entire way of life so that they can cope with the new conditions. For some people it takes more and for others less, while some consumers consider that their life has not changed at all due to the pandemic.

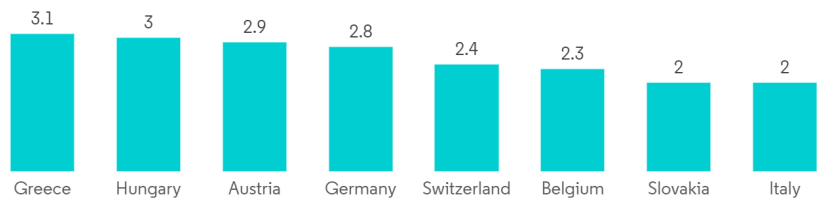
Figure 2: Rates of change in the lifestyle of Greek consumers during the pandemic based on gender and age (Mavros, 2021)



According to online surveys conducted through social networking platforms, older people chose a certain way of working with e-commerce compared to younger people (Vieira, Frade, Ascenso, Prates, & Martinho, 2020; McIntosh et al., 2021). It seems that young Greeks continue to prefer the e-commerce that was created during the pandemic crisis until today, while older people in Greece have chosen to return to a greater extent to physical stores during the post pandemic period (Theodoridis & Kavoura, 2021). For most Greek consumers, Facebook remains one of the most popular platforms for buying products. Research has shown that almost 52% of online shoppers in Greece, still over the age of 45, use this platform to make their purchases. At the same time, 49% of consumers aged up to 24 will use platforms such as Instagram to make their digital purchases (Skalkos et al. 2021). As mentioned above, in Greece the time period which was the most profitable for online shopping during the quarantine was that of Friday, Saturday and Sunday. Taking these into consideration, it is observed that the pandemic has not only changed the consumer behavior of consumers in Greece in terms of the type of goods they will buy, but it has also changed the way Greek consumers choose to buy their products. Figure 3 below indicates that in 2021 during the beginning of the pandemic there was a greater consumption and purchase of products through e-commerce in Greece, compared to the rest of the European countries.

Figure 3: E-commerce spending as a percentage of total GDP, by country in Western and Central Europe (<https://www.mordorintelligence.com>)

E-commerce Spending as Percentage of Total GDP, By Country, Western and Central Europe, 2021



Source: PPRO



For Greek consumers, trust in the store and personal contact with the shopkeeper has always been something very important. However, during the pandemic crisis even older people realized the advantages of e-commerce and chose to take advantage of them. Nevertheless, the percentage of people who continue to use e-commerce after the pandemic crisis, at least for older people, has decreased considerably (Fakieh & Happonen, 2022). We could easily say that electronic commerce is a new form of commerce that has reached Greece and has acquired an important position in the market. Certainly e-commerce is not going to decline. In the coming years in Greece we will see an increase in shopping via the internet and a decrease in shopping in physical stores. This will have a huge impact on the market whose results are very difficult to predict.

2.5 Long-term changes in e-commerce

The changes in the market are not easy to predict despite the fact that e-commerce is now considered one of the most common way of buying goods both in Greece and in the rest of the world. E-commerce will have both a positive and negative impact on the future market mainly regarding the physical environment and the human factor (Sui & Rejeski, 2002; Tzavlopoulos, Gotzamani, Andronikidis, & Vassiliadis, 2019). For instance, one negative impact will be the fact that too many people will lose their jobs as too many physical stores will close and remain online only. Of course, this also requires the creation of new jobs and new specialization, especially for the new people who are now starting to enter the labor market. There will be a great need for labor in the product warehouses as well as citizens and contact persons in the call centers of the stores. At the same time, it is almost certain that new types of jobs will be created which will be inextricably linked to e-commerce (Cash, Yoong, & Huff, 2004). The new trends that online stores will have to meet will definitely create a need for new minds and new ideas as well as new jobs. We're already seeing this starting to happen in marketing. Traditional marketing can no longer provide ideas that can meet consumers' needs and expectations. So in the field of marketing it seems that there will be a trend of new ideas and new people who will be able to create even better images, products, services and offers, so that they can attract an even larger audience. E-commerce in the long run will change a lot and marketing will play a very important role in this change. Consumers will be able to buy their products not only through computers and phones but through any electronic devices that can connect to the Internet. At the same time, the marketing campaigns will be optimized to such a level that we will be able to give the consumer options for products and services that they need at any time and moment. This of course has already started to happen with the internet and through many social networking platforms building a consumer profile and constantly giving new suggestions to users regarding products and services that might be of interest to them. It is very difficult to predict the picture of e-commerce in the next decade, however, one thing we can say for sure is that e-commerce will at some point and beyond replace physical commerce as the main way of buying all products and all goods.

The analysis of e-commerce in the era of the pandemic, which is also the main topic of this particular study, is certainly a topic that has been analyzed a lot and will continue to be analyzed for many years. A lot of research has been done, however, we can say that there is still space for a lot of research as the specific topic can change based on the consumer, the supplier, the product, the service, geographical location and many more (Dospinescu, Dospinescu, & Bostan, 2022). In 2022, with the pandemic spreading throughout the world, completely new conditions around e-commerce began to take shape. Mandatory measures from governments forced potential consumers to social distance. This naturally results in all these consumers turning their

attention to the internet and of course to e-commerce. E-commerce can be said that for the period of the pandemic it was a real salvation for some people who could not stand confinement. But this change awakened completely new consumption habits for citizens (Wyman, 2020; Chatzopoulou & Xanthopoulou, 2021). Generally, consumers have started to act in a completely different way in terms of how they buy products or services and how they judge whether these products and services are what they would like. At the same time, this hyper-consumerism has drastically changed the global economic situation for both consumers and suppliers. There seems to be a huge change in the financial sector which is greatly influenced by the e-commerce movement (Moravčíková, 2022). Similarly, the marketing sector had to apply new practices that would help manage consumer behavior in the midst of the pandemic. Certainly these changes are here to stay and are not yet complete as the pandemic has changed not only the consumer behavior of people but in general the way they think and operate in their daily lives (Hoekstra & Leeflang, 2020).

Figure 4: Increase and decrease in website traffic during the Covid-19 pandemic (Neil Patel.,2021)

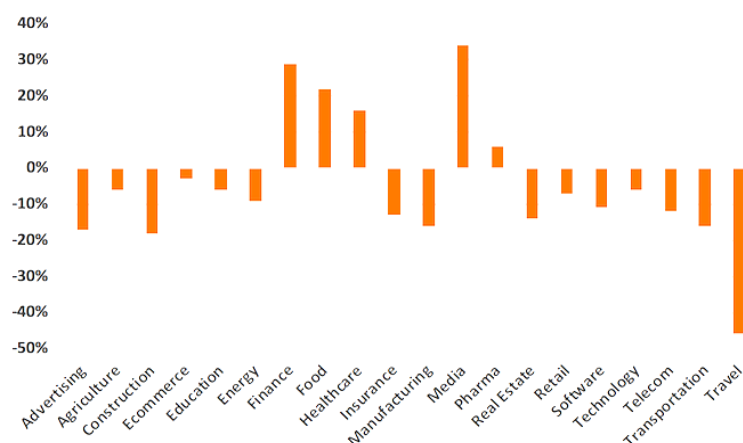


Figure 4 above shows the decrease in traffic to websites with topics such as energy, education and travel and an increase in websites with topics such as food, health, medicine and finance. This increase shows that the consumers are changing their priorities in terms of what they are looking for in the midst of a pandemic. At the same time, there should be a change in marketing strategy on pages that offer products and services that do not seem to fit the preferences of the public during the pandemic.

Figure 5: Changes in companies' marketing campaigns during the Covid-19 pandemic (Nanji, 2020)



bynder

Finally, figure 5 presents the results of a survey of the Bynder website, which was carried out in companies. During the pandemic, it appears that 26% of companies increased their marketing campaigns; a similar percentage of 24% remained stable, while a percentage of 25% significantly reduced campaigns. The change in consumer behavior played an important role as both websites that increased the percentage of campaigns and those that decreased it, in the midst of a pandemic, were affected by the new wants of consumers.

3. Conclusions and Suggestions for future research

Consumer behavior during the covid-19 pandemic has not only been affected but has created new models which are here to stay. Of course e-commerce has grown tremendously and the benefits it has been able to provide to consumers during the pandemic have made it a strong competitor in the commerce sector. Many organizations have begun to adapt to these new data and promote their online stores by trying to create the right buying conditions for their consumers. According to Argyropoulou, Papoutsis, Tzavara, and Argyropoulou (2023), in Greece it appeared that consumers, especially elderly consumers, began to show more confidence in e-commerce as they learned to use the online platforms. Nevertheless, it seems that after the end of the pandemic, they are not interested in continuing to use e-commerce 100%, unlike young consumers. According to the research of Theodoridis and Zacharatos (2022), the new models of consumer behavior that have been created both in Greece and in the rest of the world seem to have not is still being completed as new technologies are constantly coming out on e-commerce finally at the same time businesses are trying, with the corresponding feedback, to improve the consumer experience again and again so that they can increase their clientele. E-commerce is certainly very profitable and can provide many organizations around the world with the ability to sell their products to a much larger clientele at a lower cost and higher profit. Through this specific work, it was seen that although consumer behavior changed during the pandemic, it has not been totally reformed. At the same time, it seems that e-commerce is constantly evolving and bringing more and more innovations to the field.

A suggestion for future research is to examine consumer behavior through e-commerce in both developed and developing countries. It is important for researchers to consider external factors that can influence consumer electronic behavior. Another suggestion for future researchers is the implementation of a quantitative survey on companies that thrived during the pandemic, and see how their revenue growth was changed. In the case of an increase, a comparative study could be interesting to see the differences between these organizations with those that were thriving before the pandemic, leading to a more holistic picture of the changes in consumer behavior. In the case of a reduction, a second qualitative survey can be done this time on a group of consumers of various ages, using questionnaires, for the researchers to understand whether consumer behavior has returned to pre-pandemic patterns or if it continues to change, and to what extent turns to. It is the consumer behavior that will show whether the use of e-commerce can be so profitable for businesses or it can be disastrous. Thus, the main proposal for future research focuses on consumer behavior and the factors that can influence it in the coming decades.

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An Examination of Food Scandals in Albania: Causes, Consequences, and Policy Recommendations

Pranvera TROKA¹

Ilir KAPAJ²

¹ Assistant lecturer, PhD student, ptroka@ubt.edu.al, ORCID: 0009-0004-7331-9052

² Lecturer, ikapaj@ubt.edu.al, ORCID: 0000-000-0349-044X

Abstract: In recent years, Albania has faced a series of food scandals that have raised concerns about the safety and quality of the country's food supply. From contaminated dairy products to mislabeled meat, the public is left to question what they are consuming and where their food is coming from. This paper presents the results of a study investigating the causes, consequences, and recommendations related to food scandals in Albania. The data for this study were collected from two main sources: the National Food Agency and Google search. The NFA provided information on reported cases of food scandals in Albania, including the type of scandal, affected food products, and the actions taken by the agency to address the issue. In addition, Google search was used to identify news articles, academic publications, and reports related to food scandals in Albania.

Our findings suggest that food scandals in Albania are primarily caused by weak enforcement of food safety regulations, lack of transparency in the food industry, and corruption. The consequences of these scandals include decreased consumer trust in food products, negative economic impact on the food industry, and public health risks. Based on our analysis, we provide several recommendations for addressing food safety issues in Albania, including strengthening regulatory enforcement, improving transparency and accountability in the food industry, and enhancing public awareness and education on food safety issues. These findings have important implications for policymakers, industry stakeholders, and consumers in Albania and beyond.

Keywords: food safety; food scandals; food industry.

1. INTRODUCTION

There is a general fear among consumers that the food they eat is not safe and could potentially harm their health, either in the short term or the long term. This fear is enhanced by food incidents, inaccurate information, increasing consumer awareness, and the media spreading information. Unfortunately, food scandals continue to be a global concern, transcending geographical boundaries and threatening public health.

During the past decades, the world has encountered some food scandals that have forever marked the global food landscape. The series of food scandals started with the BSE crisis, known as the mad cow disease (1986), the dioxin crisis (1999), the avian flu (2003), the Chinese melamine case (2007), the Irish pork crisis (2008), and the H1N1 new influenza (2009). These scandals resulted in major health, economic, and social consequences (Hussain & Dawson, 2013). Therefore, fears related to food additives, residues, and emerging food technologies focused consumers' and authorities' attention on food safety (Bánáti, 2011).

Food safety in developing countries, such as Albania, presents unique challenges compared to more developed nations. The development of society, especially in recent years, has been accompanied, among other things, by new consumer approaches to the quality of the food they consume. People are now more concerned about the safety and quality of their food, which has made ensuring food safety a growing priority.

Over the years, several cases of contaminated and unsafe food products have been reported in the country, leading to growing concerns among both consumers and authorities regarding the need for stricter regulations, enforcement, and improved food safety measures within the food industry. Upon taking the new government mandate in 2017, the government conducted a survey that revealed food security as the third most pressing issue citizens expected improvements in during the current mandate, which was coming to an end. This was considered a scream for attention, emphasizing the urgent need for policies and actions to address the nation's food security concerns (Science and Innovation Center for Development, 2021).

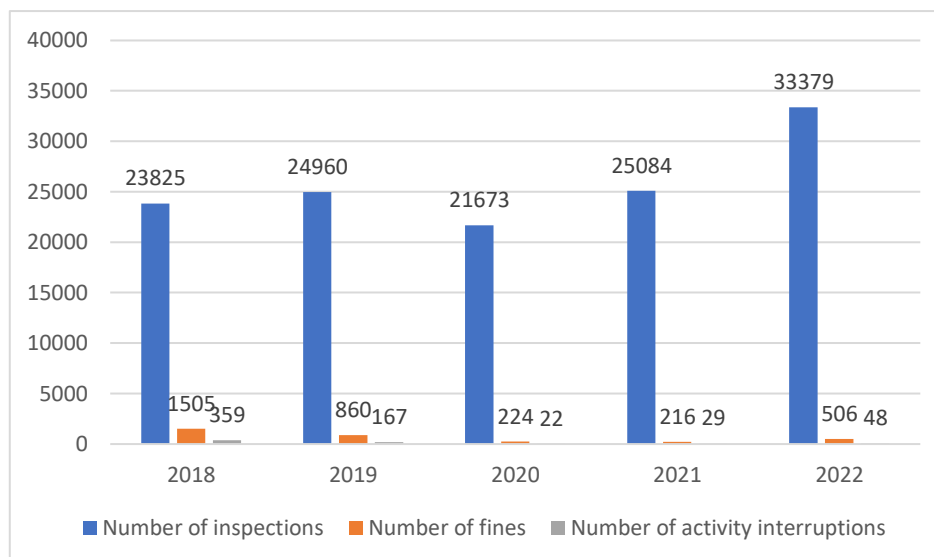
“Despite the fact that food has never before been as safe and healthy as it is today, it seems that consumers are uncertain and increasingly critical about the quality and safety of their food” (Verbeke et al., 2007). Increased access to information channels (Fleming et al., 2006) and education have led global consumers to become more aware of food (Liu & Ma, 2016). In Albania, this trend is also evident as consumers are becoming more informed and discerning about the food they choose to consume.

Unfortunately, the food sector is constantly subject to illegal activities such as adulteration or exploitation of labor happening at the global level (Rizzuti, 2022). The lack of a universal fraud definition poses an initial challenge to the economic analysis of ‘fraud’ (Ehmke et al., 2019). However, it is commonly accepted that the term ‘food fraud’ covers any violation of food law that is an intentional and deceptive misrepresentation of food for financial gain (van Ruth et al., 2017). Other authors have expanded upon this explanation and have outlined seven categories of food fraud: adulteration, tampering, over-run, theft, diversion, simulation, and counterfeit (Spink and Moyer, 2011).

1.1. Legal framework of food safety

The institution responsible for overseeing food safety in Albania is the National Food Authority, which ensures the fulfillment of legal, economic, and social requirements by businesses and guarantees the right of Albanian consumers to consume safe products. Law No. 9863 “Law on Food”, dated January 28, 2008, aims to “set the bases for ensuring a high level of protection of people's health and the interests of the consumer (Food Law, 2008). According to the Law on Food, administrative offenses are punishable by a fine. Article 68 has a long list of actions that are considered administrative offenses, such as no compliance with self-control obligations, exercise of activity in an illegal establishment, etc. Table 1 shows the number of NFA inspections of businesses that operate in the food industry in the past five years.

Table 2 NFA inspections during the past five years



Source: National food authority

If violations of food safety go beyond Law No. 9863, the Criminal Code of the Republic of Albania provides certain criminal offenses in the field of food safety. This code punishes the production and sale of food dangerous to health as well as the illegal production of food articles, respectively, according to articles 288 and 288/a, as follows:

- Article 288: *Production and sale of food and other substances dangerous to health.* Production of chemicals, materials, and additional substances in the production and processing of food and beverages, when death or serious damage to the health of the person has resulted from these acts, shall be punished by a fine or imprisonment of up to ten years. When the death or serious damage to the health of several persons has been caused by the crime, it is punishable by imprisonment of not less than five years.
- Article 288/a: *Illegal production of industrial and food items and goods.* Illegal production of industrial and food items and goods constitutes a criminal offense and is punishable by a fine or imprisonment of up to two years. And this crime, when it is committed in collaboration more than once or has serious consequences, is punishable by imprisonment for three to ten years. Opposition to these laws results in legal consequences, including fines and imprisonment.

According to data obtained from the Ministry of Justice, during the year 2022, there were a total of 6 oppositions to Article 288, of which 3 were imprisoned and 3 were fined. Related to Article 288/a, there were a total of 4 oppositions, all of which faced legal action, including fines.

2. METHODOLOGY

The main objectives of this paper are the following:

1. To provide an overview of the most notable food scandals in the country
2. To discuss the impact of these scandals on the public and the country's economy
3. To identify the root causes of these scandals and the measures taken to prevent them from happening again.

To conduct this study, a comprehensive review of available literature and reports related to food scandals in Albania was undertaken. Secondary data were provided to us from governmental bodies, such as the National Food Agency (in Albanian: AKU), Ministry of Agriculture and Ministry of Justice, in order to identify reported cases of food scandals in Albania, including the type of scandal, affected food products, and the actions taken by the agency to address the issue. In addition, Google search was used to identify news articles, academic publications, and reports related to food scandals in Albania. Key words such as “food scandals in Albania”, “food contamination”, “food adulteration”, “food inspection”, “food safety” etc., were used to filter the information.

3. RESULTS

There is no definitive set of criteria for an incident to be considered a food scandal. However, the most common factors that are related to such incidents include health risks, widespread impact, public concerns, regulatory violations, unethical practices, and even economic impact and damage to the reputation of the food industry. Over the years, several cases of contaminated and unsafe food products have been reported. This examination of food scandals in Albania reveals a history of various incidents and issues related to food safety, adulteration, and contamination.

After the processing of the collected data, we were able to identify the most vulnerable food categories and food frauds in Albania, which are outlined below:

1. **Olive Oil Adulteration:** Olive oil is a significant agricultural product in Albania, but there have been concerns about the adulteration of extra virgin olive oil with lower-quality oils or additives. These issues have raised concerns about the authenticity and quality of Albanian olive oil, both for domestic consumption and export markets.
2. **Milk and milk by-products:** Economically motivated, milk is the most fraudulent food product in the world after olive oil (Moore et al., 2012). Insufficient quality control measures at various stages of production, processing, and distribution have resulted in inconsistent milk quality and safety. Reported cases within the milk sector involve mostly: mixing or diluting genuine milk with water or other substances to increase volume and profitability; contaminated milk due to the presence of harmful microorganisms (e.g., bacteria, viruses), chemical residues (e.g., pesticides, antibiotics), or foreign materials (e.g., feces); and the sale of expired products.
3. **Meat Quality and Safety:** Albania has faced issues related to the quality and safety of meat products. These issues include the illegal use of growth-promoting substances and antibiotics in animal husbandry, as well as concerns about the missing veterinarian stamp and the hygiene and conditions in some slaughterhouses. These problems impact the safety of Albanian meat products for consumers, which are not even allowed to be exported to the EU (AASF, 2019).
4. **Food Labeling and Traceability:** Proper food labeling and traceability are essential for ensuring food safety and authenticity. Albania has faced challenges in enforcing labeling regulations and ensuring that food products are accurately labeled, especially in the case of imported goods. There are a lot of reported cases of packaged foods that are on the verge of expiration, have already expired, or have changed their expiration dates.

5. **Foodborne Illness Outbreaks:** Like many countries, Albania has experienced outbreaks of foodborne illnesses related to the BSE crisis, the avian flu, H1N1 influenza, etc.

Food scandals have major consequences, including health, economic and social. However, there are no data available to measure such consequences in Albania. While food safety is a critical concern, it's notable that the National Food Authority has not publicly disclosed or provided a list of the most problematic food categories in the country. Such lists are essential for consumers to make informed choices and for the government to take appropriate regulatory actions. On the other hand, the Ministry of Health does not possess official data regarding the number of individuals who have fallen ill due to food-related issues and the specific types of illnesses related to food consumption. Such data is crucial for public health monitoring, identifying trends, and implementing targeted interventions to prevent foodborne illnesses.

4. DISCUSSIONS

Food scandals have become a growing concern in Albania, posing significant risks to public health and undermining the reputation of the country's food industry. One of the main causes of food scandals in Albania is the lack of regulations and oversight of the food industry. Gaps in the regulatory framework make it easier for food producers, processors, and distributors to evade compliance with food safety standards.

Another major cause of food scandals in Albania is corruption. The food industry is prone to corruption, with bribes and political influence often used to bypass food safety regulations and standards. In addition to these causes, lack of consumer awareness also plays a role in food scandals in Albania. Consumers often lack information about the sources and quality of food products, making it difficult for them to make informed decisions about what they consume.

To address the issue of food scandals in Albania, there is a need for stricter regulation and enforcement of food safety standards. The government must implement a comprehensive food safety management system that provides a framework for food safety inspections, audits, and enforcement of penalties for violations. Additionally, the government must invest in consumer education programs, to raise awareness about the importance of food safety and help consumers make informed decisions about what they consume.

The food industry must also play its part in preventing food scandals in Albania. Food producers, processors, and distributors must adopt safe and responsible food production and processing practices, and ensure that they meet all food safety regulations and standards. This will not only help to prevent food scandals, but also improve the reputation of the food industry, and boost consumer confidence in the quality and safety of food products in Albania.

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Systemic Dynamics Approach to Public Administration with Emphasis on Local Government, Especially in Regions: The Administrative Perspective.

Vasileios Tamateas¹

Lampros Sdrolias²

Grigorios Giannarakis³

Ioannis Koukoumliakos⁴

¹Corresponding author, University of Thessaly, Dept of Business Administration, ORCID: 0009-0005-6808-2801, vtamateas@uth.gr

²University of Thessaly, Dept of Business Administration, lsdrolias@uth.gr

³University of Western Macedonia, Dept of Business Administration, ggiannarakis@uowm.gr

⁴University of Western Macedonia, Dept of Business Administration, jkukoumliakos@gmail.com

Abstract: This academic paper is part of the ongoing doctoral research.

The purpose of this academic paper is to study the systemic dynamics of public administration with emphasis on elected regions, trying to highlight the nature of this methodology as a means to facilitate policy design and policy analysis processes.

The research subject is the elected regions and their administrative constitution, placing the problem of the administrative operation of their services in the critique of administrative restructuring and at the same time highlighting the necessity of redesigning their procedures.

As far as the research method is concerned, we chose the literature review as an effort in which all the information collected from different sources is summarized and analyzed.

We expect the conclusions of our work to lead us to the position that the re-engineering of procedures in elected regions is not an administrative approach that will be implemented with legal intervention on the part of the executive authority, but on the contrary, modern administrative methods are needed to restructure the administration of services for the maximum contribution to society, citizens and businesses at local government level.

Keywords: Regions, Local Government, Systemic Approach, Systemic Dynamics, Administration Service

1. Intro : A History of Systems or a Systemic Planning Of Evolution and Progress

Systemic Methodology refers to a holistic approach according to which an entity/entity/agent is not independent but is an integral part of a larger whole, which includes other additional elements in interaction and interaction as a single system.

The interaction and interaction of the elements shapes the overall behavior of the system, which, at the same time, affects the behavior of the entity.

According to the principles of the Systemic Approach, the behavior of the system is due to its structure and the interactions between its elements (Kim:1999).

The total system has behavior and properties that cannot be explained by the individual study of individual elements (emergence), i.e. the system is more than its parts (Meadows:2009).

Historically there has been a variety of definitions of Systems Thinking (Arnold & Wade: 2015, Monat & Gannon: 2015) but all they revolve around the concept of system, emergence, interactions, feedback and complexity.

The adoption of Systems Thinking suggests more of a "view" or "interpretation" with which an attempt is made to improve problematic situations. The use of systems thinking to describe situations as systems has led to the creation of a vocabulary as well as techniques and tools (conceptual or technological). In this way, Systems Thinking has three aspects: it is a way of looking at situations (perspective), vocabulary and tools (Kim:1999).

System Dynamics is a methodology of systemic analysis and at the same time a tool for studying the behavior of dynamic systems. As a methodology, it aims :

- to conceive and understand the causal mechanisms that create the dynamic characteristics of a system,

- to the analysis of the existing interaction relationships between them and the synthesis of corresponding schematic typical dynamic feedback systems, which incorporate the researcher's perceptions of the dynamic behavior of the system.

Systems Dynamics was introduced and developed by Jay W. Forrester (Professor at M.I.T.) and is an integrated methodology for the study of complex, nonlinear feedback systems. "The purpose of systemic dynamics is to be the ultimate real tool for improving the functioning of natural, social and economic systems" (Forrester: 1987).

Progress in the field of feedback systems design, the development of simulation techniques and the accumulation of experience in designing formal models of decision-making processes contributed to the development of systemic dynamics and its formulation into an integrated methodology. The foundations of the theory of control and communication on which the techniques for designing feedback systems are based were laid by N. Wiener. The latter, studying various mechanical and electrical systems, concluded that the action produces results: At the same time, the feedback of the system with the information about the deviation of the results from the desired allows the control of the system. In fact, Wiener showed that similar mechanisms for controlling behavior through feedback loops of information apply to biological systems (animals) (Wiener: 1948).

However, the identification of similar mechanisms of feedback and control in complex socio-economic systems was first made by H. Simon (Simon:1952).

2. Systemic Approach as a methodology

It would not be out of place at this point to point out the comprehensive observation of Ramage & Shipp as well as Konstantopoulos, who emphasize that the reference to the systemic view is based on the process of forming the idea that the complexity of the world can be understood in terms of the whole and interactions, rather than in analytical thinking and isolation of parts (Ramage&Shipp:2009, Konstantopoulos: 2008), thus coinciding with the Aristotelian principle that "the whole is greater than the sum of parts".

The path towards answering this question has a twofold effect, on the one hand it will mark the beginning for the constitutive recording of a common epistemology and thus the integration and recognition of the process of redesign in the field of expansion of Management Science, as we have initially pointed out, and secondly, we will have deepened and enriched the systemic view in terms of focusing and creating common unifying principles and the use of a common interdisciplinary language (Nicolescu: 2002) .

However, although the concept of system holds a central place in modern organizational theory (Typas & Katsaros: 2006), since the concept of organization consists of a set of elements or parts that are connected to each other by interaction relations and constitute a whole, which, in turn, can be part of a larger system (Typas & Katsaros: 2006).

2.1. Policy design and policy analysis processes

Public policy refers to the actions, decisions and plans of the government aimed at addressing social problems or meeting public needs. In other words, public policy is the framework within which governments make decisions about the allocation of resources, the distribution of benefits and services, and the implementation of programs and initiatives that affect the public. Public policy encompasses a wide range of issues, including economic development, healthcare, education, social welfare, and national security, among others (Dye:2017).

Public policy is also characterized by its multifaceted nature. It involves a range of actors, including elected officials, bureaucrats, interest groups and citizens, involved in a complex process of decision-making, implementation and evaluation. Policy decisions are often the result of negotiations and compromises between these actors and reflect a wide range of political, economic, social and cultural values and priorities (Jenkins-Smithetal: 2014).

Finally, public policy is characterized by its public nature. Unlike private decisions made by individuals or organizations, public policy decisions are made in the public sphere and are subject to public scrutiny and accountability. This accountability is essential to ensuring that public policy decisions are transparent, fair, and responsive to the needs and interests of all members of society (Stone:2008).

3. Public Administration with emphasis in Local Government, especially elected Regions

The field of administrative science deals with the study of management as a phenomenon and administration as an institution. The administrative phenomenon refers to the activities and practices related to the management and coordination of public and private organizations, while management as an institution refers to the organizational structures and systems that allow the emergence of the administrative phenomenon (Denhardt&Denhardt:2015).

The administrative phenomenon is a broad field of study that includes a series of activities and practices related to the management and coordination of organizations. These activities include planning, organizing, directing, controlling and evaluating organizational activities to achieve specific goals and objectives. The administrative phenomenon can be applied to both public and private organizations and can be studied from a variety of perspectives, including organizational behavior, public policy and strategic management (Robbins & Judge:2019).

In particular, public policy in the context of the operation of the administrative phenomenon focuses on the way in which governments and other public institutions make decisions on public issues and implement these decisions through administrative action. Bardach and Patashnik (2019) provide a framework for understanding the policy-making process and the role of administrations in policy implementation.

3.1 The concept of administrating an organization

A public body is defined as a structure which ensures the possibility of cooperation people and coordination of all their individual activities with the main objective the attainment of specific objectives (Tipas,Katsaros : 2006).

Otherwise, it can be said that the organism is a conscious system coordinated activities or forces of two or more persons, based on communication between them aimed at realizing a specific audience

objective or several specific common objectives (Pavlopoulos:1983) .

The administrative phenomenon is inherent in any systematic organized effort of a group of people aiming to achieve of a specific purpose or the implementation of a certain project (Tipas,Katsaros:2006). The administration it is, therefore, a social phenomenon and appears alongside human societies, while consciously practicing since ancient times.

It is necessary to point out that the conditions which are used in the relevant literature to convey the concept of two administrative phenomena: "Management" and "Administration".

Nevertheless it should be understood that the term management is broader than the term management which in English translates as administration, because the former means a more universal top-down supervisory directorate (strategic planning, definition policy, guidelines, etc.), whereas the term administration means Execute a specific project or apply a policy or complete one command (Theofanidis: 1989).

In summary, management makes the big – strategic decisions, ie determines the general policy – strategy in an organization, either public or private, draws up large business plans and gives orders. On the other hand, the management processes the decisions taken by the management, implements the policy – strategy that it sets and, finally, executes its orders, while at the same time it can take decisions on minor issues that concern the organization.

In the figure below, at the end of this section, the positions held by both management and administration in the hierarchical pyramid of an organization, which is also known as the management pyramid, are distinguished.

It should be mentioned that management is categorized into top management, middle management and lower management, which, however, is more theoretical than practical (Kefis: 2005).

3.2 Applied administrative science in Regions

The new narrative for local government reform must be based on the concept that the country's administrative system is functionally linked to the political, economic and social system, or in other words that it is part of the broader "systemic square" that connects the local government, Self-government and, in general, public administration with politics, economy (business) and society (citizens) (Andrews: 2014).

More specifically, it should be noted that the reform of local government does not It needs vague but, on the contrary, measurable objectives. In addition, it does not is only an internal issue of local authorities, but also a "systemic" issue, under the meaning that politics and economics and society are involved in the process. Besides, it is not enough to stress simply changing the regulatory framework.

However, there is an urgent need to create an operational implementation plan based on a change in the value framework and a change in the paradigm structure of structures and responsibilities.

The "systemic tools" of reform and improvement of local relations self-government with the other three poles of the systemic square, namely the politics, economics, as well as society, are divided into the following subcategories (Garrentt, Sementelli:2012):

- The tools which mainly concern local government relations and Policy.
- The tools which mainly concern local government relations and Economy.
- The tools which mainly concern local government relations and Society.
- Those tools which relate to local relations as a whole self-government, politics, economy and society.

More specifically, the "systemic tools" which mainly concern relationships Local Government and Policy is (Maistros:2009) :

- ✓ Improving the effectiveness of local body bodies and the organization of all operational planning functions, and coordination of the work of local authorities of all levels.
- ✓ The organization of production systems, policies and regulations arrangements, as well as the establishment of a monitoring mechanism, and their application.
- ✓ Establishment of a new Supreme Council of Public Services (SCPS).
- ✓ Establishment of a new body of senior managers.

The "systemic tools" which mainly concern local relations Self-government and economy is (Maistros: 2009) :

- Establishment of a joint consultation body between local authorities and economic institutions and bodies with the aim of enhancing competitiveness, investments and, by extension, sustainable and sustainable development Greek economy.
- Program of active support of the project to improve competitiveness, investments, but also local and regional development within the limits of activity of individual local authorities to strengthen the local and regional economy.
- Project support program to reduce administrative burden and administrative costs and, therefore, to minimize the financial costs of local authorities, as well as to enhance entrepreneurship, as well as for the "multichannel" provision of services of local organizations.
- Strengthening the economic observatory of local authorities to improve and, at the same time, to improve thean economic observatory of local authorities for the improvement and,
- At the same time, for the consolidation of their financial data, with the aim of alleviating the state budget and, at the same time, increasing it their financial independence.
- Creation of a licensing authority for strategic investments in each local authority.
- Improving the regulatory framework providing for institutions cooperation between local authorities and the private sector, as well as creation of programs to support its implementation.

The "systemic tools" which mainly concern local relations self-government and society is (Maistros:2009) :

- ✓ Organization and, at the same time, functional modernization of structures and transparency, accountability and communication functions with citizens and businesses, as well as servicing them.
- ✓ Programme to ensure open access for citizens to public information concerning local organizations and their participation the formulation of policies and regulations that. They concern local government.
- ✓ Programme for rapid digital inclusion of citizens in its processes e-government for their best possible service by local authorities, as well as for their information and participation in events of local government and local community where live.

The "systemic tools" which concern local relations as a whole Self-government, politics, economy and society is (Maistros:2009)

- Program for the support and promotion of innovation in the field of local government.
- Creation of a single point of access to the services of local authorities and Open- Making public information about local organisations available and local government.

- Programme to broaden two-way communication between citizens and the local government and politics, with the main aim of expanding their trust in them, and the implementation of a parallel programme publication of the new reform plan related to local government to the citizens and its consultation with the whole society so that it can actively participate in the final formation
- Creation of a body or authority managing relations between the local authorities, citizens and businesses, with the aim of proper functioning and development of local authorities and local communities.

4. CONCLUSION

In summary, reform engineering, which is to be used in local government, needs, among many others, institutional memory, exemplary models, maturity of socio-economic conditions, a new value framework, strong political will, broader political consensus, diagnosis of problems, study of possible solutions, clear formulation of specific objectives, simple and clear regulatory framework, administrative measures for the implementation of the current regulatory framework, full siting, classification and codification of regulations, administrative measures and administrative actions, executive administration and organizational structure, electronic or digital one-stop shop services to reduce maladministration, corruption and bureaucracy and simplify procedures, decentralization of services and responsibilities within local authorities to better serve citizens.

Distinction between staff assigned to staff – planning/strategic and executive – operational bodies respectively, clear distinction between main and supporting – secondary functions and activities, means-to-end/end ratio, cost-benefit analysis, mutually reinforcing cross-sectoral cooperation and interaction, horizontalisation of operational structures in order to better coordinate actions, adequate human and financial resources, improvement of the organization of structures, as well as the functions of the reformed local organizations, widespread development and use of relatively new and modern technology, scientific and technical support of the whole reform effort, publicity, but also communication of changes both to workers and to society as a whole, use of clear timetables with, at the same time, sufficient time for the implementation of the reform project, as well as, finally, and as long as the most rational administration and management of the reform program with all the means and tools offered by modern administrative science and the new management.

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Establishing Paternity In The Court Through The Prism Of Existing Jurisdictions

Veronica Gisca¹

Anastasia Buga²

¹PhD, associate professor, Academy of Economic Studies of Moldova, gisca.veronica@ase.md, ORCID : 0000-0002-0781-1995

²Undergraduate, Academy of Economic Studies of Moldova, buga.anastasia@ase.md,
ORCID: 0000-0003-3203-6836

Summary: Establishing paternity through the court system is a legal process that plays a crucial role in determining the legal rights and responsibilities of parents and children. This legal action is often necessary when there is uncertainty or dispute about the identity of a child's biological father. Establishing paternity is not only important for the welfare of the child, but also for ensuring that both parents fulfill their obligations and enjoy parental rights. Establishing paternity by the court is a crucial process that ensures the protection of children's rights, guarantees the responsibility of parents and provides clarity about the parentage of the child. It plays a vital role in maintaining the well-being and safety of children and families, while respecting the principles of justice and legal accountability. Court paternity determinations can vary somewhat in different jurisdictions, as family law is subject to local regulations and legal frameworks. However, the fundamental principles and procedures are relatively consistent across many regions. The objective of the given paper is to develop a deep and comprehensive study on all issues related to the stability and analysis of the object as a necessary condition of the stability of paternity and the importance of the court in this process, which will allow raising the level of knowledge in the given field, will contribute to the application . correctness of the legislation in, to the effective resolution of the issues in that matter, of course, the better understanding of the subject by paying special attention by paying special attention to the comparison procedure, because this effective research.

Key words: family law, paternity, provenance, legality, court, comparative study.

INTRODUCTION

Every fifth child is born out of wedlock, statistical data from the last five years show. In this context, the Public Services Agency of the Republic of Moldova draws the attention of parents to the manner and conditions of establishing paternity over the child.

Establishing and contesting paternity are two fundamental aspects of family law. Recently, more and more courts in the country are examining requests in which the father of the child requests in court to contest paternity, or the mother of the minor who most often wants to establish paternity in order to determine the man with whom she conceived a child to participate in the maintenance and educating the little one. Establishing paternity can be done by voluntary recognition of this fact by the father or by court decision. It is important to note that the procedures and requirements for establishing paternity in the Republic of Moldova may change over time, so it is advisable to consult with a legal professional or the relevant government authorities for the most up-to-date information and guidance regarding the given process. Legal assistance may be necessary, particularly in cases involving disputes or complex circumstances that cannot be resolved without the involvement of the courts or that cannot be resolved peacefully.

Article 48 of the Family Code in the Republic of Moldova regulates the establishment of paternity in court, "If the child is born to parents who are not married to each other and in the absence of a joint declaration by the parents or the child's father, paternity is established by the court based on the declaration of one of the parents, of the guardian (guardian) of the child or of the child himself upon reaching the age of majority." (1). According to the legislation, children must be registered in their marital status until they turn one year old. If the parents of the newborn are married, they are automatically entered in the birth certificate. The same happens if the woman gave birth to a child within 300 days of the divorce, even if the ex-spouses are already in other relationships. If the child's parents did not register marriage, only the mother is listed in his birth certificate. She can indicate who the child's father is, but in this case, the child will take over the mother's family name. And when both parents present themselves at the civil status office to complete the first act of the newborn, the father completes the request to establish paternity. DNA tests can be carried out for private purposes or for legal purposes. When requesting a test with legal value, the physical presence of all participants is mandatory, i.e. the alleged father, the child to be investigated, but also the mother, depending on the case. The court cannot compel the alleged father to take the DNA test. According to statistics, the result

of a DNA test is ready within 2-3 days and serves as evidence in the files regarding the establishment or contestation of paternity.

CORE CONTENT – THE PATERNITY PROCESS

According to the legislation, children must be registered in their civil status until they turn one year old. If the newborn's parents are married, they are automatically included in the birth certificate. The same happens if the woman gave birth to a child within 300 days of the divorce, even if the ex-spouses are already in other relationships.

Recognition of paternity is a personal act and cannot be exercised by a third person. Therefore, in the conditions of the impossibility of presentation by one of the parents to the territorial civil status service, respectively, the municipality/village town hall to submit the declaration regarding the establishment of the child's paternity, the declaration of the parents must be authenticated by a notary or, as the case may be, by the consular office/diplomatic mission of the Republic of Moldova accredited abroad.

In the absence of the parents' common agreement regarding the establishment of the paternity of the child, the establishment of paternity can take place through judicial action.

At the same time, the paternity of the person registered in the birth certificate as the father can only be contested in judicial proceedings. Exceptions to the respective norm are the cases when the child is born within marriage (for the child born out of wedlock, the legal presumption of paternity operates, respectively, the mother's husband is presumed to be the child's father), but the mother denies that her husband is the child's father and is against the husband's data being entered in the child's birth certificate. For the situations in question, paternity can be challenged administratively, only at the time of registration of the child's birth, provided that there is also the written consent of the husband. (2)

The process generally includes both voluntary and involuntary methods.

Here is an overview of how paternity is established in Moldova:

1. Voluntary recognition of paternity:

If the biological father is willing to acknowledge paternity, he can do so voluntarily by signing a notarized declaration of acknowledgment. This declaration is usually signed at the Civil Registry Office or at a notary's office. The mother can also sign this acknowledgment if she agrees with the father's claim of paternity. Once the confirmation is signed, it is legally binding and the father's name is included on the child's birth certificate.

2. Determination of paternity ordered by the court:

When there is a paternity dispute or if the biological father refuses to voluntarily acknowledge it, the mother or potential father can file a paternity lawsuit. The court may order DNA testing to determine biological paternity. Testing is usually done at a specialized laboratory. If the test confirms paternity, the court will issue a decision officially establishing the legal relationship between father and child.

3. Presumption of paternity:

In Moldova, there is a presumption of paternity if the child is born to a married couple. In such cases, the husband is presumed to be the father. However, this presumption can be challenged in court if there is evidence to the contrary.

4. Posthumous paternity:

In cases where the alleged father is deceased, paternity can still be established through DNA testing, using samples from relatives (eg, the alleged father's parents or siblings) to determine genetic relationships.

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Unlike in the past when the child out of wedlock was marginalized, today we are trying to change its status to one similar to that of the child in wedlock.

He has the right to call himself the child of a certain person, to bear his name, to benefit from the care, protection, maintenance that he gives him.

Paternity disputes arise when the father is unknown or when the legal father is different from the biological father. In the Republic of Moldova, the Family Code provides for two ways of establishing paternity: recognition and judicial determination. Which means that whenever the father does not recognize his child, the mother or, in her absence, the legal representative, can take him to court, demanding what is rightfully the child's, following the principles that govern this matter: the principle the protection of the child, the establishment of the truth regarding paternity, the equality of rights between the child in marriage and the one outside it.

The request for summons must be entered in the name of the child as the sole holder of the right to the action in establishing paternity. When the child is a minor, it can be introduced by the mother, and in the absence of the mother, by the legal representative. The child's heirs cannot file the action, due to its strictly personal nature. It was considered, however, that, in the hypothesis that the child died during the course of the trial, his heirs can continue the filed action, whether they are testamentary or legal, provided that they are not renouncers or unworthy. It was said that there was an inversion of the character of the action from personal to patrimonial, and this especially since the testamentary heirs, in general, are not related to the deceased, and the interests pursued by them are patrimonial. Instead, the action can be filed both against the father, as long as he is alive, and against his heirs. In relation to the latter, the action retains its personal non-patrimonial character - so it can also be brought against the relinquishing heirs.

If the action can be filed against the heirs of the alleged father, the more it can be continued against them, when the alleged father died during the trial.

The action to establish paternity is held by the child, regardless of whether he is an adult, a minor, adopted with limited effects, full or was the object of an international adoption, there being no reason to reject the action when it is about a child whose paternity natural was not established before the adoption and when the other conditions for starting the action are met.

The action can be filed within one year from the birth of the child. If the child benefited from a legal presumption of paternity provided by art. 53, and later he lost his status as a child from the marriage, the term in which the action can be filed is calculated as follows: from the date of finality of the decision by which the denial of paternity was admitted or the contestation of the recognition of paternity or the decision by which annulled the acknowledgment made by the father.

The cohabitation of the alleged father with the mother or the provision of maintenance by the alleged father, if they started before the fulfillment of the term of one year from the birth of the child, are causes for interrupting the prescription course, which means that the term of one year is calculated from the date of cessation of cohabitation or cessation of maintenance.

OTHER JURISDICTIONS

Establishing paternity can vary widely from one jurisdiction to another, and a comparative analysis can help highlight the differences and commonalities in how this is done. Here's a comparative analysis of paternity in different jurisdictions, using the United States, the United Kingdom, and Germany as examples:

1. USA: (3)

– Voluntary Acknowledgment: In the United States, parents can voluntarily acknowledge paternity by signing a legal document called an "Affidavit of Paternity." This can often be done at the hospital when the baby is born or through a state agency. (6)

– Genetic testing: Genetic testing (DNA testing) may be ordered by a court or requested by either parent to determine paternity. If the alleged father refuses, this can be used as evidence against him.

– Court orders: If there is a paternity dispute, a court can issue a paternity order, usually after DNA testing and court proceedings.

– Child support: Paternity is often established when one parent applies for child support, which may involve legal action to establish paternity. (7)

2. United Kingdom of Great Britain and Northern Ireland: (4)

– Voluntary acknowledgment: In the UK, parents can voluntarily acknowledge paternity by jointly registering the child's birth. Both parents must be present at registration.

– Genetic testing: Genetic testing may be requested, but is not as common as in the United States. It is usually done when there is a paternity dispute.

– Court rulings: If there is a paternity dispute and the parties cannot agree, they can apply to the court for a declaration of paternity.

– Child Support: Paternity is often established in cases where child support is sought (similar to child support).

3. Germany: (5)

– Voluntary recognition: In Germany, paternity can be voluntarily recognized by both parents at the civil status office (Standesamt) upon birth registration.

– Genetic testing: Genetic testing can be requested but is not as widely used as in other countries. It can be ordered by a court in contested paternity cases.

– Court rulings: If there is a paternity dispute, a court may be involved to determine paternity, usually after DNA testing and court proceedings.

– Child support: Paternity is often established when child support is claimed, and the child's paternity must be legally confirmed.

KEY DIFFERENCES:

– Voluntary Acknowledgment: The process for voluntary acknowledgment of paternity differs slightly between these jurisdictions, with variations in when and where it can be done.

– Genetic testing: The prevalence and ease of obtaining genetic testing to establish paternity varies. In the US, it is relatively common, while in the UK and Germany, it is usually used in cases of dispute.

– Child Support: Paternity often becomes an issue when alimony or child support is claimed, but the procedures for calculating and applying child support can also differ between jurisdictions.

The court decision establishing paternity outside of marriage produces effects: from conception, the child is considered the father's. This decision has relative effects until the date it becomes definitive, when it acquires absolute effects (it is objectionable *erga omnes*).

As a result of the establishment of paternity, the child will have the same legal situation vis-à-vis the parent and vis-à-vis his relatives as the child from the marriage, producing important effects regarding the name, residence, inheritance, maintenance obligation, exercise of parental rights.

CONCLUSION

In conclusion, establishing paternity through a court-recognized process is of paramount importance for various reasons that extend far beyond legal formalities. This critical step not only ensures the legal rights and responsibilities of both parents, but also has significant implications for the well-being of the child and society as a whole.

First, establishing paternity provides a clear legal framework for fathers to assert their rights and responsibilities towards their children. This includes visitation rights, custody and the ability to make decisions about the child's upbringing. Without a court-recognized paternity determination, fathers can face significant obstacles in pursuing these rights, which can lead to protracted and emotionally charged legal battles. By formalizing paternity, the courts provide a fair and impartial dispute resolution process, ultimately benefiting all parties involved.

In addition, establishing paternity is critical to the child's financial security. It guarantees access to financial support in the form of child support, ensuring that both parents contribute to the child's upbringing. This financial stability plays a crucial role in the overall quality of a child's life, including access to education, healthcare and basic needs.

Furthermore, establishing paternity has profound emotional and psychological benefits for the child. Knowing both parents and having a secure sense of identity can help improve self-esteem and mental well-being. Children who have a clear understanding of their family background are often better equipped to build strong relationships and face life's challenges.

From a societal perspective, establishing paternity serves as a cornerstone for maintaining social order. It helps reduce the burden on government welfare programs by ensuring that both parents bear their fair share of financial responsibility for their child. This, in turn, promotes personal responsibility and discourages evasion of parental obligations.

In conclusion, the importance of establishing paternity through a court-recognized process cannot be overstated. It is a fundamental step in protecting the rights and well-being of both parents and, most importantly, the child. By providing recognition and legal structure, it promotes stability, emotional security and financial support for children, contributing to the growth and prosperity of society as a whole. Courts play a vital role in ensuring that these processes are fair, equitable and in the best interest of all parties involved, ultimately reaffirming the importance of establishing paternity through legal channels.

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Legal Aspects of The Termination of Parental Rights in The Legislation of The Republic of Moldova

Veronica Gisca ¹

Arina Costin ²

¹PhD, associate professor, Academy of Economic Studies of Moldova, gisca.veronica@ase.md, ORCID : 0000-0002-0781-1995

²Undergraduate, Academy of Economic Studies of Moldova, arina.costin@ase.md, ORCID: 0000-0003-3203-6836

Abstract: Termination of parental rights is an extremely important and delicate legal measure, regulated by the Family Code of the Republic of Moldova. This measure allows the courts to take the decision to deprive a parent of parental rights and responsibilities towards the child. This process takes place in exceptional circumstances, such as neglect or abuse of the child, abandonment or other serious actions that endanger the child's life or development.

The legal procedures associated with the termination of parental rights are rigorous and must always take into account the best interests of the child. The measure has a significant impact on the parent in question, who loses the right to make decisions about the child and is no longer obliged to maintain or have contact with the child.

The main purpose of this legal process is to protect the child and provide a safe and healthy environment for his or her growth and development. Termination of parental rights is taken for the benefit of the child and to prevent any danger or harm to the child.

Accordingly, parental disqualification is an exceptional legal measure taken to protect the best interests of the child in serious situations where the parent is failing to fulfil his or her responsibilities or poses a threat to the child. This measure reflects the priority given to the safety and well-being of the child in the legal system of parental rights.

Keywords: parental termination, parental rights, child, parents, responsibilities.

INTRODUCTION

The termination of parental rights is a highly relevant topic in the context of family law in the Republic of Moldova. The Family Code of the Republic of Moldova contains detailed provisions on the conditions and procedures under which parents may be deprived of their rights over their children. This issue is rooted in the attempt to protect the best interests of the child and to ensure a family environment suitable for the child's development.

In this scholarly article, we aim to analyse in depth the legal provisions on the deprivation of parental rights under the Family Code of the Republic of Moldova. We will explore the reasons and consequences of this process, highlighting the social and legal implications. We will also examine the judicial practice and recent developments regarding the termination of parental rights in the Republic of Moldova in order to better understand the complexity of this issue in contemporary society.

BASIC CONTENT

Termination of parental rights is the way in which a parent, for reasons related to the protection of the minor, is deprived of the prerogatives of parental authority, if he or she endangers the life, health or development of the child by ill-treatment, alcohol or drug abuse, abusive behaviour, serious negligence in the performance of parental duties or serious harm to the best interests of the child.

Thus, by virtue of a court judgment, the parent will no longer have any or all rights in relation to the child if the parent is found to be engaging in conduct that jeopardises the child's welfare.

Disqualification from parental rights is therefore a specific sanction of family law, the effect of which is that the parent in question loses the exercise of parental rights in certain cases expressly provided for by law, i.e. for serious offences against the child. Forfeiture is an exception to the rule that parental authority belongs equally to both parents. However, it does not lead to the loss of parental rights, but only to the loss of the exercise of those rights.

According to Article 67 of the Family Code of the Republic of Moldova, parents may be deprived of their parental rights if:

- a) they evade the exercise of parental obligations, including the payment of maintenance;
- b) refuses to take the child from the maternity ward or from another curative, educational, social welfare or similar institution;
- c) abuse their parental rights;
- d) behaves cruelly towards the child, using physical or psychological violence, or infringes the child's sexual inviolability;
- e) by amoral behaviour, they have a negative influence on the child;
- f) suffers from chronic alcoholism or drug addiction;
- g) have committed premeditated crimes against the life and health of children or their spouses; and
- h) in other cases where the interests of the child so require.

The loss of parental rights occurs if the child's health or physical development is endangered by the way parental rights are exercised, by abusive behaviour or by serious negligence in the performance of parental duties, or if the child's education, teaching or professional training is not carried out taking into account the legislation in force, the court will pronounce the parent's disqualification from parental rights. These penalties, which by law are imposed on parents for failure to perform or improper performance of parental duties, can be classified into two groups:

1. According to the branch of law to which they belong:

- criminal law sanctions,
- penalties under criminal law,
- civil law sanctions,
- and family law penalties respectively.

2. As they occur for failure to fulfil duties:

- with regard to the person of the child,
- with regard to his property.

These sanctions are provided for by the legislation, namely they are the result of failure to fulfil or improper fulfilment of parental duties concerning the child. As regards the patrimonial component of the protection of the minor, when, as administrators of the child's property, the parents, by their illicit act, have caused damage to the minor, they shall be liable to the minor according to the provisions of tort liability Art. 1398 of the Civil Code of the Republic of Moldova, jointly and severally whenever the parents have jointly and severally administered.

In accordance with Art.68 of the Family Code of the Republic of Moldova, it stipulates that the forfeiture of parental rights shall be made only by court order. Other bodies cannot examine this matter. The action on the termination of parental rights can be brought by:

- One of the parents (in the absence of parents - the child's guardian);
- the guardianship authority;
- the public prosecutor.

Persons other than those indicated in Article 68 paragraph 2 of the Family Code are not entitled to apply to the court for the termination of parental rights. As a defendant can be one or both parents. Finding that the action on the disqualification from parental rights is filed at the request of one of the parents, the court is obliged in each case separately to determine the place of the other parent, to raise the issue of bringing him/her to the court proceedings and the possibility of sending the child for upbringing in case of such request.

Grounds for the forfeiture of parental rights

§ 1. Failure to fulfil parental obligations, including the payment of maintenance

As a result of the forfeiture, the parent loses parental rights in respect of the person and property of the minor, as well as parental duties, with the exception of the maintenance obligation towards the minor. In other words, the effect of the termination of parental rights is not to affect the child's rights vis-à-vis his or her parent and, consequently, this sanction does not affect the parent's obligations in relation to these rights. This ground includes actions or inactions that endanger the child's physical and mental health, moral development, provision of living and material conditions, teaching and training. If parents systematically evade paying child maintenance, they are also endangering the child's decent standard of living. In this case it is necessary to bear in mind that if the parent does not pay maintenance for objective reasons, the parental rights cannot be terminated on the basis of this provision.

§ 2. Refusal of the parent to take the child from the maternity ward or other curative, educational, social welfare or similar institution.

Thus, this ground is a very unpleasant one for the child, because the parents refused to take the child home from the maternity home. This often happens when the mother, for reasons unknown to anyone, simply gives up on the child. Once you decide to give life to a child, you must have the desire to have this child and to bear this responsibility until the end, in the sense that you have to raise the child with care until it reaches adulthood. A child's life is not something you can "play" with, on the contrary you have to take care of it. Many young women who give birth abandon their children because they are too young, or because by the time they find out they are pregnant it is too late to have an abortion, and many such reasons for not taking the child out of the maternity ward, but when they get older they realise that what they have done and how they have done it with their own child is very unpleasant. Of course there are some exceptions to this theme. These are cases when the child has a manifest disability and at the request of the parents or with their consent is placed in a curative institution in the system of social welfare bodies for disabled children.

It shall also not be considered a refusal if the parent who placed the child in a state institution for the upbringing and maintenance of the child, on the grounds that the parent himself has no means of support, consents to the child being placed for adoption in accordance with paragraph 1. 4 Article 124 of the Family Code.

§ 3. Cases where the parent abuses parental rights

This includes parents using the rights they have over children to force the child to drink alcohol, beg, use drugs, engage in criminal activity, in some cases parents forbidding children to attend school in order to force the child to work, and the parent may not spend money on the child's education and upbringing but use it for personal needs. In other words, parents often use the given actions, which leads to damage to the physical health and moral development of the child. The danger of abuse of parental rights lies in the fact that the child trusts his parents completely, and they, respectively knowing about this, take advantage of the child's inability to resist, these actions leading to direct violation of children's rights. In the Convention on the Rights of the Child, it is stated in paragraph 2 Art. 3 that the State is obliged to provide the child with the protection and care necessary to ensure his or her well-being, taking into account all the rights and obligations of parents towards their children, and in case of non-compliance by parents, they shall be punished according to the law.

§ 4. Cruel behaviour towards the child, using physical or psychological violence, infringes the child's sexual inviolability

Cruelty can be expressed as the hateful attitude, or the mental and physical violence that some parents apply to their children. Thus, the very word violence means a negative phenomenon which manifests itself through physical action, words, emotional and emotional state, humiliation, with the aim of mistreating or suggesting fear. The number of cases of domestic violence is high and the extent of the phenomenon is not fully known, because victims of violence, women and children, are ashamed or afraid to reveal their experience of abuse. Through psychological violence, the parent instils fear in the child, by means of various threats which would make the child stop resisting, and which lead to the child's compliance with all the instructions imposed by the parents. Physical violence, however, refers to the parent beating the child, hitting the child, inflicting physical pain in various ways, including exploiting the child at work, exceeding the child's physical strength, depriving the child of food and water. Parents believing they have the right of possession over their children allow themselves to inflict violence on them. According to statistics provided by UNICEF Moldova, 42% of parents,

50% of mothers and 33% of fathers believe that "beating is a heaven-sent punishment", reporting the use of physical punishment to "discipline" children. In rural areas, 57% of mothers and 37% of fathers report using physical punishment in the process of educating children. Children in the RM are subjected to violence regardless of age. Thus, 16, 4% of parents beat their children who have not even reached the age of one. The violation of the child's sexual inviolability is a ground for filing a criminal case against the parent, because even if they are the child's parents, they do not have the right to use children for some sexual crimes. The Criminal Code specifies all the components of sexual offences (Art. 171-175), for which parents are punished in case of their commission.

§ 5. Through the parent's amoral behaviour, which negatively influences the child

By amoral behaviour of the parent towards the child is meant indecent behaviour, which would lead to negatively influencing the upbringing and education of the child. By means of this theme the parents violate the norms of coexistence that exist in society, to such an extent that the fact traumatizes the child's psychology or puts him/her in a difficult situation, such as the parents' participation in some criminal activities, prostitution, turning the home into a brothel. These facts lead to the child being brought up, contrary to the legal provisions, and to a negative influence on the child. Because once he grows up in such an environment, he will not set an example in the future in society.

§ 6. If the parent suffers from chronic alcoholism or drug addiction

The term alcoholism refers to a pathological condition caused by excessive alcohol consumption, and drug addiction also refers to a pathological condition, but it consists of a permanent attraction to narcotics. Alcoholism and drug addiction are two diseases which lead to the degradation of people, and their danger lies in the fact that parents are usually not aware of their actions, are aggressive, or even if they are not, they are a danger to their own children because they are deprived of parental care, are often hungry, uncared for, suffer from diseases or are left without supervision, and suffer morally and physically. If parents suffer from alcoholism or drug addiction, they are unable to create a decent environment for raising and educating their children, which is detrimental to the children's health and their subsequent development.

§ 7. A parent who has committed premeditated crimes against the life and health of the children or the spouse

The given basis can be invoked in case there is already a court judgment which found that the parent's premeditated actions were directed to commit crimes against his/her minor children - attempt on the children's life, determination and suicide, intentional harm to bodily integrity or health, leaving the child in danger or contaminating him/her with HIV/AIDS. It is not only criminal acts directed against the child, but also those directed against the child's spouse, i.e. the child's other parent, that traumatise the child both physically and mentally. The parent can be deprived of parental rights both when the crime was committed in the presence of the child and when the child was not present, because the tragedy that occurred in the family has a negative impact on the child in any case, in terms of his education and upbringing in normal living conditions for a child.

§ 8. Other cases where the interests of the child so require

Other cases may be when the child's legitimate rights and interests are violated, but these violations cannot be included in the grounds mentioned above. When examining this case, the court must examine very carefully all the issues that prove the violation of the child's rights, the guilt of the parents and the fact that depriving the parents of their rights is in the child's interest. Unlike the legislation of other countries (Art. 109 Family Code of Romania, Art. 63 Family Code of the Russian Federation, Art. 378 Civil Code of France), by inserting this point in Art. 67 of the Family Code the grounds for deprivation of parental rights are no longer limited by the law and the text is no longer of strict interpretation.

How to terminate parental rights

The court may order the termination of parental rights at the request of the social welfare and child protection authorities. Thus, according to para. (1) of Article 68 of the Family Code, the termination of parental rights can only take place through the courts. Other legal bodies cannot examine this matter. An action for the termination of parental rights may be brought by the child's other parent, the guardianship authority, the child's guardian or the public prosecutor. The termination of parental rights entails, in principle, the loss for one or both parents of all rights concerning the child. A parent may be deprived of parental rights where his or her conduct constitutes a considerable risk to the child or the child's property. In these situations, the state's legal bodies, which are responsible for the protection of the minor, intervene to separate the child from the

abusive parent and, following a court case, the parent may be deprived of parental rights. If both parents have been deprived of their parental rights, a guardianship is opened whereby a guardian is invested with this authority. Depending on the situation, this measure may be provisional or definitive. In the case of a request for the deprivation of parental rights, the following important documents must be submitted, such as: a request for a court order in triplicate, and a report on the child which will include data on the child's personality, physical and mental condition, socio-medical and educational history, the conditions in which the child was born and brought up, and any other data relating to the child's upbringing and education which may contribute to the resolution of the case. Also, even if both parents are deprived of parental rights, the court will allow the parent deprived of parental rights to maintain personal links with the child. Taking into account the best interests of the child as a priority, it may limit the exercise of this right if there are serious reasons that could endanger the child's physical, mental, spiritual, moral or social development.

The application for the termination of parental rights shall be considered only with the mandatory participation of the guardianship authority. The court is obliged to send a copy of the decision on the termination of parental rights to the civil status office within 3 days from the moment when the decision on the termination of parental rights became final. The latter, in its turn, shall enter the relevant entries on the child's birth certificate in accordance with Article 69 of the Law on Civil Status Documents. Also, according to Article 8(3) of the Civil Status Documents Act, parents who have been deprived of their parental rights cannot receive duplicates of the child's birth certificate.

Effects of the termination of parental rights

Disqualification is a protective measure for minor children, but it is also a serious sanction for parents. This measure also has legal effects, which are regulated in Article 69 of the Family Code. The main effect of the forfeiture is that the parent loses his or her parental rights in respect of the child, as well as his or her parental duties, with the exception of the duty to support the child, namely:

1. The right to educate the child. Disqualified parents may have access to their child only with the permission of the guardianship authority. Interviews are granted if the child's upbringing, education, learning or vocational training are not endangered, and are not granted if the parents' contact with the child is likely to cause harm to the child's physical or intellectual development, if it is obvious that the parents are not capable of such contact, if, for some reason, the contact is contrary to the child's interests, or if the child, during the court proceedings, had serious objections to contact with the disqualified parents.
2. The right to defend and represent the child in his/her relations with all natural and legal persons;
3. The right to demand the return of the child from any person who detains him or her without legal grounds;
4. The right to receive the pensions, allowances and other payments due to the child; These will be paid by the persons to whom the child will continue to be attached;
5. The right to receive maintenance from the child of full age who is capable of work;
6. The right to inherit the child's estate in the event of the child's death;
7. The right to give consent to the adoption of the child, or emancipation;
8. The right to receive a pension for loss of maintenance in the event of the death of a child of full age;
9. The right to the benefits provided for by labour law for women who have minor children up to a certain age.

The loss of the above-mentioned rights by the parents occurs only in respect of the children who are indicated in the court's decision on the forfeiture of parental rights. If there are other children in the family or if they are born after the judgment has been handed down, the parents have all the rights and obligations provided for by the legislation in force with regard to these children. Parents deprived of parental rights lose not only rights based on the fact of kinship with the child, but also the possibility of acquiring certain subjective personal family rights, such as the right to be a subsequent guardian or curator (Article 143 of the Family Code), parent-educator (Article 150 of the Family Code). Thus, according to Art. 69 of the Family Code, it is stated that: "The child whose parents (one of them) are deprived of parental rights retains the right of use of the living space and all property rights based on kinship with his parents and natural relatives, including the right to inheritance.

The deprivation of parental rights entails the isolation of the child from his or her parents, with the aim of protecting the child's physical and mental health and ensuring favourable conditions for his or her upbringing

and education. Thus, in practice, maintaining the child's right to use the living space is problematic. Because, taking into account the housing legislation, several situations are possible:

- The family lives in a state apartment - so in this case the parents can be evicted without being offered alternative accommodation,
- The house or apartment is owned by the parent who has not been deprived of parental rights - the parent who has been deprived of parental rights can be evicted without being offered other accommodation,
- The dwelling belongs to the parents with joint ownership in common, or to the parent who has been deprived of parental rights with personal ownership - this parent cannot be evicted because he/she has not been deprived of ownership.

If the child cannot be transferred to the other parent or if both parents are deprived of parental rights, the child is placed at the disposal of the guardianship authority, so that the latter can take the child into care as a child deprived of parental care and choose one of the appropriate forms of education. If the child is deprived of parental care, he or she may be placed under guardianship or curatorship, as the case may be; offered for adoption, placed in a family-type children's home or in a state educational or curative institution.

CONCLUSION

In my opinion, bringing a human being into the world and guiding it from infancy to adulthood is in most cases a process full of difficulties and problems, both for the parent and the child. Most adults accept this challenge with joy and eager biological destiny. The concept of parenthood includes those skills that are necessary to successfully lead the child to maturity. There is some contradiction in this, while parenting advice comes in many forms, from books and magazines to educational courses and personal experiences passed on by well-meaning family members, it is only when you get to have a child that you really learn how to parent. A good parent strives to ensure the safety and physical health of children, as well as their emotional, mental and spiritual development. This may involve almost no direct teaching, much of the guidance parents give their children is taken from their attitudes.

Thus, if a parent reacts calmly with encouragement to failure, the child will learn that failing at some things is part of life, that the important thing is to try harder at the next opportunity. Such a lesson will help the child develop self-confidence. Developing self-confidence, self-esteem, self-awareness in children, awareness of limits and developing a sound reasoning with the help of the parent are also qualities of a good parent. So is encouraging good citizenship behaviour, making children aware of the needs of others, encouraging them to develop a responsible attitude towards society as a whole and towards the environment. Equally important is the delicate process of enabling children to develop their unique personalities and fulfil their potential, whatever their abilities. Supporting children's developing personalities, allowing them to express their individuality and giving meaning to their unique identities is the primary responsibility of the parent. It is unfair and yet almost natural nowadays for some parents to struggle with fate to have children and not be able to, others to make superhuman efforts to battle their sons' illnesses, while others don't give a damn about the poor souls who end up suffering severe trauma. They are children abused, beaten, unjustly abandoned by their parents. There is only one solution for them: forfeiture of parental rights. Unfortunately, the measure does not have the effects that we could rely on. Most of these pseudo-parents thankfully say that they have been relieved of certain obligations, such as bringing them up, educating them, and many others, but it is nevertheless up to them to support their children.

In view of this, I consider the disqualification from parental rights to be a rather mild measure, because there are some parents who do not care at all about their own children, and they should be punished more severely. Once you want to give life to a child, you have to think it through and take on some responsibility for raising it and providing it with the necessary education. However, having no other solution, it is necessary, moral and obligatory for the court to do so in the countless unfortunate cases, to deprive the parents of their parental rights and take the children to children's homes or give them up for adoption, etc.

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Neglect - Specific Form of Child Maltreatment

Veronica Gisca¹

Turcanu Alexandra²

¹PhD, associate professor, Academy of Economic Studies of Moldova, gisca.veronica@ase.md, ORCID : 0000-0002-0781-1995

²Undergraduate, Academy of Economic Studies of Moldova, turcanu.alexandra@ase.md, ORCID: 0000-0003-2881-309X

Abstract: Neglect represents a specific form of child maltreatment and can have serious consequences on their development. It involves the neglect of a child's fundamental needs, such as food, medical care, education, and protection.

The article highlights that neglect can be both physical and emotional. Physical neglect refers to the lack of essential resources like adequate nutrition and shelter. Emotional neglect manifests through the ignoring or rejecting of the child, which can lead to long-term psychological and social issues. It's important to note that neglect can have long-term consequences on a child's health, including developmental disorders, anxiety, and depression. The article's author also emphasizes the importance of early identification and intervention to prevent the negative effects of neglect on children. In the case of parents, the main factors leading to child neglect are poor financial resources, lack of education, substance abuse, physical or mental health issues, domestic violence, and a history of childhood abuse and neglect.

In conclusion, neglect is a severe form of child maltreatment that requires prompt involvement and action to protect the well-being and development of children. Awareness and education on this subject are essential for preventing and effectively addressing this issue.

Keywords: Neglect, child maltreatment, consequences, emotional neglect, intervention, prevention.

INTRODUCTION

*"Child neglect is murder
silent and relentless of the human spirit"*

Parents and the family have the primary role in raising, caring for and educating the child, and society's efforts must be directed towards strengthening and supporting the family in assuming responsibilities towards the child. The child is a being with qualitative characteristics different from those of the adult and legitimately has the right to occupy a privileged position and to enjoy a specific "treatment". The health, development and education of the child must be at the center of the family.

The family is the essential environment that can influence the development and destiny of the child through material security, love and education. The values by which a mature, healthy family operates are the ability to love and work with the goal of generating love for all its members. (Constantin M. p. 132)

Child neglect is a very complex social phenomenon, encountered since ancient times. As a phenomenon denoting violence against children, it was recognized only in 1962, with the initiative of Henry Kempe, a pediatrician from Colorado, USA, who formulated, for doctors all over the world, the concept of "battered child syndrome". From this moment, the problem of the maltreated child became a concern not only for medicine, but also for social workers and lawyers.

Neglect, the passive form of maltreatment, is defined as representing "conditions in which the person responsible for caring for the child, either intentionally or inadvertently, allows the child to experience avoidable suffering and/or fails to provide one or more conditions that they are essential for the development of a person's physical, intellectual and emotional capacities" (Irimescu, 2006, p.82).

From a psychological point of view, maltreatment from the perspective of the child's vulnerability, in the context of parent/caregiver-child relationships, and sociology treats child abuse as a particular incident, which represents a wider spectrum of problems and risk factors of a social nature.

Vulnerability of the child it emerges from psychobehavioral and age-specific peculiarities:

- almost complete lack of physical and mental defense possibilities,
- reduced ability to anticipate some behavioral acts of one's own or of others, in particular, of adults,

- reduced ability to understand the effects, the consequences of one's own actions or those of other people,
- reduced empathic capacity,
- inability to discern between good and bad intentions of other people,
- high level of suggestibility and credulity, sincerity and purity of feelings, thoughts and intentions, etc.

Thus, the child can easily be trained in victimizing actions for him, he can be manipulated, lied to, determined to commit acts, whose negative consequences for him and for others he cannot foresee. Being, sometimes, unable to resist promises, rewards offered especially by adults, which apparently inspire confidence and emotional security, they can easily fall prey to aggressors.

From the perspective of child protection activities, intervention and assistance in the field of child abuse represent real challenges, in the conditions of a system marked in short periods of time by important reformative measures.

The lack of affection or its deficient expression lead to the child's affective deficiency, his emotional and communication needs being neglected. Interpersonal relationships are mainly affected, children presenting feelings of loneliness and abandonment, they don't feel loved, they don't feel at ease among their schoolmates, they don't get along well or argue with the people around them, they prefer solitude the most part of the time. At the same time, these children express feelings of inefficiency - they believe that they will not succeed in life, that they cannot do anything well, etc. and anhedonia - feelings of sadness, inferiority and worry, non-involvement in activities that produce pleasure, crying, sleep disturbances, lack of appetite, somatic symptoms. Psychotherapeutic intervention must include both children,

For children, this includes a series of objectives: stress management, self-esteem improvement, psychoeducation, emotion management, behavior, relationship improvement. The objectives of counseling parents are: development of parenting skills, education, analysis and integration of one's own history of abuse or neglect, emotional expression, establishing clear roles and limits in the family, improving relationships, balancing the educational model.

LAW No. 140 of 14-06-2013, approved by the Parliament of the Republic of Moldova, regarding the special protection of children at risk and children separated from their parents, as well as the Romanian legislation, child neglect means "the voluntary or involuntary omission, of a person who has the responsibility of raising, caring or educating the child to take any measure subordinate to this responsibility, a fact that endangers the life, physical, mental, spiritual, moral or social development, bodily integrity, physical or mental health of the child" (Law no. 272/2004, art. 89).

Neglect can be general, when the child is not given adequate care in terms of food, clothing, housing, medical care and supervision, there is a risk of chronicity and episodic, less serious, affects only one of the previously mentioned elements and ends with the disappearance of risk factors.

Child neglect is a category that often raises the question of the opportunity of an intervention to support the child. Neglect brings special problems to the attention of professionals because cases rarely reach the level of discussions in the Child Protection Commission; they are often discontinued soon after the case is reported. Although families who neglect their children can face serious marital and other problems, social services also tend to neglect providing help.

The category of neglected children includes:

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- children abandoned by their parents or the person who should take care of their upbringing and care,
 - the children who were on the street as a result of bad treatment from the family,
 - children who are sent to beg,
 - children victims of family poverty,
 - children from families with high alcohol consumption.

Child neglect can take several forms:

- clothing negligence;
- home neglect;
- medical negligence;
- neglect in education
- regular non-attendance of an appropriate form of education, which can lead to educational and cultural deprivation;
- affective (emotional) neglect
- the lack of emotional support needed by the child for harmonious and healthy growth;
- abandonment of the child – situation in which the child is actually abandoned, i.e. the natural representatives, for one reason or another, refused or temporarily and completely lost the right to care for him. (Constantin, 2008, p.127)

Abandonment of the child by his parents can be temporary or permanent.

The most often incriminated is the mother's attitude, as a result of temporary or chronic mental disorders (Neurosis, depression, lactation disorders, emotional immaturity, schizophrenia, etc.) she may fail to ensure the conditions for growth appropriate to the needs of the child's age. Neglect of the child by the adult in whose care he is may be due to some reactions to stressful factors in the psychosocial environment. (Roth-Szamoskozi, 1999, pp. 89-90)

In the case of mothers, such an attitude could be due to multiple factors: the mother's loneliness due to her husband leaving the family or his disinterest, the mother's psychological unpreparedness for the duties of a mother, often due to being too young or due to personality disorders, overwhelming the mother with professional obligations, either as a result of professional ambitions or because of the family's material passion, the lack of support offered to the mother by the social network. In the case of a parent with several children, the low affection towards a particular one can be in relation to certain characteristics of the child: the presence of a handicap, certain physical and mental characteristics, which are often put in the foreground by the parent by comparison with the features of the sister or brother. In families with such parental attitudes, the child with special needs presents the greatest risk of being neglected. (Constantin, 2008, p.127)

Although the consequences of neglect are often serious due to their chronic nature, the true spread of the phenomenon among the population, outside of reported cases, is little known. Neglect in the form of the parent's serious disinterest in the child, going as far as maintaining concern for him, is an extreme form, which obviously falls under the maltreatment aspect.

Many neglected children take on some kind of adult role at a young age to compensate for what their parents did not provide them. They have to take care of themselves and often their own parents. It happens that this child is praised by adults for his precautions and mature behavior without anyone noticing that he is deprived of his childhood. It is perhaps the most important damage that may not be noticed until much later.

Emotionally, the picture of the consequences of neglect can be extremely different. The neglected child is marked by an attitude of indifference or shyness and the inability to organize his activity freely. He is not curious, has attention disorders, a low or, on the contrary, too high a threshold for tolerance of frustrations, easily somatizes, is not willing to make cognitive effort, has no level of long-term aspirations (Constantin, 2004, p.130)

The negative consequences of neglect on child development are not inevitable. Factors have been identified that either diminish or worsen the effects of child neglect. The stability of the family environment is a positive factor, diminishing the negative effects of abuse, while multiple placements, daily stress and parental depression contribute to aggravating the consequences of neglect, acting negatively on development. (Miftode, 2002 p.180)

Nowadays, there is an increased concern about abused and neglected children, often in their own homes and by their own parents, who naturally have to ensure their protection and safety.

Exploitation of children:

- The sexual exploitation of children is a practice through which a person, usually an adult, obtains sexual gratification, financial gain or advancement, abusing/exploiting a child's sexuality, violating their rights to dignity, equality, autonomy and well-being physical and mental; examples: prostitution, sex tourism, marriage trade (including by mail), pornography, striptease. Child prostitution and child pornography are defined by the Optional Protocol to the UN Convention on the Rights of the Child, regarding the sale of children, child prostitution and child pornography, adopted by the UN General Assembly on September 6, 2000 (art. 2 letters b and c) ;

- Exploitation of the child through labor corresponds to the definition of the worst forms of child labor in the Convention of the International Labor Organization (ILO) no. 182/1999 regarding the prohibition of the worst forms of child labor and the immediate action to eliminate them (art. 3) , as well as in the provisions of the ILO Convention no. 138 regarding the minimum employment age.

Changing the mentality towards the problem of child abuse and neglect can only be achieved through sustained education and information of social actors regarding the psychological, medical and social dimensions and consequences of the phenomena.

Placing the child at the center of a society's concerns must or should constitute a priority of all factors and actors involved and responsible for its protection. If we try to understand the child as a person who needs love, respect, support, recognition, only then will we be able to talk about real respect for his interests and rights and above all about ensuring adequate protection according to the main needs of the child.

The abuse and neglect of children continue to be two sensitive topics of society, on which the attention and efforts of the authorities, but also those of the relevant actors from the non-governmental environment, will continue to be directed with the same concern. The need to harmonize this common effort must remain a priority, considering the serious long-term effects that acts of violence perpetrated on a child can have on his future development and his behavior as an adult, in the overall rules of social coexistence .

Sometimes neglect can have much more serious consequences than physical abuse.

CONCLUSION

We conclude that the attachment of parents to children does not manifest itself in the same way in all types of families. The dependence of the mother's and father's behavior towards their children, on the customs existing in various communities, is attested by a series of ethnological data, which confirms the fact that the material tendency, that is, the mother's attachment to children, although very widespread among people, is not universal, being determined by the customs of the community.

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The Role of Importance of Changes in Legal Regulation for Blue Mussel Production in the Baltic Sea

Zaiga Ozoliņa¹

Biruta Sloka²

¹ University of Latvia, zaigai@inbox.lv, ORCID: 0000-0001-5841-1265

² University of Latvia, Biruta.Sloka@lu.lv, ORCID: 0000-0003-2129-053X

Abstract: Researchers in various countries have performed many scientific investigations on the best possible production of blue mussels to be used for food, for animal feed and for sea water cleaning.

It is becoming more and more important to realise green economy aspects, including sea water cleaning. The Aim of this research is to develop reasonable suggestions for changes in the legislation regulating blue mussel production in the Baltic Sea.

Scientific findings from mussel farming world-wide as a basic material are used for this research. It lays out the possible developments of mussel farming within the legal framework and the analysis of expert survey, it views analysis related to the aspects of the changes for legal regulation regulating blue mussel production in the Baltic Sea.

Experts were asked to evaluate several aspects on legal enactments in evaluation scale in 1-10, where 1- nothing needs to be changed; 10 – significant changes are required: on updating of the licensing procedure; regularly upgrading of the development strategy of the sector; updating of the terminology; updating of the legislation in the marine aquaculture sector; updating of the legislation of the environmental law.

Survey results indicated that several aspects of the changes in legislation need to be seriously considered and realised as regards blue mussel production in the Baltic Sea. The results did not show statistically significant difference by expert's gender, by expert's age group, and by expert's occupation. The experts, who has obtained doctoral degree, evaluated several aspects of the legislation as a higher parameter than experts who has obtained bachelor degree. Fishermen evaluated licensing aspect parameters higher than other aspects regarding legislation.

Keywords: Blue mussels production; legislative documents; sea water cleaning.

1. INTRODUCTION

In the Baltic Sea region marine aquaculture faces development issues, and mussel farming is at its initial phase in the Baltic Sea Region, therefore it has to tackle several aspects. Regulation and legal acts are one of the influencing the development of the sector.

Fishery industry is regulated with special permit (licence), and experts in various countries have admitted that permits restrict industry development in countries concerned, however, legal regulation might have positive or negative influence on the development of the industry, therefore experts around the Baltic Sea were questioned as regards the necessity to change regulation for blue mussel development in the Baltic, considering that the field in Baltic Sea Region is new.

Blue mussel, regardless the small size grows in the Baltic Sea. Blue mussel can be used as food, animal feed and for sea water cleaning, thus becoming more important in realising green economy aspects.

Requirements of marine aquaculture regulation are complicated and might negatively influence the development of the sector.

The blue mussel farming is a subject to regulatory requirements, being a complex matters, and mussel farming often is considered to be treated similarly to other marine aquaculture, thus imposing similar requirements to fish aquaculture farming or aquacultures alike, therefore and explanatory initiatives take place in explaining and clarifying the particularities of the mussel farming and address legal issues regarding various aspects of mussel farming and harvesting and its sustainability in the Baltic Sea.

2. THEORETICAL FINDINGS

Marine ecosystem provides multiple economic and cultural benefits to people, such as food, raw materials, leisure and cultural identity (Beaumont et al., 2007; Lique et al., 2013; Müller et al., 2020; Ruskule et al., 2023). Marine ecosystem is very important not only for society but also for environment, therefore the

development should be linked with regulations and requirements. Marine issues are regulated by the European Union and referred to in Europe's Blue Economy (Winder & Heron, 2010).

Responsive actions to comply with environmental regulations and agreement requirements is a necessary tool to monitoring (Gibson et al., 2018), and by involving stakeholders it is possible to achieve better results. It is important to establish a regulatory process that clearly identifies the location of aquaculture site where aquacultural facilities can be located, and how to instigate a strategy for the sustainable development of aquaculture for the regions mentioned (Sanchez-Jerez et al., 2016), the effects of aquaculture on coastal and inland resources must be clearly determined to implement policies and regulatory frameworks to control its impact (Yucel-Gier et al., 2019).

In Norway the access to new "green" licences in aquaculture field faced some challenges (Osmundsen et al., 2022). Licencing procedures might be very complicated, which might restrict industry development. In 2010 Ahsan and Roth admitted that in Denmark mussel farmers need predicable regulation and any changes should improve conditions for mussel farmers. The farmers are ready to be involved in politics and deal with policy makers and politicians, therefore they should participate in the development of legislative framework. In 2018 Renwick analysed regulatory challenges in aquaculture and indicated that dysfunctional licensing arrangements restrict the development of the oyster industry. Canadian government policy faced constraint potential legitimation issues regarding shellfish aquaculture policy (Howlett & Rayner, 2004). Licensing and policy issues are indicated as important aspect to develop blue mussel farming in the Baltic Sea Region, therefore they are analysed in a research paper.

Accessing resources is increasingly problematic, because of fish stock depletion, local water pollution, therefore there is a necessity for further research, besides sustainable mussel farming is not compatible with illegal exploitation of resources (Caroppo et al., 2012) and should include sustainable development principles (Vasconcelos et al., 2022). The Implementation of legislation is challenging as it relies on stakeholders' cooperation, the development of the policy instruments and reaching mutual agreements (Hulme et al., 2008; Williams and Grosholz, 2008). Countries should adopt their own laws and regulations that address marine pollution (Vince & Hardesty, 2018), but experience of other countries will help to avoid previous pitfalls.

The role of consumer behaviour is very important, but responsibility for solving the problem should be shared and not be borne by one group only, according to the interviewed stakeholders (Frantzi et al., 2021).

A detailed analysis of legislation regulating blue mussel in the Baltic Sea was provided by Lancmane, and her colleagues in 2013. Considering that mussel farming is in the beginning phase, the experts were invited to answer to several questions as regards legal regulation changes for blue mussel farming.

3. EMPIRICAL RESEARCH RESULTS

Expert survey was prepared and organised to identify necessity of changes in legal acts to develop marine aquaculture in Baltic Sea Region (Denmark, Estonia, Finland, Germany, Latvia, Sweden). Experts were selected by their working experience and were invited to answer questions to what an extent are the legal acts necessary to develop marine aquaculture in Baltic Sea Region. For analyzed aspects the evaluation (used scale 1 – 10, where 1 – nothing needs to be changed; 10 – significant changes are required) was used. Experts could indicate if they had no opinion on respective analyzed aspect – such responses constituted two to three percent and they were not included in this analysis.

Table 1: Main statistical indicators of evaluation by experts to what an extent are the legal acts necessary to develop marine aquaculture in Baltic Sea Region

Develop marine aquaculture in Baltic Sea Region						
		Updating of the licensing procedure	Regularly upgrading of the development strategy of the sector	Updating of the terminology	Updating of the legislation in the marine aquaculture sector	Updating of the legislation of the environmental law
N	Valid	44	44	44	44	44
	Missing	0	0	0	0	0
	Mean	7,39	7,43	6,00	7,39	7,14
	Std. Error of	0.412	0.367	0.472	0.392	0.396

Mean					
Median	8	8	7	8	7
Mode	10	10	10	10	10
Std. Deviation	2,730	2,434	3,133	2,599	2,629
Variance	7,452	5,925	9,814	6,754	6,911
Range	9	9	9	9	9
Minimum	1	1	1	1	1
Maximum	10	10	10	10	10

Source: Zaiga Ozoliņa conducted survey, evaluation scale 1 – 10, where 1- nothing needs to be changed; 10 – significant changes are required, n = 44.

The results indicated that experts evaluated regularly upgrading of the development strategy of the sector with arithmetic mean 7,43, mode 10, median 8; experts evaluated two aspects such as updating of the legislation in the marine aquaculture sector and updating of the licensing procedure with arithmetic mean 7.39, mode 10, median 8. Aspects regards updated terminology obtained the lowest assessment by experts, arithmetic mean 6, mode 10, median 7.

The Baltic Sea countries vary in their specific regulation requirements for marine aquaculture and blue mussel farming and fishery field; however, some aspects have been indicated as similar. The next table shows the difference in opinion about legislation in various countries by various experts.

Table 2: Results of analysis of variance (ANOVA) on expert assessment to what an extent the legal acts changes are needed to develop marine aquaculture in Baltic Sea Region – the Baltic Sea Region countries expert survey results by expert's country

		Sum of Squares	df	Mean Square	F	Sig.
Updating of the licensing procedure	Between Groups	67,558	3	22,519	3,562	0,022
	Within Groups	252,874	40	6,322		
	Total	320,432	43			
Regularly upgrading of the development strategy of the sector	Between Groups	29,506	3	9,835	1,746	0,173
	Within Groups	225,289	40	5,632		
	Total	254,795	43			
Updating of the terminology	Between Groups	20,205	3	6,735	0,67	0,575
	Within Groups	401,795	40	10,045		
	Total	422	43			
Updating of the legislation of the environmental law	Between Groups	52,447	3	17,482	2,938	0,045
	Within Groups	237,985	40	5,95		
	Total	290,432	43			
Updating of the legislation of the environmental law	Between Groups	45,463	3	15,154	2,408	0,081
	Within Groups	251,719	40	6,293		
	Total	297,182	43			

Source: Zaiga Ozoliņa conducted survey, evaluation scale 1 – 10, where 1- nothing needs to be changed; 10 – significant changes are required, n = 43.

The results have showed statistical difference by expert' country regard updating of the licensing procedure (sig. 0,22) and updating of the legislation of the environmental law (0,045).

Experts from Germany admitted that updating of licencing procedure required significant changes. Experts from Germany, Latvia and Estonia mostly admitted updating of the legislation of the environmental law required significant changes.

The expert results indicated that there is no statistically significant difference regard updating of the legal terminology in the country concerned.

Table 3: Results of analysis of variance (ANOVA) on expert assessment to what an extent the legal acts changes are needed to develop marine aquaculture in Baltic Sea Region – the Baltic Sea Region countries expert survey results by expert's gender

		Sum of Squares	df	Mean Square	F	Sig.
Updating of the licensing procedure	Between Groups	0,018	1	0,018	0,002	0,962
	Within Groups	320,414	42	7,629		
	Total	320,432	43			
Regularly upgrading of the development strategy of the sector	Between Groups	0,011	1	0,011	0,002	0,966
	Within Groups	254,784	42	6,066		
	Total	254,795	43			
Updating of the terminology	Between Groups	6,135	1	6,135	0,620	0,436
	Within Groups	415,865	42	9,902		
	Total	422,000	43			
Updating of the legislation of the environmental law	Between Groups	2,828	1	2,828	0,413	0,524
	Within Groups	287,603	42	6,848		
	Total	290,432	43			
Updating of the legislation of the environmental law	Between Groups	1,299	1	1,299	0,184	0,670
	Within Groups	295,882	42	7,045		
	Total	297,182	43			

Source: Zaiga Ozoliņa conducted survey, evaluation scale 1 – 10, where 1- nothing needs to be changed; 10 – significant changes are required, n = 43.

The results have not showed statistical difference by expert' gender, thus approving that gender characteristic attitudes have not influenced the obtained results.

Table 4: Results of analysis of variance (ANOVA) on expert assessment to what an extent the legal acts changes are needed to develop marine aquaculture in Baltic Sea Region – the Baltic Sea Region countries expert survey results by expert's occupation

		Sum of Squares	df	Mean Square	F	Sig.
Updating of the licensing procedure	Between Groups	22,150	3	7,383	0,989	0,408
	Within Groups	291,292	39	7,469		
	Total	313,442	42			
Regularly upgrading of the development strategy of the sector	Between Groups	14,305	3	4,768	0,796	0,504
	Within Groups	233,741	39	5,993		
	Total	248,047	42			
Updating of the terminology	Between Groups	13,497	3	4,499	0,447	0,720
	Within Groups	392,131	39	10,055		
	Total	405,628	42			
Updating of the legislation of the environmental law	Between Groups	19,473	3	6,491	0,959	0,422
	Within Groups	263,969	39	6,768		
	Total	283,442	42			
Updating of the legislation of the environmental law	Between Groups	16,557	3	5,519	0,791	0,506
	Within Groups	272,233	39	6,980		
	Total	288,791	42			

Source: Zaiga Ozoliņa conducted survey, evaluation scale 1 – 10, where 1- nothing needs to be changed; 10 – significant changes are required, n = 43.

The results have not shown statistical differences, despite the expertise – representatives or regional government, scientists, representatives of public administration and fishermen.

The unified view of legislative changes shows that different stakeholders' groups share a common view that can help to develop the blue mussel farming sector faster. The common position of the various parties shows that there is a common understanding on both sides, so that the interpretative measures taken or the understanding of the importance of the marine aquaculture should lead to better results.

Differences in views (scientists, regional government and fishermen) often limit the scope for development of the area, and this similar viewpoint should be taken into account, and none of parties concerned are due to

transfer their responsibility to the other party.

Fishermen have evaluated licensing aspect parameters higher than other aspects regarding legislation, thus indicating that licencing aspect requires some changes in the Baltic Sea Region.

Table 5: Results of analysis of variance (ANOVA) on expert assessment to what an extent the legal acts changes are needed to develop marine aquaculture in Baltic Sea Region – the Baltic Sea Region countries expert survey results by expert's age

		Sum of Squares	df	Mean Square	F	Sig.
Updating of the licensing procedure	Between Groups	1,198	4	0,300	0,037	0,997
	Within Groups	319,233	39	8,185		
	Total	320,432	43			
Regularly upgrading of the development strategy of the sector	Between Groups	4,412	4	1,103	,172	0,952
	Within Groups	250,383	39	6,420		
	Total	254,795	43			
Updating of the terminology	Between Groups	21,762	4	5,441	0,530	0,714
	Within Groups	400,237	39	10,263		
	Total	422,000	43			
Updating of the legislation of the environmental law	Between Groups	4,461	4	1,115	0,152	0,961
	Within Groups	285,971	39	7,333		
	Total	290,432	43			
Updating of the legislation of the environmental law	Between Groups	30,348	4	7,587	1,109	0,366
	Within Groups	266,833	39	6,842		
	Total	297,182	43			

Source: Zaiga Ozoliņa conducted survey, evaluation scale 1 – 10, where 1- nothing needs to be changed; 10 – significant changes are required, n = 43.

The results have not showed statistical difference by expert' age. It might indicate that experts viewpoint is based on their experience and they have common viewpoint despite the age of experts.

Table 6: Results of statistical indicators) on expert assessment to what an extent the legal acts changes are needed to develop marine aquaculture in Baltic Sea Region – the Baltic Sea Region countries expert survey results by expert's the highest education level

Highest education level		Updating of the licensing procedure	Regularly upgrading of the development strategy of the sector	Updating of the terminology	Updating of the legislation in the marine aquaculture sector	Updating of the legislation of the environmental law
Lower education level than bachelor's degree, bachelor's degree or equivalent level	Mean	6,86	6,86	6,00	6,29	6,86
	N	7	7	7	7	7
	Std. Deviation	3,338	2,911	3,606	3,352	3,078
Master's degree or equivalent level	Mean	7,24	7,20	6,08	7,40	7,16
	N	25	25	25	25	25
	Std. Deviation	2,666	2,466	2,871	2,550	2,593
Doctoral degree or equivalent level	Mean	8,00	8,25	5,83	8,00	7,25
	N	12	12	12	12	12
	Std. Deviation	2,629	2,050	3,639	2,216	2,667
Total	Mean	7,39	7,43	6,00	7,39	7,14
	N	44	44	44	44	44
	Std. Deviation	2,730	2,434	3,133	2,599	2,629

Source: Zaiga Ozoliņa conducted survey, evaluation scale 1 – 10, where 1- nothing needs to be changed; 10 – significant changes are required, n = 44.

The results have showed that experts who have obtained lower education level or bachelor' degree evaluated the updating of licensing procedure with arithmetical mean 6,86, the regularly upgrading of the development strategy of the sector with arithmetical mean 6,86, the updating of the legislation in the marine aquaculture sector with arithmetical mean 6,29, and the updating of legislation of the environmental law with arithmetical mean 6,86, while those having master's degree or doctoral degree the necessity of changes in the regulation indicated with a higher arithmetical mean , in comparison to those who has obtained bachelor' degree or have lower education level than bachelor' degree.

4. CONCLUSION

The experts indicated the necessity to regularly upgrade the development strategy of the sector. Experts from Germany admitted that updating of licencing procedure required significant changes. Experts from Germany, Sweden and Estonia mostly admitted updating of the legislation of the environmental law required significant changes.

The expert results indicated that there is no statistically significant difference regarding the updating of the legal terminology by the country experts concerned.

Experts who obtained doctoral degree indicated necessity of regulation changes higher that those who obtained bachelor' degree or have lower education level than bachelor' degree except regard updating of the terminology.

The unified view of legislative changes shows that different stakeholders' groups share a common view that can help to develop the blue mussel farming sector faster. The common position of the various parties shows that there is a common understanding on both sides, so that the interpretative measures taken or the understanding of the importance of the marine aquaculture should lead to better results.

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Türkiye’de Çevre Vergileri ile Kişi Başına Gelir İlişkisine Yönelik VAR Analizi

Öğretim Görevlisi Arzu ERDOĞAN¹

¹ Trakya Üniversitesi, Havsa MYO. Finans, Bankacılık ve Sigortacılık Bölümü, Maliye Programı,
arzuerdogan@trakya.edu.tr. ORCID: 0000 – 0001 – 7610 – 5106

Özet: Günümüzde gelecek nesillere daha yaşanılabilir bir dünya bırakmak tüm dünya ülkelerinin ortak fikri haline gelmiştir. Bugünkü şartlarda bireylerin sınırsız ihtiyaçlarının karşılanması amacıyla üretim safhasında doğanın bilinçsiz bir şekilde kullanılması çevreyi korumanın önemini giderek daha da artırmıştır. Özellikle sanayileşme ile ortaya çıkan olumsuzlukları azaltmak ve önlemek için çevre ile ilgili toplumu daha duyarlı hale getirecek kanunlar, politikalar ve ülkeler arası anlaşmalar gerçekleştirilmektedir. Politika uygulayıcılar bu hedeflere ulaşabilmek amacıyla çevre vergilerini araç olarak kullanmaktadır.

Çevre vergileri ile ekonomik büyüme arasındaki ilişkinin yönünü ve büyüklüğünü ölçmek amacı taşıyan bu çalışmada Türkiye için 1994 – 2021 yılları arası veriler kullanılmaktadır. Çalışmada söz konusu değişkenler arasındaki ilişkiyi incelemeye yönelik VAR modeli ve VAR Granger nedensellik testiyle analiz edilmektedir. Çalışmada elde edilen sonuçlara göre VAR modelinin istikrarlılık koşulu geçerlidir. Ayrıca kişi başına gelirdeki değişimin kaynağını büyük ölçüde çevre vergileri olduğu anlaşılmıştır. Son olarak da çevre vergileri ve kişi başına gelir değişkenlerinin her iki yönlü nedensellik testlerinin istatistiksel açıdan anlamlı olduğu tespit edilmiştir.

Anahtar Kelimeler: Çevre Vergileri, Kişi Başına Gelir, VAR Modeli

Var Analysis on The Relationship Between Environmental Taxes and Per Capita Income in Turkey

Abstract: Today, leaving a more livable world to future generations has become a common idea of all countries of the world. In today's conditions, the unconscious use of nature in the production phase in order to meet the unlimited needs of individuals has increased the importance of environmental protection. Laws, policies and agreements between countries are being implemented to make the society more sensitive to the environment, especially in order to reduce and prevent the negativities arising from industrialization. Policy makers use environmental taxes as a tool to achieve these objectives.

This study, which aims to measure the direction and magnitude of the relationship between environmental taxes and economic growth, uses data for Turkey between 1994 and 2021. The VAR model and VAR Granger causality test are used to analyze the relationship between these variables. According to the results obtained in the study, the stability condition of the VAR model is valid. In addition, it is understood that the source of the change in per capita income is largely environmental taxes. Finally, it is found that both directional causality tests of environmental taxes and per capita income variables are statistically significant.

Key Words: Environmental Taxes, Per Capita Income, VAR Model

1.GİRİŞ

Günümüzün önemli konulardan biri de çevresel sorunlar ve nedenleri aynı zamanda olumsuzlukların çözümüdür. Çevresel sorunların varlığı, sanayileşme ile birlikte sınırlı kaynakların ölçsüz kullanımı sonucunda oluşmaya başlamıştır. Gerçekleşen sanayileşme ve teknolojik ilerleme bireylerin refahını artırmada önemli bir nokta olmasına rağmen doğanın yani çevrenin olumsuz faktörlerden etkilenmesine de yol açmıştır. Çevresel sorunlar ekonomik, kültürel ve sosyal gibi alanlarda da olumsuzlukların meydana gelmesine sebep olmuştur. Özellikle hızlı nüfus artışıyla beraber artan ihtiyaçların karşılanması amacıyla üretim için kaynak kullanımının artmasıyla sadece bölgesel ve ulusal değil sorun uluslararası boyut kazanmıştır. Günümüzde de sıklıkla küresel ısınma, iklim değişikliği, biyolojik çeşitliliğin azalması ve çevre kirliliği gibi terimlerin kullanır hale gelmesi sorunun çözümü için harekete geçilmesi gerektiğinin göstergesi olmuştur. Çevre kirliliği neticesinde meydana gelen dışsalılıkların çözümü için tek bir ülkenin değil uluslararası iş birliği, ülkeler arasında yapılan anlaşma ve politikalarla önlemlerin alınması gerekmektedir. Yaşanan çevresel sorunların çözümünde ve hedeflenen kaliteli çevrenin oluşmasında vergiler ülkeler için önemli bir araç olarak kullanılmaktadır.

Çevreyi doğrudan ya da dolaylı olarak olumsuz etkileyen faaliyetlerin azaltılmasında ve önlenmesinde kullanılan yöntemlerden bir de vergilerdir. Çevre politikalarında vergilerin kullanılmasındaki amaç sürdürülebilir bir çevrenin oluşmasında kaynak tahsisinde etkinliğin sağlanmasıdır (Akkaya ve Bakkal, 2005: 3). Bazı iktisadi faaliyetler dışsal maliyetlerin oluşumuna neden oluyorsa tam rekabet koşullarında bile kaynak

tahsisi gerçekleşmeyecektir. Böyle bir durumda kamusal müdahaleye gerek olacaktır. Çünkü dışsal maliyetlerin içselleştirilmesiyle piyasa mekanizması etkinliğini sağlamış olacaktır (Bedir ve Güneş, 2016: 10). Negatif dışsallıkların içselleştirilmesi amacıyla çevresel vergilerin ülkelerin vergi sisteminde yer almaktadır. Literatürde vergilerin, çevre politikalarında kullanılmasında büyümeye ya da kişi başına gelir ile nasıl bir ilişkide olduğu çalışmalarla incelenmiştir. Amaç çevre kirliliğinde oluşan olumsuzlukları gidermek olsa da çevre vergileri firmaların rekabet gücünü azalttığı için ekonomik yönden olumsuzluklar oluşmaktadır. Tam tersi çevre kirliliğinin azalması insan yaşam kalitesinin artmasına neden olacağı için ekonomik yönden olumlu etkileyeceği ifade edilmektedir. Yapılan çalışmalarda iki değişken arasındaki ilişkinin farklı açılardan sonuç verdiğini göstermektedir. Bunlardan ilki Morley (2010)'in yapmış olduğu çalışma çevre vergilerinin ekonomik büyüme üzerinde negatif bir etkisi olduğu sonucuna ulaşmıştır. İkinci çalışmada Aloï ve Tournemaine (2011) iki değişken arasında pozitif ilişki olduğu yönünde olmuştur (Bekmez ve Nakipoğlu, 2012: 649).

Bu çalışmada öncelikli olarak çevre vergileri ve ekonomik büyüme arasındaki ilişkiye yönelik literatür hakkında bilgi verilmektedir. Sonrasında analiz kısmına geçilip ilk olarak veri seti açıklığa kavuşturulmaktadır. Ardından çalışmada yöntem olarak seçilen VAR modeli ve nedensellik analizi uygulanmaktadır. Söz konusu VAR modeli içerisinde birim çember, etki-tepki fonksiyonu ve varyans ayrıştırması testleri uygulanmaktadır. Çalışmada kişi başına düşen milli gelir artışı ekonomik büyümeyi temsilen yer almaktadır. Literatürde genel anlamda toplam milli gelirdeki artış ekonomik büyüme verisi olarak kullanılmıştır. Çalışma bu yönüyle ve VAR modeli analizinin kısıtlı şekilde kullanılmış olmasıyla literatürdeki diğer çalışmalardan ayrılmaktadır. Aşağıda yer alan tablo 1'de çevre vergileri ile ekonomik büyüme arasındaki ilişkinin incelendiği Türkiye'ye yönelik ve çeşitli ülke gruplarına yönelik olarak yapılmış olan ampirik çalışmalar yer almaktadır.

Tablo 1: Literatür Özeti

Yazar/Yazarlar	Ülke ve Dönem	Yöntem	Sonuç
Bedir ve Güneş (2016)	AB üyesi ülkeler, 1995-2012	Eşbütünleşme ve Nedensellik	Uzun dönemde çevre vergileri ile ekonomik büyüme arasında ters yönlü bir ilişkinin olduğu sonucuna ulaşılmıştır. Kısa dönemde tek yönlü uzun dönemde ise çift yönlü ilişki sonucuna ulaşılmıştır.
Bekmez ve Nakipoğlu (2012).	Türkiye, 1994-2009	VAR modeli ve eşbütünleşme analizi	Uzun dönemde çevre vergileri, ekonomik büyüme ve CO ₂ emisyonu değişkenleri arasında olumlu bir ilişki tespit edilmiştir.
Dökmen (2012)	29 Avrupa ülkesi, 1996-2010	Panel Veri analizi	Çevre vergilerindeki bir şok karşısında ekonomik büyüme anlamlı ve pozitif tepkilere karşılık geldiği sonucuna ulaşılmıştır.
Ozkaya (2022)	27 AB ülkesi, 2000-2017	Panel veri analizi	Eşbütünleşme analizi, uzun dönemde değişkenler arasında anlamlı bir ilişki olduğu sonucu elde edilmiştir. Nedensellik analizi sonucuna göre çevre vergi gelirleri ile CO ₂ emisyonu, ekonomik büyüme ile çevre vergi gelirleri arasında çift yönlü nedensellik mevcuttur. Ayrıca CO ₂ emisyonlarından ekonomik büyümeye doğru ise tek yönlü nedensellik olduğu sonucuna ulaşılmıştır.
Abdullah ve Morley (2014)	AB ve OECD ülkeleri, 1995-2006	Granger Nedensellik ve GMM	Çevresel vergilerle büyüme arasında AB ülkeleri için anlamlı bir ilişki bulunamamıştır. OECD ülkelerinde ise ekonomik büyümeye gaz vergilerine doğru uzun dönemli nedensellik bulunmuştur.

2. YÖNTEM

Çevre vergileri ile kişi başına gelir arasındaki ilişkiyi analiz etmek için VAR model ve VAR Granger nedensellik testi kullanılmıştır.

2.1. Veri Seti

Çalışmada kullanılan değişkenlerle ilgili bilgi tablo 2’ de yer almaktadır. Çevre vergileri ile kişi başına gelir arasındaki ilişkinin Türkiye’deki durumunun analiz edilmesi amacıyla çalışmada toplam çevre vergilerinin GSYH’deki yüzdesi ile kişi başına GSYH büyümesi değişkenleri arasındaki ilişki sınanmak istenmiştir. Yapılan çalışmadaki kullanılan veriler yıllık olup 1994-2021 dönemini kapsamaktadır. Analizlerde değişkenlerin kullanımında, toplam çevre vergilerinin GSYH’deki yüzdesi temsilen ETAX değişkeni ve kişi başına GSYH büyümesini temsilen ise PGDP değişkeni şeklinde ifade edilmiştir.

Tablo 2: Veri Seti

Dönem Aralığı: 1994-2021		Yıllık Veriler
Değişkenler	Açıklama	Kaynak
ETAX	Çevre Vergisi, Toplam GSYH'nin yüzdesi	OECD
PGDP	Kişi başına GSYH büyümesi (yıllık %)	World Bank

2.2. Durağanlık Analizi

Bazı ekonomilerde dönem dönem oluşan ekonomik şoklar, bu ülke ekonomilerine yönelik yapılan çalışmalarda bazı sapmalı neticeler görülebilecektir. Ampirik çalışmalarda kullanılan değişkenlerde trend veya mevsim etkilerinin hakim olduğu serilere uygulanan birim kök testleri sonucunda H_0 hipotezinin kabul edilmesiyle birim kökün olması durumunda durağan olmadıkları anlaşılmaktadır. Durağanlık analizinde kullanılan yöntemlerden birisi de Augmented Dickey-Fuller’in geliştirdiği ADF 79 birim kök testidir (Dickey & Fuller, 1979, 428). Aşağıdaki tabloda birim kök testi sonuçları verilmektedir.

Tablo 3: Birim Kök Durağanlık Testi

Test	Dickey ve Fuller (1979) Testi						
Model Tipi	Sabitli Model		Sabitli ve Trendli Model		Test Kritik Değerleri		
Değişkenler	Test	Olasılık	Test	Olasılık	%1	%5	%10
ETAX	-2,02	0,27			-3,71	-2,98	-2,62
D(ETAX)	-5,11	0,00					
PGDP			-5,19	0,00	-4,33	-3,58	-3,22

Yukardaki tabloya göre ETAX değişkeni I(1) düzeyde birinci farkla durağan iken, PGDP verisi ise I(0) düzeyde durağandır. Serilerin grafiğine bakılarak birim kök testine yönelik model tipi belirlenmiştir. Buna göre, çevre vergisi verisi sabit etkili birim kök testine tabi tutulurken, kişi başına düşen gelir büyümesi değişkeni ise sabit ve trend etkisinin birlikte görülmesi dolayısıyla model tipi o şekilde belirlenmiştir.

2.3. VAR Analizi

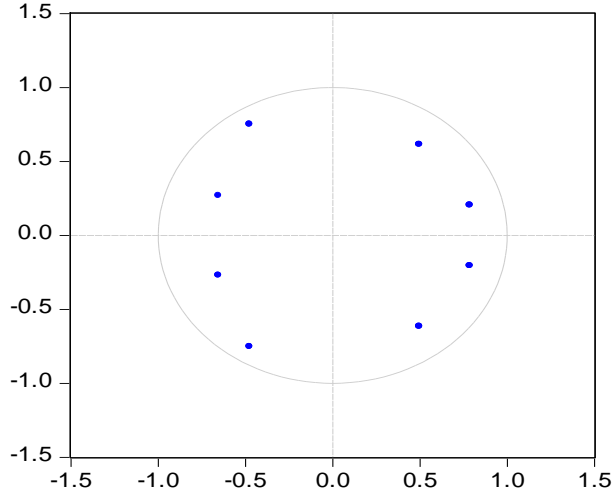
VAR modelinin temel mantığı değişkenler arasındaki etkileşimin karşılıklı olarak incelenmesine dayanmaktadır (Enders, 2004, 270). Ampirik analizlerde VAR modellerinin açıklanmasını sağlayan iki testten birincisi Etki-Tepki Fonksiyonu testidir. Bu test modeldeki içsel değişkenlerin hata terimindeki rassal şoklara karşı tepkisini hesaplar, (Sevüktekin & Çınar, 2014, 510). Bir diğer test de Varyans Ayrıştırması testi olup, her bir değişkenin tahmini hata varyansını modeldeki bütün değişkenlere dağıtılarak iktisadi şokların değişkenler üzerindeki etkilerini oran olarak göstermektedir (Tari, 2005, 436).

Tablo 4: Gecikme Katsayısının Belirlenmesi

VAR Modeli Gecikme Katsayısının Belirlenmesi						
Endojen Değişkenler: ETAX, PGDP				Egzojen Değişken: C		
Dönem: 1994-2021				Veri Sayısı: 28		
Lag	LogL	LR	FPE	AIC	SC	HQ
0	-92.06905	NA	8.700933	7.839088	7.937259	7.865133
1	-77.40839	25.65617	3.587924*	6.950699	7.245212*	7.028833*
2	-76.10035	2.071065	4.534229	7.175029	7.665885	7.305253
3	-75.51858	0.824175	6.165741	7.459881	8.147079	7.642195
4	-65.24068	12.84737*	3.810970	6.936723*	7.820264	7.171127

Yukardaki tabloda görüldüğü üzere çalışmada uygulanacak olan VAR modelinde gecikme katsayısı 4 olarak belirlenmiştir.

Grafik 1: VAR Modeli Birim Çember



Yukardaki grafikte görüldüğü üzere VAR birim çember modelinde karakteristik köklerin tamamının çember içerisinde olduğu görülmektedir. Buna bağlı olarak VAR modeli durağan olup, istikrarlılık koşulu sağlanmıştır.

Grafik 2: Etki – Tepki Fonksiyonu Analizi



Yukardaki grafiğe göre çevre vergilerinin kişi başına gelir büyüme oranı üzerinde yarattığı şok etkisine kişi başına gelir büyüme oranı kısa dönemde negatif tepki vermektedirken, bu tepki sonrasında pozitive dönmüştür. Kişi başına düşen gelir büyüme oranının çevre vergileri üzerinde yarattığı şok etkisine çevre vergileri genel anlamda negatif yönlü tepki vermektedir.

Tablo 5: Varyans Ayrıştırması Sonuçları

Gecikme	Çevre Vergisi (ETAX)			Kişi Başına Gelir Büyüme Oranı (PGDP)		
	S.E.	ETAX	PGDP	S.E.	ETAX	PGDP
1	0.401229	100.0000	0.000000	4.273245	31.43075	68.56925
2	0.598643	85.45741	14.54259	5.230066	51.04727	48.95273
3	0.716583	83.02285	16.97715	5.318200	49.83084	50.16916
4	0.801010	85.81076	14.18924	5.648281	52.88643	47.11357
5	0.894876	82.73510	17.26490	5.910775	54.84471	45.15529
6	0.903374	82.96684	17.03316	5.946376	54.21544	45.78456
7	0.922795	83.65952	16.34048	5.999302	53.27980	46.72020

8	0.934719	83.18348	16.81652	6.010457	53.43651	46.56349
9	0.934831	83.18710	16.81290	6.015106	53.39315	46.60685
10	0.937426	83.27965	16.72035	6.024221	53.23170	46.76830
Ortalama		%85	%15		%51	%49

Yukardaki grafiğe göre, çevre vergilerindeki değişimin %15'lik kaynağı kişi başı gelir büyüme oranından kaynaklanmaktadır. Bunun yanında kişi başı gelir büyüme oranındaki değişimin ise yaklaşık olarak %51'i çevre vergilerinde kaynaklanmaktadır. Bu da çevre vergilerinin kişi başına gelir üzerinde daha belirgin bir rolü olduğu göstermektedir.

Tablo 6: Otokorelasyon, Değişen Varyans, Normallik Testleri

Testler	Gecikme	Test Değeri	d.f	Olasılık
LM(I)	1	1,40		0,84
LM(II)	2	4,87		0,30
White	4	40,63	48	0,76
Jarque-Bera	1	0,82	2	0,66

Yukardaki tabloya göre ise, VAR modelinin tanımlayıcı testlerine göre söz konusu modelde olasılık değerlerinin %5'in üzerinde olması sonucunda değişen varyans ve otokorelasyon problemleri bulunmamaktadır. Aynı zamanda modelin normal dağılım varsayımının da geçerli olduğu tespit edilmiştir.

2.4. Nedensellik Analizi

İktisadi analizli ampirik çalışmalarda ekonomik büyüklükler arasındaki neden sonuç ilişkisinin yönünün bulunmasında Granger (1969) öncülüğünde geliştirilmiş olan nedensellik testi kullanılmaktadır.

Bu analiz aşağıdaki denklemler ile gösterilirse;

$$B_t = \sum_{i=1}^n \alpha_i B_{t-i} + \sum_{i=1}^n \partial_i YB_{t-i} + e_{1t} \quad (1)$$

$$YB_t = \sum_{i=1}^n \alpha_i YB_{t-i} + \sum_{i=1}^n \partial_i B_{t-i} + e_{2t} \quad (2)$$

Denklemlere göre, tek yönlü nedensellik ilişkisinde katsayılarından sadece denklemdeki ∂_i Parametresi anlamlı iken. Karşılıklı nedensellik ilişkisinin tespitinde ise denklemlerdeki α_i ve ∂_i katsayıların ikisi de anlamlıdır (Kutlar, 2009: 243).

Tablo 7: Nedensellik Testleri

VAR GRANGER WALD TESTİ		Gecikme:4
Hipotez	Test	Olasılık
Çevre Vergileri Kişi Başına Gelirdeki Artışın Nedenidir	8,62	0,07
Kişi Başına Gelirdeki Artış Çevre Vergilerinin Nedenidir	9,66	0,04

Yukardaki tabloya göre, çevre vergileri ve kişi başına gelir büyümesi değişkenleri arasında karşılıklı çift yönlü nedensellik ilişkisinin anlamlı olduğu görülmüştür.

3. SONUÇ

Çevre politikalarının amacı çevre konusunda toplumu bilinçlendirmek, çevre kirliliğini azaltmak ve önlemektir. Özellikle sanayileşme ve teknolojinin ilerlemesi ile artan üretim miktarı sınırlı kaynakların ölçsüz kullanımına sebep olmuştur. Bu durumda ortaya çıkan negatif dışsallıkların giderilmesinde alınan önlemlerden biri de vergilerden yararlanmaktır. Devlet, dışsal maliyetlerin içselleştirerek piyasa mekanizmasının etkinliğini sağlamaya çalışmaktadır. Vergiler maliyetlerin artmasına neden olsa bile aslında toplumdaki bireylerin kaynak kullanımında hem üretim hem de tüketim açısından çevre dostu davranmalarına teşvik edecektir.

Çalışmada elde edilen sonuçlar bağlamında çevre vergilerinin kişi başına düşen gelir üzerinde daha açıklayıcı bir etkiye sahip olmasının yanında her iki değişken arasındaki nedensellik ilişkisinin anlamlı olduğu tespit edilmiştir. Ayrıca birbirlerinin üzerinde kısa dönemde daha etkin ve anlamlı bir şekilde birbirlerine tepki gösterdikleri tespit edilmiştir. Uzun dönemde ise tepkisizliğin hâkim olması söz konusudur. Bu çalışma

kullanılmış olduğu yöntem ve farklı bir ekonomik büyüme tanımlamasına yönelik bir değişken kullanılması itibarıyla bu alandaki diğer çalışmalardan farklı kılınmaya çalışılmıştır.

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Doğrusal Olmayan Kantil Eşbütünleşme Testi

Aysun TURFANDA¹

Prof.Dr.Burak GÜRIŞ²

¹ayturfanda@hotmail.com, ORCID: 0000-0002-1602-7537

²Prof. Dr., İstanbul Üniversitesi, İktisat Fakültesi, Ekonometri Bölümü, bguris@istanbul.edu.tr, ORCID: 0000-0003-0562-4130

Özet: Kantil eşbütünleşme analizleri ekonomik değişkenler arasındaki doğrusal ilişkileri araştırmaktadır. Ancak iktisadi seriler çoğunlukla doğrusal olmayan bir yapı sergiler. Bu doğrusal olmayan yapının analizlerde dikkate alınması elde edilen sonuçların güvenilirliği açısından önemlidir. Literatürde en yaygın kullanılan kantil eşbütünleşme testleri Xiao (2009) ve Kuriyama (2016) dır. Doğrusal olmayan yapıyı üstel yumuşak geçişli otoregresif (ESTAR) yapı ile modelleyen bir kantil eşbütünleşme testi literatürde yoktur. Literatürde yer alan bu eksiklikten yola çıkılarak, KSS (2006) eşbütünleşme testinde yer alan doğrusal olmayan ESTAR yapının kantil yaklaşımıyla modellendiği bir eşbütünleşme testi önerilmiştir. QKSS olarak adlandırdığımız kantil eşbütünleşme testinin adımlarını göstermek ve testi tanıtmak amacıyla bir uygulama yapılmıştır. Analizlere başlamadan önce değişkenlere ait tanımlayıcı istatistiklere yer verilmiştir. Bu istatistiklere bakıldığında serilerin normallik varsayımını sağlamadığı görülmüştür. Serilere geleneksel birim kök testleri uygulanmış ve serilerin düzey halleriyle durağan olmadığı sonucuna ulaşılmıştır. Önerilen test uygulamasına geçmeden önce doğrusal olmayan eşbütünleşme testlerinden Kapetanious, Shin ve Snell (2006) testi söz konusu verilere uygulanmıştır. Sonrasında önerilen kantil eşbütünleşme yaklaşımı ile geliştirilen test uygulanmıştır. Geleneksel eşbütünleşme testleriyle seriler arasında eşbütünleşme ilişkisi ortaya konamazken, geliştirilen kantil eşbütünleşme testiyle değişkenler arasındaki eşbütünleşme ilişkisi ortaya konmuştur.

Anahtar Kelimeler: Kantil, Kantil Eşbütünleşme, Doğrusal Olmayan Kantil Eşbütünleşme Testi

Abstract: Quantile cointegration analyzes investigate linear relationships between economic variables. However, economic series often exhibit a non-linear structure. Taking this nonlinear structure into account in the analysis is important for the reliability of the results obtained. The most commonly used quantile cointegration tests in the literature are Xiao (2009) and Kuriyama (2016). There is no quantile cointegration test in the literature that models the nonlinear structure with an exponential smooth transition autoregressive (ESTAR) structure. Based on this deficiency in the literature, a cointegration test in which the nonlinear ESTAR structure in the KSS (2006) cointegration test is modeled with the quantile approach has been proposed. An application has been made to show the steps of the quantile cointegration test, which we call QKSS, and to introduce the test. Before starting the analyses, descriptive statistics of the variables were included. Looking at these statistics, it was seen that the series did not meet the normality assumption. Traditional unit root tests were applied to the series and it was concluded that the series were not stationary in their level states. Before proceeding with the proposed test application, the Kapetanious, Shin and Snell (2006) test, one of the non-linear cointegration tests, was applied to the data in question. Afterwards, the test developed with the recommended quantile cointegration approach was applied. While the cointegration relationship between the series could not be revealed with traditional cointegration tests, the cointegration relationship between the variables was revealed with the developed quantile cointegration test.

Key Words: Quantile, Quantile Cointegration, Non-Linear Quantile Cointegration Test

1. GİRİŞ

Bu çalışmada, normallik varsayımının sağlanmadığı durumlar için doğrusal olmayan kantil eşbütünleşme testi önerilmiştir. Doğrusal olmama durumu üstel yumuşak geçişli otoregresif (ESTAR) yapı ile modellenmiştir. Bu çalışmanın amacı, değişkenler arasındaki doğrusal olmayan ilişkileri farklı yüzdelik dilimlerle açıklamaktır. Bu nedenle, doğrusal olmayan kantil eşbütünleşme testi geliştirilmeye çalışılmıştır. Geliştirilen kantil eşbütünleşme testinin aşamalarını göstermek amacıyla iktisadi bir uygulama yapılmıştır.

2. KANTİL DOĞRUSAL OLMAYAN EŞBÜTÜNLEŞME TESTİ ÖNERİSİ

Geliştirilen eşbütünleşme testi için test denklemi aşağıdaki şekilde gösterilir.

$$\Delta y_t = \beta(\tau)u_{t-1}^2 + \beta(\tau)\Delta x_t + \sum_{i=1}^p \psi_i'(\tau)\Delta z_{t-i} + u_t(\tau), \quad \tau = 0.1, 0.2, \dots, 0.9$$

Denklemden yer alan τ değerleri kantilleri ifade eder. Bu model her kantil için yeniden tahmin edilir. Model sonuçları kullanılarak test istatistiği değeri aşağıdaki şekilde hesaplanır.

$$\hat{V}_n(\tau) = n(\hat{\beta}(\tau) - \hat{\beta})$$

Denklemden yer alan $\hat{V}_n(\tau)$ değerinin supremum olanı alınır.

$\hat{\beta}(\tau)$, kantil regresyona ait β değerini, $\hat{\beta}$ ise ols regresyon sonucunda elde edilen β değerlerini ifade etmektedir.

Yeni örnekler x_t^* ve y_t^* elde edilir.

$$x_t^* = x_{t-1}^* + v_t^*$$

$$x_1^* = x_1$$

$$y_t^* = \hat{\alpha} + \hat{\beta}'x_t^* + u_t^*$$

QKSS testinin asimptotik dağılımı standart olmadığından kritik değerleri simülasyon sonucunda elde edilmiştir. Bozucu terimin varlığı nedeniyle kritik değerler tablosu oluşturulamamıştır. (Turfanda, 2023)

Kullanılan Bootstrap Aşamaları aşağıdaki şekildedir (Xiao, 2009):

i) Öncelikle sırasıyla $\hat{\beta}(\tau)$ ve $\hat{\beta}$, kantil regresyon ve OLS regresyon ile elde edilir.

$$y_t = \alpha + \beta'x_t + \sum_{j=-K}^K \Delta x_{t-j}'\Pi_j + \varepsilon_t$$

$$\hat{V}_n(\tau) = n(\hat{\beta}(\tau) - \hat{\beta})$$

oluşturulur ve artıklar elde edilir.

$$\hat{u}_t = y_t - \hat{\alpha} - \hat{\beta}'x_t, \quad t = 1, \dots, n.$$

$$ii) \hat{w}_t = (v_t, \hat{u}_t), v_t = \Delta x_t$$

oluşturulur. \hat{w}_t üzerinde otoregresyon uygulanır ve

$$\hat{w}_t = \sum_{j=1}^q \hat{\beta}_j \hat{w}_{t-j} + \hat{e}_t, \quad t = q + 1, \dots, n$$

uygun artıklar elde edilir.

$$\hat{e}_t = \hat{w}_t - \sum_{j=1}^q \hat{\beta}_j \hat{w}_{t-j}, \quad t = q + 1, \dots, n$$

iii) Bağımsız ve özdeş dağılmış rastgele değişkenler $\{e_t^*\}_{t=q+1}^n$ merkezi artıklardan $\hat{e}_t - \frac{1}{n-q} \sum_{j=q+1}^n \hat{e}_j$ ve uygun otoregresyon kullanılarak e_t^* den w_t^* düzenlenir.

$$w_t^* = \sum_{j=1}^q \hat{\beta}_j w_{t-j}^* + e_t^*, \quad t = q + 1, \dots, n.$$

$$w_j^* = \hat{w}_j \quad j = 1, \dots, q$$

iv) $w_t^* = (v_t^*, u_t^*)$, $\hat{w}_t = (v_t, \hat{u}_t)$ ile tanımlanır ve x_t^* ,

$$x_t^* = x_{t-1}^* + v_t^* \text{ ve } x_1^* = x_1 \text{ 'dan türetiriz}$$

$$y_t^* = \hat{\alpha} + \hat{\beta}'x_t^* + u_t^*$$

Bootstrap örnekleri elde edilir(y_t^*, x_t^*).

v) Bootstrap örnekleri(y_t^*, x_t^*) kullanılarak, $\hat{\beta}(\tau)$, $\hat{\beta}$ ve $\hat{V}_n(\tau)$ 'nin bootstrap versiyonları elde edilir. Öncelikle $\hat{\beta}^*(\tau)$ ve $\hat{\beta}^*$, kantil ve OLS regresyon için aşağıdaki denklem ile elde edilir.

$$y_t^* = \alpha + \beta' x_t^* + \sum_{j=-K}^K \Delta x_{t-j}^* \Pi_j + \varepsilon_t^*$$

Sonra $\hat{V}_n^*(\tau)$ oluşturulur.

$$\hat{V}_n^*(\tau) = n(\hat{\beta}^*(\tau) - \hat{\beta}^*)$$

Test istatistiklerinin dağılımı, 2-5 arası adımlar birçok kez tekrarlanarak tahmin edilebilir.

3. UYGULAMA SONUÇLARI

Bu bölümde geliştirilen eşbütünleşme testine yönelik süreci gösteren bir uygulama yapılmıştır. Amerikan Borsalarının gösterge endeksi olarak S&P 500 Borsa Endeksi (SPX) ve Amazon (AMAZON) arasındaki eşbütünleşme ilişkisi araştırılmıştır. Mart 2021-Temmuz 2023 dönemine ait günlük veri seti Yahoo Finance veri tabanından alınmıştır. Uygulama olarak incelenecek model, aşağıdaki şekilde oluşturulur;

$$SPX_t = \alpha(\tau)d_t + \beta(\tau)AMAZON_t + u_t(\tau)$$

burada $\beta(\tau)$, kantil eşbütünleşme yöntemi sonucunda eşbütünleşme vektöründen elde edilmiş olan ve SPX ile AMAZON doğrusal olmayan ilişkinin ölçütüdür. Bu katsayı, kantillere göre değişmektedir.

Çalışmada ilk olarak SPX ve AMAZON hisselerinin dağılımını incelemek amacı ile tanımlayıcı istatistikler elde edilmiştir. Jarque-Bera test sonuçlarına göre değişkenler normal dağılıma sahip değildir.

Tablo 1: Tanımlayıcı İstatistikler

	Kurtosis	Skewness	Jarque-Bera
SPX	2.1826	0.0610	17.334
AMAZON	1.5968	-0.1394	51.936

Kantil eşbütünleşme testinin yapılabilmesi için gerekli şart serilerin düzeyde halleriyle durağan olmamasıdır. Durağanlığın incelenebilmesi için öncelikle geleneksel birim kök testleri değişkenlere uygulanmıştır.

Tablo 2: Geleneksel Birim Kök Testi Sonuçları

	ADF		PP		KPSS	
	Sabit	Sabit ve Trendli	Sabit	Sabit ve Trendli	Sabit	Sabit ve Trendli
SPX	-2.0352	-2.1021	-1.9471	-2.0011	2.0541	0.873
AMAZON	-1.3686	-1.9193	-1.4321	-2.0065	6.7419	0.6872

SPX ve Amazon değişkenleri için geleneksel birim kök testlerinden ADF (Dickey & Fuller, 1981), PP (Phillips & Perron, 1988) ve KPSS (Kwiatkowski, Phillips, Schmidt, & Shin, 1992) testine göre sınılandığında birim kök temel hipotezi reddedilmemektedir. Seriler düzey halleriyle durağan değildir.

Tablo 3: Birinci farkı alınmış değişkenler için geleneksel Birim Kök Test Sonuçları

	ADF		PP		KPSS	
	Sabit	Sabit ve Trendli	Sabit	Sabit ve Trendli	Sabit	Sabit ve Trendli
SPX	-18.1701	-18.1561	-24.5025	-24.4810	0.1243	0.1231
AMAZON	-16.8226	-16.8123	-24.7477	-24.7311	0.1028	0.0926

SPX ve Amazon değişkenlerinin birinci farkı alınarak geleneksel birim kök testleriyle yeniden durağanlıkları incelenmiştir. Test sonuçlarına göre birim kök temel hipotezi reddedilmektedir. Seriler birinci farkı alınmış halleriyle durağandır.

Tablo 4: Kapetanious vd. (2003) Birim Kök Test Sonuçları

Kapetanious vd.(2003)

	k	c	k	t
SPX	9	-1.652874	9	-1.824298
AMAZON	0	-2.529796	0	-2.328147

Tabloda c indisi ortalamadan arındırılmış yapıyı göstermektedir. Tabloda t indisi ortalamadan ve trendden arındırılmış yapıyı göstermektedir. Test istatistikleri Kapetanious vd. (2003) (Kapetanios, Shin, & Snell, 2003) çalışmasında yer alan kritik değerler ile kıyaslanmıştır. Tabloda yer alan değerler serilerin birim köklü olduğunu göstermektedir.

Tablo 5: Sollis (2009) Birim Kök Test Sonuçları

Sollis(2009)				
	k	c	k	t
SPX	9	3.749411	9	3.830831
AMAZON	0	1.506079	0	2.366803

Tabloda c indisi ortalamadan arındırılmış yapıyı göstermektedir. Tabloda t indisi ortalamadan ve trendden arındırılmış yapıyı göstermektedir. Test istatistikleri Sollis(2009) (Sollis, 2009) çalışmasında yer alan kritik değerler ile kıyaslanmıştır. Tabloda yer alan değerler serilerin birim köklü olduğunu göstermektedir.

Tablo 6: Kruse (2011) Birim Kök Test Sonuçları

Kruse(2011)				
	k	c	k	t
SPX	9	7.403657	9	7.614113
AMAZON	0	2.926341	0	4.119073

Tabloda c indisi ortalamadan arındırılmış yapıyı göstermektedir. Tabloda t indisi ortalamadan ve trendden arındırılmış yapıyı göstermektedir. Test istatistikleri Kruse(2011) (Kruse, 2011) çalışmasında yer alan kritik değerler ile kıyaslanmıştır. Tabloda yer alan değerler serilerin birim köklü olduğunu göstermektedir.

Tablo 7: Kapetanious, Shin ve Snell (2006) Eşbütünleşme Test Sonuçları

KSS(2006) Eşbütünleşme Testi				
SPX-AMAZON	k	Ham Veri	Ortalamadan arındırılmış	Ortalama ve trendden arındırılmış
	12	-1.149429	-1.823348	-2.347307

Kapetanious, Shin ve Snell (2006) (Kapetanios, Shin, & Snell, 2006) eşbütünleşme testine göre %5 anlamlılık düzeyinde değişkenler arasında eşbütünleşme ilişkisinin bulunmamasını ifade eden temel hipotez ham veri, ortalamadan arındırılmış, ortalamadan arındırılmış ve trendden arındırılmış yapı için kabul edilir.

Tablo 8: Önerilen Kantil Eşbütünleşme Testi Sonuçları

QKSS Kantil Eşbütünleşme Testi Önerisi				
	Test İstatistiği	Kritik Değerler		
SPX-AMAZON	0.00015	99%	95%	90%
		0.000002255	0.00000195	0.000001732

Önerilen test için sınanacak olan hipotezler şu şekilde oluşturulur:

H_0 : AMAZON ile SPX arasında eşbütünleşme yoktur.

H_1 : AMAZON ile SPX arasında eşbütünleşme vardır.

Test istatistik değeri tablo değerlerinden büyük olduğu için eşbütünleşme ilişkisinin bulunmamasını ifade eden temel hipotez reddedilir. Önerilen kantil eşbütünleşme testi sonuçlarına göre %5 anlamlılık düzeyinde Amazon ve SPX değişkenleri arasında eşbütünleşme vardır.

Geleneksel eşbütünleşme test sonuçları, seriler arasında bir eşbütünleşme ilişkisinin olmadığı yönünde çıktı üretirken, önerilen kantil eşbütünleşme testi Amazon ve SPX değişkenleri arasında eşbütünleşme ilişkisinin olduğunu ortaya koymaktadır.

4. SONUÇ

İncelenen seri normal dağılmadığında EKK ile tahminin güvenilir olmadığını ve buna karşı dirençli sonuçlar veren testlere ihtiyaç duyulmaktadır. İktisadi serilerin çoğunlukla normal dağılmadığı da bilinmektedir. Bu literatürden hareketle seriler normal dağılmadığında etkinlik kaybına uğramacağımız testler geliştirilmeye çalışılmıştır.

Literatürde seriler normal dağılmadığında uygulayabileceğimiz etkinlik kaybına neden olmayacak, KSS (2006) eşbütünleşme testinde yer alan doğrusal olmayan ESTAR yapının kantille modellendiği bir eşbütünleşme testi yoktur. Bu bilgiden hareketle literatürde yer alan bu eksikliği gidermek amacıyla yeni bir kantil eşbütünleşme testi önerilmiştir. Önerilen test simülasyonu sonucunda, üretilen kantil testinin üstünlüğü ve kullanım gerekçesi ispatlanmıştır. Kritik değer üretimindeki bozucu terim nedeni ile bootstrap yöntemine geçiş yapılmıştır.

Çalışmada önerilen testin adımlarını göstermek adına 2021-2023 döneminde günlük verilerle bir uygulamaya yer verilmektedir. Öncelikle çalışmada kullanılan ve Amerikan Borsa gösterge endeksleri olarak ele alınan SPX ve Amazon verilerinin normal dağılıp dağılmadığı test edilmiştir. Test sonucunda değişkenlerin normal dağılım varsayımını sağlamadığı sonucuna ulaşılmıştır. Çalışmada geleneksel birim kök testleri ve doğrusal olmayan birim kök test sonuçları tablolar şeklinde gösterilmiştir. Genel olarak birim kök test sonuçları değişkenlerin düzey halleriyle durağan olmadığını göstermiştir. Ancak değişkenler birinci farkları alındığı durumda durağan hale gelmektedir. Eşbütünleşme testleri için gerekli olan temel şart yani değişkenlerin aynı mertebeden durağan olmasını sağlamaktadır.

Önerilen test uygulamasına geçmeden önce doğrusal olmayan eşbütünleşme testlerinden Kapetanious, Shin ve Snell (2006) testi söz konusu verilere uygulanmıştır. Test sonucunda temel hipotez kabul edilerek Amazon ve SPX değişkenleri arasında eşbütünleşme ilişkisi olmadığı sonucuna ulaşılmıştır. Sonrasında önerilen kantil eşbütünleşme yaklaşımı ile geliştirilen test sonucuna göre temel hipotez reddedilir eşbütünleşme ilişkisi vardır sonucuna ulaşılmıştır. Bu sonuç, kantillerin önemini vurgular ve kantillerin dikkate alınmadığı durumda yanlış yorumlamaların yapılabileceğini gösterir. Geleneksel eşbütünleşme testleriyle seriler arasında eşbütünleşme ilişkisi ortaya konamazken, geliştirilen kantil eşbütünleşme testiyle değişkenler arasındaki eşbütünleşme ilişkisi ortaya konmuştur.

Sonuçlardan da görüldüğü gibi eşbütünleşme testi yapılırken kantil eşbütünleşme testiyle inceleme yapılmadığı takdirde seriler arasında eşbütünleşme ilişkisi olmadığı yönünde yanıltıcı sonuçlar çıkmaktadır.

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D-8 Ülkelerinde Ekolojik Ayak İzi Yakınsaması: Doğrusal ve Doğrusal Olmayan Birim Kök Testleri İle Analizi

Prof. Dr. Burak Güriş¹

Arş. Gör. Yağmur Yavuz²

¹İstanbul Üniversitesi, İktisat Fakültesi, Ekonometri Bölümü, bguris@istanbul.edu.tr, 0000-0003-0562-4130

²İstanbul Gedik Üniversitesi, İktisadi, İdari ve Sosyal Bilimler Fakültesi, Yönetim Bilişim Sistemleri Bölümü, yagmur.yavuz@gedik.edu.tr, 0000-0001-9497-5172

Özet: Çevresel kirliliğin kapsamlı bir göstergesi olarak yaygın biçimde kullanılan ekolojik ayak izi, doğadaki talep ve arzı ölçerek çevresel politikaların belirlenmesinde yardımcı olmaktadır. Bu çalışmada yakınsama hipotezi çerçevesinde D-8 ülkeleri için 1971-2022 dönemi ele alınarak ekolojik ayak izi yakınsaması araştırılmıştır. Çalışmada Harvey vd. (2008) Doğrusal Olmama Testi, geleneksel Genişletilmiş Dickey-Fuller (1981) ve Phillips-Perron (1988) Birim Kök Testleri, yapısal kırılmayı dikkate alan Narayan ve Popp (2010) Birim Kök Testi ve son olarak doğrusal olmayan yapı ile birlikte yapısal kırılmayı dikkate alan yeni bir doğrusal olmayan birim kök testi kullanılmıştır. Elde edilen sonuçlara göre Pakistan ve İran için yakınsama hipotezi geçerli, Türkiye, Nijerya, Malezya, Bangladeş, Mısır ve Endonezya için yakınsama hipotezi geçerli değildir.

Anahtar Kelimeler: Yakınsama, Doğrusallık Analizi, Fourier Birim Kök Testi

1.GİRİŞ

Yoksul ülkelerin zengin ülkeler ile kıyaslandığında, daha hızlı büyüme eğiliminde olduğu varsayımına dayanan neoklasik büyüme modeli, Solow (1956) tarafından ortaya atılmıştır. Ortaya atılan bu modelin önemli bir parçası olan yakınsama hipotezi, yoksul ekonomilerin zengin ekonomilerden daha hızlı büyüme eğiliminde olduğunu iddia eder. Hipoteze göre zamanla bu iki ekonomi grubu arasındaki refah seviyesi farklılığı azalacaktır (Solow, 1956).

Neoklasik büyüme modelinin ülkeler arası büyüme özellikleri çerçevesinde incelenmesinde, araştırmacılar tarafından model üzerine eklenen yeni varsayımlar ve üzerine yapılan tartışmalar farklı yakınsama kavramlarının ortaya çıkmasına sebep olmuştur. Bu yakınsama kavramlarından biri “stokastik yakınsama”dır. Stokastik yakınsama, yakınsama hipotezinin zaman serisi yaklaşımının kullanıma başlanmasıyla ortaya çıkmıştır. Carlino ve Mills (1993), Bernard ve Durlauf (1996), Evans ve Karras (1996), Li ve Papell (1999) çalışmaları, yakınsama hipotezini zaman serisi teknikleriyle inceleyen öncü çalışmalar olmaktadır. Birim kök testleri aracılığıyla incelenebilen stokastik yakınsama, incelenen seriye gelen geçici şokların etkilerinin zaman içinde dağıldığı anlamına gelmektedir. Bu bağlamda, seriye gelen şoklar geçiciyse seri stokastik olarak yakınsıyordu, şokların kalıcı olduğu durumda ise ıraksama söz konusudur.

Solow (1956) çalışmasının ardından yakınsama hipotezi, sağlık, eğitim, askeri, dış ticaret, enerji ve çevre gibi farklı ekonomik göstergeler için araştırılarak çalışma alanı genişlemiştir. Güncel çalışmalar incelendiğinde, yakınsama hipotezinin araştırıldığı çalışmaların çevresel kalite üzerinde yoğunlaştığı görülmektedir. 18. yüzyılın sonundan itibaren yaşanan hızlı sanayileşme, buna bağlı olarak gerçekleşen dramatik nüfus artışı ve beraberinde getirdiği ihtiyaçlar ile birlikte bireylerin yaşam tarzları değişmiştir ve değişmeye devam etmektedir. Bu değişim doğal kaynaklar üzerindeki baskıyı arttırdığından, doğrudan yaşanan çevreyi olumsuz olarak etkilemektedir. Su ve toprak kirliliği, doğal kaynaklar üzerindeki yadsınamaz artış, biyolojik çeşitliliğin azalması gibi çevresel tehditler dünyanın geleceği açısından tedbirlerin alınma gerekliliğini yaratmıştır. Çevresel sorunların yarattığı olumsuz sonuçlar dikkate alındığında, doğanın arzını ve talebini incelemeyi mümkün kılan ekolojik ayak izi kavramı ortaya çıkmıştır (Erden Özsoy ve Dinç, 2016: 36). Ekolojik ayak izi, çevresel sürdürülebilirliği ölçmek için kullanılmaktadır. Dünyada sahip olunan teknolojik kaynaklar ile bireylerin veya toplumun tüketimde bulunduğu kaynakları üretmek ve aynı zamanda meydana gelen atıkları yok etmek için önem arz eden, biyolojik açıdan verimli toprak ve su alanlarını ifade eder. Ekolojik ayak izinin belirlenmesinde ekolojik ayak izi ve biyolojik kapasite olmak üzere iki temel gösterge kullanılmaktadır. Tüketime ekolojik ayak izi, toplum tarafından tüketilen ürünlerin üretimi için kullanılan yenilenebilir doğal kaynakları ifade ederken, biyolojik kapasite coğrafi bir bölgenin yenilenebilir doğal kaynakları üretme kapasitesini göstermektedir. Kişi başına düşen tüketimin ekolojik ayak izi miktarı, kişi başına düşen biyolojik kapasiteyi aşarsa, bu durum o coğrafi bölgede yaşayan bireylerin tüketim biçimlerinin sürdürüleemeyeceğini ifade eder (Global Footprint Network, 2023).

Stokastik yakınsama analizi birim kök testleri ile gerçekleştirilebilmektedir. İncelenen serinin durağan bir yapıya sahip olması, yani serinin birim kök içermemesi yakınsamanın gerçekleştiğini ifade etmektedir. Yakınsama analizinin gerçekleştirildiği çalışmalar farklı birim kök testleri aracılığıyla incelenebilmektedir. Birim kök analizini gerçekleştirirken dikkat edilmesi gereken iki temel özellik vardır. Bunlardan ilki incelenen serinin doğrusal bir yapıya sahip olup olmaması, ikincisi ise yapısal kırılmalardır. İncelenen serinin doğrusal olmayan bir yapıya sahip olmasına rağmen, analizin doğrusal yöntemlerle gerçekleştirilmesi elde edilen bulguların yanıltıcı olmasına sebep olacaktır. Aynı şekilde yapısal kırılmayı göz ardı etmek, aslında durağan olan bir serinin birim köklü bulunması problemini yaratacaktır. Tüm bu sebepler dikkate alındığında, bu çalışmada öncelikle incelenen serilerin doğrusal bir yapıya sahip olup olmama durumları Harvey vd. (2008) doğrusal olmama testi ile incelenmiştir. Doğrusallık bulgusu elde edilen serilere sırasıyla geleneksel birim kök testlerinden olan Genişletilmiş Dickey-Fuller (ADF, 1981) ve Phillips-Perron (PP, 1988) birim kök testleri uygulanmıştır. Aynı serilere daha sonra hem temel hem de alternatif hipotez altında yapısal kırılmaya izin veren Narayan ve Popp (2010) birim kök testi uygulanmıştır. Doğrusal olmama bulgusu elde edilen serilere ise, Güriş (2019) çalışmasıyla literatüre kazandırılan Fourier Kruse (2019) birim kök testinin bir uzantısı olarak geliştirilen yeni bir doğrusal olmayan birim kök testi uygulanarak yakınsama analizi gerçekleştirilmiştir.

Bu kapsamda çalışmanın ikinci kısmını literatür taraması, üçüncü kısmını ekonometrik yöntem, dördüncü kısmını veri ve ampirik sonuçlar ve son olarak beşinci kısmını analizden elde edilen sonuçlar oluşturmaktadır.

2. LİTERATÜR TARAMASI

Aşağıda yer alan Tablo 1’de Ekolojik Ayak İzi ile yapılan güncel yakınsama çalışmaları yer almaktadır.

Tablo 1: Literatür Taraması

Çalışma	Dönem	Ülke	Yöntem	Sonuç
Bilgili ve Ulucak (2018)	1961-2014	G20 Ülkeleri	Panel KPSS Birim Kök Testi	Yakınsama vardır.
Solarin (2019)	1961-2013	27 OECD Ülkesi	RALS-LM Birim Kök Testi LM Birim Kök Testi	Sonuçlar ülkelere göre farklılık göstermektedir.
Yurtkuran (2020)	1971-2016	N-11 Ülkeleri	CADF Fourier Panel Birim Kök Testi	Sonuçlar ülkelere göre farklılık göstermektedir.
Pata (2020)	1971-2016	N-11 Ülkeleri	Hadri-Kurozumi Panel Birim Kök Testi Lee ve Tieslau Panel Birim Kök Testi	Yakınsama vardır.
Işık vd. (2021)	1961-2016	USMCA Ülkeleri	Panel TAR Birim Kök Testi	Yakınsama vardır.
Erdoğan ve Okumuş (2021)	1961-2016	Alt-Orta-Üst Gelirli Ülkeler	FPKPSS Birim Kök Testi	Hipotez sonuçlarında farklılık vardır.
Bello vd. (2022)	1973-2018	49 Afrika Ülkesi	Panel Birim Kök Testleri	Sonuçlar ülkelere göre farklılık göstermektedir.
Ergün Tatar (2022)	1973-2017	ASEAN-5 Ülkeleri	SURADF Birim Kök Testi SURKSS Birim Kök Testi	Yakınsama vardır.

3. EKONOMETRİK YÖNTEM

3.1. Harvey vd. (2008) Doğrusal Olmama Testi

Harvey vd. (2008) çalışmasıyla literatüre serilerin entegrasyon derecesi hakkında bilgi gerektirmeyen yeni bir doğrusal olmama testi kazandırılmıştır. Zaman serisinin I(0) sürecinde olduğu varsayımı altında kullanılacak model aşağıdaki şekilde yazılmaktadır (Harvey vd., 2008):

$$y_t = \beta_0 + \beta_1 y_{t-1} + \beta_2 y_{t-1}^2 + \beta_3 y_{t-1}^3 + \sum_{j=1}^p \beta_{4,j} \Delta y_{t-j} + \varepsilon_t \quad (1)$$

Burada Δ fark operatörünü, p ise gecikme sayısını ifade eder. Çalışmada maksimum gecikme sayısının hesaplanması için $p_{max} = \text{int}(8(T/100)^{\frac{1}{4}})$ formülü kullanılmaktadır. Test için kullanılacak hipotezler aşağıdaki gibidir:

$$H_{0,I(0)}: \beta_2 = \beta_3 = 0$$

$$H_{1,I(0)}: \beta_2 \neq 0 \text{ ve/veya } \beta_3 \neq 0$$

Temel hipotez doğrusal yapıyı, alternatif hipotez doğrusal olmayan yapıyı ifade etmektedir.

Test istatistiğinin hesaplanması aşağıdaki gibidir:

$$W_0 = T \left(\frac{RSS_0^r}{RSS_0^u} - 1 \right) \quad (2)$$

Burada, RSS_0^r ve RSS_0^u sırasıyla kısıtlı ve kısıtsız modelden elde edilen hata terimi kareler toplamını ifade etmektedir ve T gözlem sayısıdır.

Zaman serisinin $I(1)$ sürecinde olduğu varsayımı altında kullanılacak model:

$$\Delta y_t = \lambda_1 \Delta y_{t-1} + \lambda_2 (\Delta y_{t-1})^2 + \lambda_3 (\Delta y_{t-1})^3 + \sum_{j=1}^p \lambda_{4,j} \Delta y_{t-j} + \varepsilon_t \quad (3)$$

şeklinde yazılmaktadır. Test için kullanılacak hipotezler aşağıdaki gibidir:

$$H_{0,I(1)}: \lambda_2 = \lambda_3 = 0$$

$$H_{1,I(1)}: \lambda_2 \neq 0 \text{ ve/veya } \lambda_3 \neq 0$$

Temel hipotez doğrusal yapıyı, alternatif hipotez doğrusal olmayan yapıyı ifade etmektedir.

Test istatistiği,

$$W_1 = T \left(\frac{RSS_1^r}{RSS_1^u} - 1 \right) \quad (4)$$

şeklinde hesaplanacaktır. RSS_1^r ve RSS_1^u kısıtlı ve kısıtsız modelden elde edilen hata terimi kareler toplamını göstermektedir ve T gözlem sayısıdır.

İncelenen zaman serisinin durağanlık özellikleri bilinmediğinde, bu iki test istatistiği kullanılarak aşağıdaki test istatistiğinin hesaplanması mümkündür:

$$W_\lambda = \{1 - \lambda\} W_0 + \lambda W_1 \quad (5)$$

W_λ test istatistiği χ^2 dağılımına uygunluk gösterir ve kısıt sayısı 2'dir.

3.2. Genişletilmiş Dickey-Fuller Birim Kök Testi

Dickey ve Fuller (1979) çalışmasında geliştirilen birim kök testinde, hata teriminin otokorelasyonsuz olduğu ve zaman serisinin birinci dereceden otoregresif AR(1) modele uygunluk gösterdiği varsayılır. Ancak AR(1) modeli zaman serisindeki tüm otokorelasyonu yakalayamamaktadır. Otokorelasyon problemini ortadan kaldırmak amacıyla daha yüksek dereceden bir otoregresif model kullanmak gerekmektedir (Stock ve Watson, 2011: 566). Dickey ve Fuller (1981) çalışmasında daha yüksek dereceli otoregresif süreçlerin birim kök sürecini incelemek amacıyla Dickey ve Fuller (1979) birim kök testini genişletmişlerdir (Dickey ve Fuller, 1981: 1065).

Dickey ve Fuller (1981) birim kök testinde dikkate alınan regresyon modelleri aşağıdaki gibidir:

$$\Delta Y_t = \delta Y_{t-1} + \sum_{i=1}^m \gamma_i \Delta Y_{t-i} + \varepsilon_t \quad (6)$$

$$\Delta Y_t = \mu + \delta Y_{t-1} + \sum_{i=1}^m \gamma_i \Delta Y_{t-i} + \varepsilon_t \quad (7)$$

$$\Delta Y_t = \mu + \beta t + \delta Y_{t-1} + \sum_{i=1}^m \gamma_i \Delta Y_{t-i} + \varepsilon_t \quad (8)$$

(6) numaralı denklem sabitsiz ve trendsiz modeli, (7) numaralı denklem sabitli modeli, (8) numaralı denklem ise sabitli ve trendli modeli ifade etmektedir. Modellerde yer alan ε_t beyaz gürültü hata terimi, m gecikme sayısıdır. Modellere eklenecek olan gecikmeli fark terimi sayısının doğru belirlenmesi δ 'nın sapmasız tahminini elde etmek ve hata teriminin otokorelasyonsuz olmasını sağlamak amacıyla önem arz eder. Gecikme uzunluğunun seçiminde Akaike Bilgi Kriteri (AIC), Bayesian Bilgi Kriteri (BIC) gibi ekonometrik uygulamalarda sıklıkla

kullanılan bilgi kriterlerinden yararlanabilmektedir. Alternatif bir farklı yöntem ise, Hall (1994)'ın önerdiği genelden özele yaklaşımıdır (Ng ve Perron, 1995: 271- Çil, 2014: 301). Uygulamada $H_0: \delta = 0$ birim kökü ifade eden temel hipotezine karşı, $H_1: \delta < 0$ alternatif hipotezi sınanır. Bu sınama Dickey-Fuller (1979) istatistiği ile aynı dağılıma uyduğu için aynı kritik değerler kullanılmaktadır. Elde edilen test istatistiğinin kritik değerden büyük olması halinde, birim kökün varlığını ifade eden temel hipotez reddedilememektedir. Hipotez testinde kullanılacak test istatistiği aşağıdaki gibidir:

$$\tau = \frac{\hat{\delta}}{se(\hat{\delta})} \quad (9)$$

ADF birim kök testinde temel ve alternatif hipotezlerde sırasıyla sabit terim ve trend etkisini ifade eden μ ve β parametreleri için herhangi bir kısıtlama yapılmamıştır (Sevüktekin ve Nargeleçekenler, 2010: 332). Dickey ve Fuller (1981) çalışmasında, üç parametrenin bileşik olarak test edilmesi amacıyla ϕ_1, ϕ_2 ve ϕ_3 olmak üzere ek olarak üç F istatistiği önerilmiştir. Bu istatistikler normal dağılıma uymayan serilerde kullanılmak üzere aşağıdaki şekilde hesaplanmaktadır:

$$\phi_i = \frac{[SSR_R - SSR_U]/r}{SSR_U/(T-k)} \quad (10)$$

Burada SSR_R ve SSR_U sırasıyla kısıtlı ve kısıtsız modellerin kalıntı kareler toplamını, r kısıtlama sayısını, T gözlem sayısını, k kısıtsız modelin parametre sayısını, $(T - k)$ kısıtsız modelin serbestlik derecesini ifade eder. F dağılımı bu testler için standart değildir bu sebeple bileşik hipotezlerin sınaması için kritik değerler Dickey ve Fuller (1981) çalışmasında ϕ_1, ϕ_2 ve ϕ_3 olarak tablolaştırılmıştır (Dickey ve Fuller, 1981: 1063). $\delta = \mu = 0$ temel hipotezinin testi için ϕ_1 istatistiği, $\delta = \mu = \beta = 0$ temel hipotezinin testi için ϕ_2 istatistiği ve $\delta = \beta = 0$ temel hipotezinin testi için ϕ_3 istatistiği elde edilmektedir. Elde edilen test istatistiklerinin, Dickey ve Fuller (1981) çalışmasında tablolaştırılan kritik değerler ile karşılaştırılmasıyla temel hipotezin reddine veya reddedilemeyeceğine karar verilir.

3.3. Phillips-Perron Birim Kök Testi

Dickey-Fuller testlerinde rassal hataların istatistiksel olarak bağımsız, normal dağılımlı ve sabit varyanslı olduğu varsayımları söz konusudur ve varsayımların gerçekleşmemesi otokorelasyon problemini yaratmaktadır. ADF birim kök testinde otokorelasyon problemini çözmek amacıyla AR(p) süreci dikkate alınır ve serinin gecikmeli değerleri modele dahil edilmektedir. Ancak bu durum serbestlik derecesi kaybına sebep olmaktadır. Bu sebeple, Phillips ve Perron (1988) çalışmasında, yapılan varsayımlar esnetilmekte ve rassal hatalarda zayıf bağımlılığa ve heterojenliğe izin verilmektedir. Phillips ve Perron (1988) çalışmasında parametrik olmayan bir yaklaşımın kullanıldığı yeni bir birim kök testi geliştirilmiştir (Phillips ve Perron, 1988).

Phillips-Perron birim kök testi için en basit şekilde AR(1) model aşağıdaki şekilde verilmektedir:

$$y_t = \alpha y_{t-1} + u_t \quad (t = 1, 2, \dots) \quad (11)$$

Burada u_t 'nin beklenen değeri sıfırdır ve modelde test edilecek temel hipotez $H_0: \alpha = 1$ şeklindedir. Birim kök testi için aşağıda verilen denklemler dikkate alınmaktadır:

$$y_t = \hat{\mu} + \hat{\alpha} y_{t-1} + \hat{u}_t \quad (12)$$

$$y_t = \tilde{\mu} + \tilde{\beta} \left(t - \frac{1}{2}T \right) + \tilde{\alpha} y_{t-1} + \tilde{u}_t \quad (13)$$

Verilen denklemlerde yer alan $(\hat{\mu}, \hat{\alpha})$ ve $(\tilde{\mu}, \tilde{\beta}, \tilde{\alpha})$ katsayıları EKK tahminlerini, T ise gözlem sayısını ifade etmektedir. Phillips ve Perron (1988) çalışmasında veri yaratma sürecinin AR(1) süreci olduğu temel hipotezi altında katsayıların testi için test istatistikleri oluşturmuşlardır. Oluşturulan test istatistikleri aşağıdaki hipotezleri test etmek amacıyla kullanılmaktadır:

$$Z(t\hat{\alpha}): \hat{\alpha} = 1$$

$$Z(t\tilde{\alpha}): \tilde{\alpha} = 1$$

$$Z(t\tilde{\beta}): \tilde{\beta} = 1$$

$$Z(\phi_3): \tilde{\alpha} = 1, \tilde{\beta} = 1$$

Birim kökün varlığının belirlenmesinde, test istatistiklerinin limit dağılımları DF testleri ile aynı genel forma sahip olduğundan, DF testlerinin kritik değerleri bu test için de kullanılabilir.

3.4. Narayan ve Popp (2010) Birim Kök Testi

Birim kökten sonra bir serinin durağan olmamasının bir sebebi olarak değerlendirilen yapısal kırılmalar, zaman serisi analizinde dikkate alınması gereken bir faktördür. Dikkate alınmadığı takdirde kurulan bir regresyon modelinde tanımlama hatası meydana gelmekte ve elde edilen tahminler sapmalı olmaktadır. Bu noktadan hareketle yapısal kırılmaların modellendiği birim kök testleri geliştirilmiş ve bu çalışmaların öncüsü olarak Perron (1989) çalışması görülmektedir. Perron (1989) çalışması kendisinden sonra yapısal kırılmaları dikkate alan çeşitli testlerin gelişmesine katkı sağlamıştır ve bu testlerden bir tanesi Narayan ve Popp (2010) testidir. Narayan ve Popp (2010) çalışmasında iki yapısal kırılmayı ele alan ADF tipi bir birim kök testi geliştirilmiştir. Geliştirilen testte veri serisinin seviyesinde iki kırılmaya, seviyesinde ve eğiminde iki kırılmaya izin verilen iki farklı spesifikasyon dikkate alınmıştır. Kırılma zamanlarının bilinmediği varsayımı vardır ve hem temel hem de alternatif hipotezde yapısal kırılmaya izin verilmektedir (Narayan ve Popp, 2010: 1425).

Çalışmada dikkate alınan modellerden ilki, Model AA olarak ifade edilir ve bu modelde seviyede iki kırılmaya izin verilmektedir. Diğer model ise Model CC olarak ifade edilir ve bu modelde hem seviyede hem de trendde iki kırılmaya izin verilir. Model spesifikasyonları deterministik bileşen d_t 'nin belirlenmiş şekline göre değişmektedir. Denklemler aşağıdaki gibidir:

$$d_t^{M1} = \alpha + \beta_t + \Psi^*(L)(\theta_1 DU'_{1,t} + \theta_2 DU'_{2,t}) \quad (14)$$

$$d_t^{M2} = \alpha + \beta_t + \Psi^*(L)(\theta_1 DU'_{1,t} + \theta_2 DU'_{2,t} + \gamma_1 DT'_{1,t} + \gamma_2 DT'_{2,t}) \quad (15)$$

Burada $DU'_{i,t} = 1(t > T'_{B,i})$, $DT'_{i,t} = 1(t > T'_{B,i})(t - T'_{B,i})$, $i = 1,2$ şeklindedir ve $T'_{B,i}$ $i = 1,2$ kırılma tarihlerini, θ_i seviyede kırılmayı ve γ_i trendde kırılmayı ifade eder.

Model AA için verilen denklem aşağıdaki gibidir:

$$y_t^{M1} = \rho y_{t-1} + \alpha_1 + \beta * t + \theta_1 D(T'_{B'})_{1,t} + \theta_2 D(T'_{B'})_{2,t} + \delta_1 DU'_{1,t-1} + \delta_2 DU'_{2,t-1} + \sum_{j=1}^k \beta_j \Delta y_{t-j} + e_t \quad (16)$$

Denklemden $\Psi^* = (-1)^1$ ortalama gecikme olmak üzere, $\alpha_1 = \Psi^*(-1)^1[(1 - \rho)\alpha + \rho\beta] + \Psi^*(1)^{-1}(1 - \rho)\beta$, $\beta^* = \Psi^*(-1)^1(1 - \rho)\beta$, $\phi = \rho - 1$, $\delta_i = -\phi\theta_i$ ve $D(T'_{B'})_{i,t} = 1(t = T'_{B,i} + 1)$, $i = 1,2$.

Model CC için verilen denklem aşağıdaki gibidir:

$$y_t^{M2} = \rho y_{t-1} + \alpha^* + \beta^* t + \kappa_1 D(T'_{B'})_{1,t} + \kappa_2 D(T'_{B'})_{2,t} + \delta_1^* DU'_{1,t-1} + \delta_2^* DU'_{2,t-1} + \gamma_1^* DT'_{1,t-1} + \gamma_2^* DT'_{2,t-1} + \sum_{j=1}^k \beta_j \Delta y_{t-j} + e_t \quad (17)$$

Burada $\kappa_i = (\theta_i + \gamma_i)$, $\delta_i^* = (\gamma_i - \phi\theta_i)$ ve $\gamma_i^* = -\phi\gamma_i$, $i = 1,2$ şeklindedir.

Testin temel ve alternatif hipotezleri aşağıdaki şekildedir:

$$H_0: \rho = 1$$

$$H_1: \rho < 1$$

Temel hipotez reddedilirse, serinin iki yapısal kırılmayla birlikte durağan olduğu sonucuna ulaşılmaktadır. Hipotez testinin gerçekleşmesi için kullanılacak olan kritik değerler Narayan ve Popp (2010) çalışmasında tablolştırılmıştır.

3.5. Yeni Doğrusal Olmayan Birim Kök Testi (2023)

Doğrusal olmayan yapının modelde yer alması, analiz için kullanılan doğrusal yöntemlerin bulgularının yanıltıcı olması problemi yaratır. Bu durum göz önüne alındığında doğrusal olmayan birim kök testlerinin geliştirilmesiyle birlikte, son yıllarda bu testlerin Fourier terimleriyle genişletildiği görülmektedir. Fourier terimlerinin kullanılması, yapısal kırılmaların formu, tarihi ve sayısı hakkında varsayımda bulunmadan birim kök analizinin gerçekleşmesini sağlamaktadır. Fourier yaklaşımının kullanılması yaşanan ani değişimlerin yanı sıra yavaş gerçekleşen değişimlerin belirlenmesini de mümkün kılmaktadır. Bu noktadan hareketle bu çalışmada, Gürış (2019) çalışmasıyla literatüre kazandırılan Fourier Kruse birim kök testinin bir uzantısı olarak geliştirilen yeni bir doğrusal olmayan birim kök testi kullanılmıştır. Geliştirilen testte, Gürış (2019) çalışmasında dikkate

alınan modellere ilave olarak yeni bir model eklenmiştir. Dikkate alınan model “Case 3” olarak adlandırılmakta ve aşağıdaki şekilde gösterilmektedir (Yavuz, 2023):

$$y_t = \alpha_0 + \alpha_1 \sin\left(\frac{2\pi k^* t}{T}\right) + \alpha_2 \cos\left(\frac{2\pi k^* t}{T}\right) + \alpha_3 \text{trend} * \sin\left(\frac{2\pi k^* t}{T}\right) + \alpha_4 \text{trend} * \cos\left(\frac{2\pi k^* t}{T}\right) + \varepsilon_t \quad (18)$$

Test sürecinin gerçekleşmesi için aşağıdaki adımlar izlenmektedir:

1. Adım: İlk aşamada Fourier fonksiyonu, bilinmeyen formlarda ve sayılarda yapısal kırılmaları modellemek amacıyla kullanılır. Dikkate alınan modelde trend bileşeni, Fourier fonksiyonlarıyla çarpım halinde modele eklenmektedir. Model aşağıdaki gibi yazılmaktadır:

$$y_t = \alpha_0 + \alpha_1 \sin\left(\frac{2\pi k^* t}{T}\right) + \alpha_2 \cos\left(\frac{2\pi k^* t}{T}\right) + \alpha_3 \text{trend} * \sin\left(\frac{2\pi k^* t}{T}\right) + \alpha_4 \text{trend} * \cos\left(\frac{2\pi k^* t}{T}\right) + \varepsilon_t \quad (19)$$

Modelde yer alan k^* , optimal frekansı ifade eder ve optimal k^* 'nin seçiminde k^* 'ye 1 ile 5 arasında değişen değerler atanarak ve bu değerler ile sırasıyla EKK yöntemi kullanılarak model tahmin edilir. Model tahminlerinden sonra, hata terimlerinin kareleri toplamını minimum yapan k , optimal k olarak seçilir. Optimal k ile tahmin edilen modelden hata terimleri elde edilmektedir:

$$\varepsilon_t = y_t - \alpha_0 - \alpha_1 \sin\left(\frac{2\pi k^* t}{T}\right) - \alpha_2 \cos\left(\frac{2\pi k^* t}{T}\right) - \alpha_3 \text{trend} * \sin\left(\frac{2\pi k^* t}{T}\right) - \alpha_4 \text{trend} * \cos\left(\frac{2\pi k^* t}{T}\right) \quad (20)$$

2. Adım: Birinci aşamada elde edilen hata terimleri kullanılarak, test istatistikleri aşağıdaki denklem tahmin edilerek hesaplanır:

$$\Delta \varepsilon_t = \delta_1 \varepsilon_{t-1}^2 + \delta_2 \varepsilon_{t-1}^2 + \sum_{i=1}^k \beta_i \Delta \varepsilon_{t-i} + v_t \quad (21)$$

Bu aşamada birim kökün varlığı Kruse (2011) çalışmasında önerilen test ile sınanmaktadır. Kruse (2011) çalışmasında, $H_0: \delta_1 = \delta_2 = 0$ birim kök temel hipotezine karşı, $H_1: \delta_1 < 0, \delta_2 \neq 0$ durağan ESTAR süreç alternatif hipotezine karşı test etmek için bir τ testi önerilmektedir. Test istatistikleri aşağıdaki şekilde formüle edilmektedir:

$$\tau = \left(\hat{\omega}_{22} - \frac{\hat{\omega}_{21}^2}{\hat{\omega}_{11}} \right)^{-1} \left(\hat{\delta}_2 - \hat{\delta}_1 \frac{\hat{\omega}_{21}}{\hat{\omega}_{11}} \right)^2 + 1(\hat{\delta}_1 < 0) \frac{\hat{\delta}_1^2}{\hat{\omega}_{11}} \quad (22)$$

3. Adım: İkinci aşamada birim kök temel hipotezi reddedilirse, bu aşamada $H_0: \alpha_1 = \alpha_2 = \alpha_3 = \alpha_4 = 0$ temel hipotezine karşı, $H_1: \alpha_1 = \alpha_2 = \alpha_3 = \alpha_4 \neq 0$ alternatif hipotezi F testi aracılığıyla test edilebilmektedir. Burada temel hipotez trigonometrik terimlerin anlamsız olduğunu ifade etmektedir. Temel hipotezin reddedilmesi, serinin kırılmalı deterministik fonksiyon etrafında durağan olduğu anlamına gelir. Bu test için kullanılacak olan kritik değerler Becker, Enders ve Lee (2006) çalışmasında tablolştırılmıştır.

4. VERİ SETİ VE AMPİRİK BULGULAR

Bu çalışmada D-8 ülkeleri için ekolojik ayak izi yakınsaması 1971-2022 dönemi ele alınarak test edilmektedir. Veriler Global Footprint Network veri tabanından elde edilmiştir. Birim kök analizi için verilere aşağıdaki dönüşüm yapılmıştır:

$$y_{it} = \ln\left(\frac{EF_{it}}{EF_t}\right)$$

Burada t yılları, EF_{it} i. ülke için kişi başına düşen ekolojik ayak izini, EF_t ise tüm ülkelerin ekolojik ayak izi ortalamalarını ifade etmektedir.

Tablo 2: Harvey vd. (2008) Doğrusal Olmama Testi Sonuçları

Ülke	Harvey vd. (2008)

Türkiye	9.10**
İran	17.43***
Pakistan	2.85
Malezya	0.75
Bangladeş	3.65
Mısır	1.37
Endonezya	0.53
Nijerya	6.74**

Not: Harvey vd. (2008) doğrusal olmama testi kritik değerleri %1, %5 ve %10 için sırasıyla 9.21, 5.99 ve 4.60'dır. ***, ** ve * sırasıyla %1, %5 ve %10 için doğrusallık temel hipotezinin reddedildiğini ifade etmektedir.

Tablo 2'de yer alan doğrusal olmama sonuçlarına göre, Türkiye, İran ve Nijerya doğrusal bir yapıya sahip değildir. Pakistan, Malezya, Bangladeş, Mısır ve Endonezya doğrusal yapıya sahiptir. Bu sebeple Pakistan, Malezya, Bangladeş, Mısır ve Endonezya için doğrusal yöntemlerin kullanılması doğru olacaktır.

Tablo 3: ADF ve PP Birim Kök Testi Sonuçları

Ülke	Genişletilmiş Dickey-Fuller (ADF)	Phillips-Perron (PP)
Pakistan	-4.60***	-4.56***
Malezya	-2.50	-3.78**
Bangladeş	-1.53	-1.34
Mısır	-1.73	-1.76
Endonezya	-1.82	-1.66

Not: ***, ** ve * sırasıyla %1, %5 ve %10 için birim kök temel hipotezinin reddedildiğini ifade etmektedir.

Tablo 3'de yer alan geleneksel birim kök testi sonuçlarına göre Pakistan her iki test dikkate alındığında durağan yapıda bulunmuştur. Bu yakınsama hipotezinin geçerli olduğunu ifade etmektedir. Malezya için ADF birim kök testinde birim kökün varlığını ifade eden temel hipotez reddedilememişken, PP birim kök testinde temel hipotez reddedilmiştir. Bangladeş, Mısır ve Endonezya için her iki test için de temel hipotez reddedilememiştir, dolayısıyla yakınsama gerçekleşmemektedir.

Tablo 4: Narayan ve Popp (2010) Birim Kök Testi Sonuçları

Model 1	Pakistan	Malezya	Bangladeş	Mısır	Endonezya
Birinci Kırılma Tarihi	1998	1998	1989	1997	1998
İkinci Kırılma Tarihi	2005	2000	1993	2004	2004
Test İstatistiği	-5.88***	-3.57	-3.47	-2.13	-2.68
Model 2	Pakistan	Malezya	Bangladeş	Mısır	Endonezya
Birinci Kırılma Tarihi	1988	1987	1992	1998	1998
İkinci Kırılma Tarihi	2005	1998	1997	2004	2004
Test İstatistiği	-5.88**	-1.806	-3.38	-2.97	-5.41**

Not: Narayan ve Popp (2010) test istatistiğine ait kritik değerler Narayan ve Popp (2010) çalışmasından elde edilmiştir. T=50 gözlem değeri ve Model 1 için tablo değerleri %1 için -5.259, %5 için -4.514 ve %10 için -4.143'dür. Model 2 için tablo değerleri %1 için -5.949, %5 için -5.181 ve %10 için -4.789'dür. ***, ** ve * sırasıyla %1, %5 ve %10 için birim kök temel hipotezin reddedildiğini ifade etmektedir.

Tablo 4'de yer alan sonuçlara göre Pakistan için her iki model dikkate alındığında da temel hipotezin reddedildiği görülmektedir. Bu durum yakınsama hipotezinin geçerli olduğunu göstermektedir. Endonezya için model 1 dikkate alındığında temel hipotez reddedilemiyorken, model 2 dikkate alındığında temel hipotezin reddedildiği görülmektedir. Yapısal kırılmanın dikkate alındığı Narayan ve Popp (2010) birim kök testi sonuçlarına göre Malezya, Bangladeş ve Mısır için temel hipotez reddedilememiştir. Buradan elde edilen sonuçlar geleneksel birim kök testlerinden elde edilen bulguları destekler niteliktedir.

Tablo 5: Yeni Doğrusal Olmayan Birim Kök Testi (2023) Sonuçları

Ülke	Uygun Frekans (k)	Yeni Doğrusal Olmayan Birim Kök Testi (2023)
Türkiye	1	12.74

İran	1	20.61*
Nijerya	2	11.20

Not: Yeni birim kök test istatistiğine ait kritik değerler Yavuz (2023) çalışmasından elde edilmiştir. $k=1$ için tablo değerleri %1 için 28.63, %5 için 21.26 ve %10 için 18.17'dir. $k=2$ için tablo değerleri %1 için 21.80, %5 için 15.55 ve %10 için 12.91'dir. ***, ** ve * sırasıyla %1, %5 ve %10 için birim kök temel hipotezin reddedildiğini ifade etmektedir.

Tablo 5'de yer verilen doğrusal olmayan birim kök test sonuçları Türkiye ve Nijerya için temel hipotezin reddedilemediğini göstermektedir. Temel hipotez reddedilemediği için yakınsama hipotezinin gerçekleşmediğini söylemek mümkün olmaktadır. İran için ise temel hipotez reddedilmiştir, bu ise yakınsama hipotezinin geçerli olduğunu ortaya koymaktadır.

Tablo 6: F Testi Sonuçları

Ülke	F-İstatistiği
İran	30.29714***

Not: Kritik değerler Becker vd. (2006)'dan elde edilmiştir. Tablo değerleri %1 için 6.873, %5 için 4.972 ve %10 için 4.162'dir. ***, ** ve * sırasıyla %1, %5 ve %10 için birim kök temel hipotezin reddedildiğini ifade etmektedir.

Yeni birim kök test sonuçlarına göre İran için durağanlık bulgusu elde edilmesi sebebiyle F testi yapılmıştır. Yapılan F testi sonucuna göre temel hipotez reddedilmiştir, buna göre seri kırılan deterministik fonksiyon etrafında durağandır.

5. SONUÇ

Ekonomik, sosyal ve çevresel sürdürülebilir kalkınmayı ölçmek için çeşitli göstergeler mevcuttur. Son yıllarda en popüler göstergelerden biri ise ekolojik ayak izidir. Ekolojik ayak izi, çevresel sürdürülebilirlik faaliyetlerini sınamak amacıyla sıklıkla bir gösterge olarak kullanılmaktadır. Ekolojik ayak izi doğadaki talep ve arzı ölçmektedir. Ekim alanları, otlatma alanları, balıkçılık alanları, yerleşim alanları, orman alanları ve arazideki karbon talebi gibi yüzey alanlarının kullanımını takip eder. Bu ekolojik varlıkların üretkenliği ise biyolojik kapasite tarafından temsil edilir. Ekolojik ayak izinin biyolojik kapasiteyi aşması sonucunda ekolojik açık problemi ile karşılaşmaktadır. Ekolojik ayak izi ve biyolojik kapasite verilerinin incelenmesiyle, dünya çapında ekolojik açığın yükseldiğinin görülmesi mümkündür. Bu durum günümüz ihtiyaçlarını karşılamak için kullanılan kaynakların gelecek nesiller için etkin bir şekilde korunamadığını göstermektedir.

Bu çalışmada D-8 ülkelerinde 1971-2022 dönemi için kişi başına düşen ekolojik ayak izinde meydana gelen şokların kalıcı bir etkiye sahip olup olmadığı analiz edilmiştir. Bu bağlamda doğrusal yapıya sahip olduğu bulgusu elde edilen ülkeler için yapılan birim kök testleri Pakistan için şokların geçici olduğunu gösterirken, Malezya, Bangladeş ve Mısır şokların kalıcı olduğunu göstermiştir. Endonezya için sonuçlar incelendiğinde, geleneksel birim kök testleri ile yapısal kırılmayı dikkate alan birim kök testinden elde edilen bulgular birbirinden ufak değişiklikler göstermektedir. Doğrusal yapıya sahip olmadığı bulgusu elde edilen ülkeler için ise yeni bir doğrusal olmayan birim kök testi kullanılmıştır. Testin sonuçları Türkiye ve Nijerya'da şokların kalıcı olduğunu, İran'da ise şokların geçici olduğunu göstermektedir. D-8 ülkeleri yoğun bir nüfusa sahiptir ancak yoğun nüfusları enerjiye olan ihtiyacı da artırmaktadır. D-8 ülkeleri için bu bağlamda kalabalık nüfus yapısı, daha fazla enerji tüketimi anlamına gelmektedir. D-8 ülkelerinin büyük bir kısmı, fosil kökenli enerji kaynakları açısından zengin bir rezerv sahip olduğu için, enerjinin çoğunluğu bu enerji kaynaklarından sağlanmaktadır ve bu durum daha fazla çevre kirliliğine sebep olmaktadır. Yenilenebilir enerji kaynakları, özelliklerini koruyabilen, doğada varlığını sürdürebilen ve kendini yenileyebilen özelliğe sahip ve çevre kirliliğine sebebiyet vermeyen enerji türleri anlamına gelmektedir. Bu sebeple üye ülkelerin fosil yakıt kullanımı yerine yenilenebilir enerji kaynaklarının bilinçli tüketimi için gerekli altyapı çalışmalarını hızlandırması önem arz etmektedir.

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Pazarlama Eğitiminin Girişimcilik Eğilimine Etkisi: Bir Alan Araştırması*

Caner PEŞİNCİ¹

Adil OĞUZHAN²

¹Trakya Üniversitesi, Sosyal Bilimler Enstitüsü, Yönetim ve Organizasyon Ana Bilim Dalı Doktora Öğrencisi,
pesincicaner@hotmail.com, ORCID: 0000-0003-1525-9659

²Prof. Dr. Trakya Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, Ekonometri Bölümü
adiloguzhan@trakya.edu.tr, ORCID: 0000-0003-2475-6892

Özet: Bu araştırmanın amacı pazarlama eğitiminin girişimcilik eğilimi üzerine etkisinin olup olmadığını ortaya koymaktır. Pazarlama tüketici istek ve ihtiyaçlarını karşılamak için bir mal veya hizmetin üretilmesi, fiyatlandırılması, dağıtılması ve tutundurma faaliyetlerinin gerçekleştirilmesidir. Girişimcilik ise; yeni mal veya hizmet üretmek için, üretim faktörlerinin bir araya getirilmesidir. Bu nedenle pazarlama eğitimi alan kişilerin girişimcilik eğilimi olduğu düşünülmektedir.

Araştırmada; Türkiye’de Ankara, Antalya, Bursa, Denizli, Hatay, İstanbul, İzmir, Kırklareli, Konya, Manisa, Muğla ve Rize illerinde pazarlama eğitimi veren liselerde öğrenim gören pazarlama ve perakende bölümü öğrencisi 602 katılımcıya ulaşılmıştır. Veriler anket tekniği kullanılarak kolayda örnekleme yolu ile toplanmıştır. SPSS 23 ve AMOS 23 programları kullanılarak verilerin analizinde betimsel istatistikler elde edilmiş, modele ilişkin ölçeklere açıklayıcı faktör analizi ve doğrulayıcı faktör analizi yapılmıştır. Ayrıca yapısal eşitlik modeli ile pazarlama eğitiminin girişimcilik alt boyutları üzerine etkileri tahmin edilmiştir. Açıklayıcı faktör analizi sonucu girişimcilik eğiliminin alt boyutları ileri görüşlü, tutkulu, serüvenci-maceracı ve özgün-yenilikçi olarak sıralanmıştır. Araştırmada test sonuçlarına göre pazarlama eğitiminin girişimcilik eğiliminin tüm alt boyutlarını anlamlı ve olumlu etkilediği sonucuna varılmıştır.

Anahtar Kelimeler: Pazarlama, Pazarlama Eğitimi, Girişimcilik, Girişimcilik Eğilimi

Abstract: The aim of this research is to reveal whether marketing education has an effect on entrepreneurship tendency. Marketing is the production, pricing, distribution and promotion of a good or service to meet consumer wants and needs. Entrepreneurship is the combination of factors of production to produce new goods or services. For this reason, it is thought that people who receive marketing education have an entrepreneurial tendency.

In the research, 602 marketing and retail students studying at high schools providing marketing education in Ankara, Antalya, Bursa, Denizli, Hatay, İstanbul, İzmir, Kırklareli, Konya, Manisa, Muğla and Rize provinces in Turkey were reached. The data were collected by easy sampling using the questionnaire technique. Descriptive statistics were obtained in the analysis of the data by using SPSS 23 and AMOS 23 programs, and explanatory factor analysis and confirmatory factor analysis were performed on the scales related to the model. In addition, the effects of marketing education on entrepreneurship sub-dimensions were estimated with the structural equation model. As a result of explanatory factor analysis, the sub-dimensions of entrepreneurial tendency were listed as forward-looking, passionate, adventurous and original-innovative. According to the test results in the research, it was concluded that marketing education had a significant and positive effect on all sub-dimensions of entrepreneurial tendency.

Key Words: Marketing, Marketing Education, Entrepreneurship, Entrepreneurship Tendency

1. GİRİŞ

Girişimcilik; oluşturduğu yeni iş imkânları, ekonomiye yaptığı katkılar, sürekli gelişen, aktif ve içinde bulunduğu çevreden etkilenen bir süreç olduğundan dolayı araştırmacılar tarafından sürekli üzerinde çalışma yapılan bir alan olmuştur. Girişimcilik her zaman toplumların ileriye gitmesine, ekonomilerinin gelişmesine, teknolojik yeniliklerin ortaya çıkmasına ve istihdamın artmasına öncü olmuştur. Schumpeter'in ortaya koyduğu “yaratıcı yıkım kavramı” girişimciliğin eski ve alışılmışı yıkarak yerine yeniyi getirmesinin toplumları ileri taşıdığından bahsetmektedir (Kızılkaya, 2004:198-200). Girişimcilik gibi üzerinde çokça ve sıklıkla araştırmaların yapıldığı sürekli güncel ve kendini yenileyebilen bir diğer kavram ise pazarlamadır. Pazarlama müşteri istek ve ihtiyaçlarını karşılamak için ortaya bir ürünün konması, bu ürünün fayda yaratacak şekilde fiyatlandırılması, tüketicilere gerektiği şekilde ulaştırılması ve ardından tutundurma çalışmalarının yapılması faaliyetlerinin bütünü olarak tanımlanmıştır (Kotler ve Armstrong, 2012:5).

Ürünün ortaya çıkmasındaki temel unsur tüketici istek ve ihtiyaçlardır. Tüketici istek ve ihtiyaçlarını karşılamayan, topluma ve doğaya fayda sağlamayan ürünlerin herhangi bir ekonomik değeri yoktur (Mucuk, 2001). Girişimcilik faaliyetleri sonucunda ortaya çıkan ürün ancak tüketiciyle buluştuğunda anlamlı hâle

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gelecektir. Ürünün tasarımıyla tüketiciye ulaşana kadar ki sürecinde ise pazarlamanın 4P'si olarak bilinen ürün, fiyat, dağıtım ve tutundurma kavramları ön plana çıkmaktadır (Kotler, 2000:10).

Bu tanımlamalardan yola çıkarak pazarlama ve girişimcilik kavramlarının birbiriyle yakın ilişki içinde olduğunu söyleyebiliriz. Çünkü istek ve ihtiyaçlarının sonu olmayan tüketiciler için pazarlama ve girişimcilik, yeni mal ve hizmetler ortaya koyma amacıyla her zaman arayış içindedir.

Ülkemizde pazarlama eğitimi mesleki ve teknik anadolu liselerinin pazarlama ve perakende alanında eğitim gören öğrencilere lise seviyesinden itibaren verilmeye başlanmaktadır. Pazarlama eğitimi alan öğrencilerin, alanında uzman bilgi ve becerilere sahip, sektördeki ihtiyacı karşılamaya yönelik donanımlı, girişimciliğe yatkın bireyler olarak yetiştirilmesi, yeniliğe açık, keşfetmeye meraklı mezunlar olması amaçlanmaktadır (MEB,2017:3-4)

Tüm bunlar göz önüne alındığında pazarlama eğitimi alan öğrencilerin teorik olarak girişimcilik eğiliminde olmaları beklenmektedir. Bu çalışmada Ankara, Antalya, Bursa, Denizli, Hatay, İstanbul, İzmir, Kırklareli, Konya, Manisa, Muğla ve Rize illerinde pazarlama eğitimi gören 602 mesleki ve teknik anadolu lisesi öğrencisinden anket yöntemiyle veri toplanarak çeşitli istatistiksel analizler yapılmış ve teorik varsayımın doğruluğu ispatlanmaya çalışılmıştır.

2. LİTERATÜR TARAMASI

2.1. Girişimcilik Kavramı

Girişimcilik kavramı ile ilgili ilk tanımlamanın 1700'li yıllarda Fransız ekonomist Richard Cantillon tarafından yapıldığı kabul edilmektedir. Cantillon kişileri ücretli insanlar, toprak sahipleri ve girişimciler olarak 3 kategoriye ayırmış ve girişimcileri belirsiz şartlarda karar verebilen ve sektörü koordine edebilen insanlar olarak tanımlamıştır (Grebel vd., 2003:497). Girişimcilik risk alınarak yeni imkânlar ortaya koymak için hammadde, emek ve diğer varlıkları bir araya getirme faaliyetidir (Hisrich ve Peters 2001:9). Bir mal ya da hizmetin ortaya konması, fiyatının belirlenmesi ve bu faaliyetin sürdürülmesini sağlayacak bir işletmenin kurularak devamlılığının sağlanması da girişimciliğin bir başka tanımı olarak karşımıza çıkmaktadır (Tokat ve Şerbetçi, 1998:10).

Girişimciliğin tarihsel gelişimine bakıldığında 16. Yüzyıl sonlarında sermayesi ve işi olanlar girişimci olarak kabul edilmekte, yeni ürün ortaya koymaktansa ürünleri farklı pazar ve alıcılara ulaştırmak önemli kabul edilmekteydi (Cavid 2001:77). 18. Yüzyıldan itibaren liberalizmin yükselişe geçmesi, girişimcilikteki risk faktörünü arttırmış, malın maliyeti belirli iken satış fiyatında yaşanan istikrarsızlık girişimciliği daha riskli hâle getirmiştir. Bu dönemde girişimciler; sermayedarların emrinde, fikirleri olan ve işin koordinasyonunu sağlayan yöneticiler konumunda görev almaktaydı (Alpsahin 2011:75). 19. yüzyıla gelindiğinde ise bugün girişimcilik denildiğinde en çok akla gelen yenilik kavramı Schumpeter tarafından ortaya atılmış, girişimcilik, sermayedar ve yöneticilik kavramlarının dışına çıkarak yaratıcı ve yenilikçi kavramlarıyla özdeşleşmiştir. Schumpeter yeniliğin gelebilmesi için eskinin yıkılmasını, bu sayede toplumsal ilerlemenin daha hızla gerçekleşeceğini savunmaktadır (Er 2003:77-78). Günümüzde ise girişimcilik; ekonominin temel yapı taşı hâline gelmiş, toplumda önemsenen, ilgi duyulan, yeniliğin ortaya çıkmasında öncü, toplumu ve ekonomiyi geliştirici etkiye sahiptir. Girişimcilik, bireylerin iş tercihleri seçiminde de etkin rol oynamaktadır (Aşkın vd., 2011:70).

Ülkemizde girişimcilik faaliyetleri Cumhuriyet öncesinde oldukça kısıtlı ve neredeyse tamamen yabancı ağırlıklıydı. Gayrimüslim halkın ticaretle uğraşması, girişimcilik faaliyetlerinde aktif olmalarının ve fırsatları değerlendirmelerinin önünü açarken; Müslüman halkın tarım yoğunluklu çalışması, tarım işçisi olarak kalmalarına neden olmuştur (Gümüşlüoğlu ve Karagöz, 2014:103). Ayrıca Osmanlı devletinin sosyal ve kültürel geleneğinin de tarım toplumuna dayalı olması, ülkedeki mülklerin büyük çoğunluğunun hanedanlığa ait olması ve bunun yanı sıra kişilerin vergi ya da ücret karşılığı tarım işçisi statüsünde kalması, girişimcilik fikrinin gelişmesine engel olmuştur (Doğangün ve Yasa, 2013:3-4). Cumhuriyetin ilanından sonra ise özellikle Türk ve Müslüman halkın girişimcilik faaliyetlerinde aktif rol oynaması için önemli adımlar atılmıştır. İlk olarak 1923 yılında yapılan İzmir İktisat Kongresi'nde ticareti gayrimüslimlerden arındırmak ve Türk ve Müslüman iş adamı, esnaf ve tüccar yetiştirilmesini teşvik etmek amaçlı kararlar alınmıştır (Kayıran ve Saygın, 2019:42-44). 1927 yılında Teşviki sanayi Kanunu ile tarımdan sanayiye yönelim teşvik edilmeye çalışılmış, devlet girişim faaliyetlerinde aktif rol alacak memurlar yetiştirilmiş ve görevlendirmiştir (Candan, 2011:165). Ancak 1929 Ekonomik Buhranı, 2. Dünya Savaşı ve bunların ekonomik ve sosyolojik etkileri istenilen hedeflere ulaşılmasına engel olmuştur (TUGİAD, 1993:19). Yaşanan olumsuz küresel olaylara karşın yine de ülkemiz 1930-1939 yılları

arasında yıllık ortalama %11,7'lik yüksek bir büyüme göstermiştir (Eşiyok, 2006:9). Günümüzde girişimcilik devlet tarafından üretim, hizmet, tarım, sanayi ve bilişim sektörleri başta olmak üzere her alanda desteklenmekte ve teşvik edilmektedir. Özellikle üniversite eğitiminde zorunlu ya da seçmeli dersler ile girişimcilik özendirilmekte ve girişimcilik eğilimi eğitim yoluyla arttırılmaya çalışılmaktadır (Kalkınma Bakanlığı 2013:92-94).

Girişimcilik ile sermayedarlık kavramları birbiri ile karıştırılmamalıdır. Sermayedarlar belli bir işe para yatırarak gelir elde etmeyi amaçlarken girişimciler ise kendi kaynaklarını kullanarak riskin tamamını üstlenirler. Bu durumda girişim başarılı olduğunda girişimcinin getirisi sermayedara göre daha yüksek olacaktır. Ancak başarısız girişimlerde girişimcilerin zararı da büyük olmakta sermayedarlar ise daha az etkilenmektedir (Erikson ve Rooth, 2014:1019). Küreselleşmenin etkisiyle girişimcilğe karşı olan bakış açısı da değişim göstermiş ve girişimcilik yenilikçilik, risk alınabilirlik, gelişim odaklılık ve dinamiklik kavramlarıyla birlikte kullanılmaya başlanmıştır (Kutanis ve Hancı, 2004:456). Günümüzde girişimciler sadece yeni işler kurmakla kalmamakta yeniliğe öncülük etmekte ve eskiyi yıkarak değişim ajanlığı rolü üstlenmektedir. Bu nedenle girişimciler eskiyi yıkarak yeniyi getiren öncüler olarak değerlendirilmektedir (Lumpkin ve Dess, 1996:141). Toplum ve ekonomi için girişimcilik kilit rol üstlenmektedir. Yeniliği getiren girişimciler yeni iş alanları oluşturmakta ve yeni teknolojilerin gelişmesine katkı sağlamaktadırlar. Böylelikle istihdamın artmasını da desteklemektedirler. İstihdamın artması ve yeni iş sahalarının ortaya çıkması da ekonominin gelişmesine, toplumsal refahın yükselmesine pozitif katkı sağlamaktadır (Soysal, 2015:61).

Girişimciliğin toplumlarda yaygınlaştırılması, özendirilmesi ve desteklenmesi ekonomik gelişmeye öncülük etmesi ve refahın artması bakımından önem arz etmektedir. Girişimciliğin özendirilmesi kişilerin girişimcilik eğilimlerini arttıracak, girişimci sayısının artması ekonomik canlılığı arttıracak, yeni çıkan ürünler ve iş alanları istihdamın artmasına ve teknolojinin gelişmesine olanak sağlayacaktır. Bu nedenle girişimcilik eğitimlerinin küçük yaşlarda verilmesi önemlidir. Yaratıcı ve eleştirel düşünebilen, kendine güveni olan, fırsatları görme ve yeni fikirler üretme yeteneği gelişmiş kişilerin eğitim aracılığıyla yetişmesi ve desteklenmesi ülkelere ve ekonomilere katma değeri yüksek geri dönüş sağlayacaktır (Cansız, 2013:53).

Literatürde girişimcilerin özellikleri ile ilgili birçok farklı kaynak bulunmaktadır. Genel olarak girişimciler risk alabilen, başarıma arzusuna sahip, yenilikçi (Mueller ve Thomas, 2000:55), alınacak riskleri analiz edebilen, sezgileri güçlü, stresle baş edebilen (Gözek ve Akbay, 2012:51), disiplinli, belirsizlik durumunda karar verebilen (Marangoz, 2016:2), çözüm üretebilen, fikri işe çevirebilen, olayları farklı perspektiften görebilen (Ergen, 2017:36), detaycı, yaratıcı, mükemmeliyetçi, başarısızlıklarla mücadele edebilen, başarıya ihtiyaç duyan (Lambing ve Kuehl, 2000:17), entelektüel ve vizyoner kişilik özelliklerine sahiptirler (Akdemir, 2001:45).

Girişimcilik tutkunun yoğun olduğu ve olması gereken bir olgudur. Çünkü tutku ile performans arasında doğrudan bir ilişki vardır. Girişimciliğin bağlılık, adanmışlık ve fedakârlık duygularını tutku körükleyerek harekete geçirir. Ayrıca girişimcilikte acı ve zorluk ile karşı karşıya kalındığında tutku motivasyonu olumlu yönde etkileyerek olumsuzların etkisini azaltmaktadır (Gülbahar ve Karadal, 2018:53-54). Girişimciliğin en önemli işlevi de yenilikçi ve özgün olmasıdır. Sürecin merkezinde var olan kaynaklardan faydalanarak yeniden yaratma istekliliği vardır (Drucker, 2002:98). Girişimciliğin kritik bir başka noktası ise ileri görüşlülüktür. Başarılar genellikle ileriye görebilen bu sayede rakiplerinin önüne geçebilen girişimlerde meydana gelmektedir. Ayrıca yatırımcılar gelecekle tutarlı öngörüye sahip projelere yatırım yapmayı tercih etmekte bu durumda ileri görüşlü girişimlerin finansman kaynağı bulmasını kolaylaştırmaktadır (Ürper, 2018:49). Ekonominin iyi olmadığı durumlarda girişimcilik faaliyetinde bulunulmaması gerektiği düşüncesi yanlış bir yargıdır. Çünkü ekonomik çöküntülerin çıkışı kendi içinde gizli fırsatlar barındırmaktadır. Bu fırsatların görüldüğü ve cesaretle davranılan girişimcilik örnekleri de başarılı olmaktadır. Riskin yüksek olduğu durumlarda cesaretli davranabilmek girişimciliği maceracı yapmaktadır (Demirdöğen, 2013:51). Holland kişilik yaklaşımında kişiliği altı gruba ayırmış girişimci kişilik özelliklerini maceracı, enerjik ve kendine güveni olan şeklinde sıralamıştır (Özgüner, 2015:153).

2.2. Pazarlama Kavramı

İnsanların kendi kendine yettiği ilk çağlarda pazarlama kavramına ihtiyaç duyulmamaktaydı. Ancak zaman içerisinde nüfus ve kaynaklar arttıkça kişiler arası mal değişiminin miktarı ve sıklığı da artış göstermiştir. Bu çeşitlilik kişilerin tercihlerinin oluşmasına neden olmuştur. Tercih edilme isteği de pazarlama kavramının ortaya çıkmasını sağlamıştır (Altunışık vd., 2002:3). Pazarlama kavramı müşterilerin arzu ve ihtiyaçlarını göz önüne alarak mal ve hizmet üretmek, üretilen mal ve hizmeti fiyatlandırmak, dağıtmak ve tutundurma faaliyetlerini gerçekleştirmek olarak tanımlanmaktadır (Kotler ve Armstrong, 2012:5). Benzer şekilde pazarlama kavramı tüketici istek, arzu ve ihtiyacını uygun mal ve hizmeti işletmeye kâr sağlayacak şekilde üretmek, fiyatlandırmak,

dağıtmak ve tutundurmasını sağlama faaliyetlerinin bütünü olarak tanımlamak mümkündür (Tekin ve Zerenler, 2012:13). İşletmelerin öncelikli amacı müşterilerin satın aldıkları mal ve hizmetlerin ihtiyaçlarını karşılamasıdır. İhtiyacı karşılanan müşterilerin memnun ve mutlu olması ile aynı işletmeyi tekrar tercih etmesi beklenmektedir. Bu noktada işletme ile tüketici arasındaki ilişki pazarlama aracılığıyla kurulacaktır (Karafakioğlu, 2005:4). Pazarlama asıl olarak bir ürünü müşterilere sunmak ve satmaya çalışmak değil, müşteri ihtiyaç ve isteklerini doğru tespit ederek beklentileri karşılayarak ürünü geliştirerek uygun fiyata tüketicilere sunmaktır (Armstrong ve Kotler, 1999:4). Pazarlama planlama ve uygulamaların olduğu, iç içe geçmiş birçok kararın verildiği karmaşık bir süreçtir. Pazarlama ürünün ortaya konması, fiyatlandırılması, dağıtımı ve tutundurma faaliyetleri olmak üzere dört temel bileşenden oluşmaktadır. Süreç içerisindeki bileşenlerin tamamı ortak hedefi müşteri tatminini sağlamaktır (Semenik ve Bamossy, 1995).

Ürün, pazarlama karması elemanlarının ilkinin oluşturan en önemli öğedir (Kotler ve Keller 2012:349). Belirli bir bedel karşılığında elde edilen, ihtiyacı karşılaması ve tüketicide tatmin oluşturmaları beklenen mal ya da hizmet ürün olarak tanımlanmaktadır. Tüketiciler ürünü kalite ve performans olarak değerlendirerek marka ve süreç hakkında değerlendirme yaparlar (Mucuk, 2001).

Fiyat, tüketicilerin bir ürüne sahip olmak için ödemeyi kabul ettiği değerdir. Geçmişte tüketiciler için satın alma davranışını etkileyen en önemli pazarlama karması elemanı fiyat iken günümüzde sadece düşük satın alma gücüne sahip topluluklarda etkili olmaktadır. Fiyat dışı değişkenlerin satın alma kararına olan etkisi giderek artmaktadır (Armstrong ve Kotler, 1999:289). Tüketiciler satın almayı düşündüğü ürün için ödemek istedikleri bir bedel belirlerler. Ödenmek istenilen bedelle ürünün gerçek fiyatı arasındaki farkın artması tüketicileri olumsuz etkilemektedir (İlgaz vd., 2006:168-169). Fiyatlandırma karmaşık bir süreçtir. Yüksek fiyatlandırma tüketiciyi satın almayı ertelemeye ya da ikame malları tercih etmeye yönlendirirken düşük fiyatlandırma işletmenin kâr marjını olumsuz etkilemektedir. Diğer bir açıdan ise yüksek fiyat tüketicide yüksek kalite algısı düşük fiyat ise düşük kalite algısı oluşturmaktadır. Bu neden fiyatlandırmada arz, talep, çevresel faktörler ve hedef kitle göz önünde bulundurulmalıdır. (Peter ve Donnelly, 1998:195).

Dağıtım, üretim ve tüketim arasında bir köprü görevi görmektedir. İşletmenin en az kontrole sahip olduğu pazarlama karması elemanı dağıtımdır. Çünkü ürünler bir yerden başka bir yere ulaştırılırken iç kaynak ve dış kaynak kullanımından faydalanılmaktadır. İşletmenin kendi kaynakları ile ulaşım sağlanması durumunda kontrolü daha yüksekken dış kaynak kullanımında kontrolü daha düşüktür (Ecer ve Canitez, 2004:245). Dağıtımda önemli olan ürünleri tüketiciye doğru zamanda, doğru yerde ve doğru miktarda ulaştırabilmektir. Dağıtımdaki tek kritik nokta işletmeden tüketiciye ürünün ulaştırılması değil aynı zamanda işletmeye ulaşacak ürün tedarikinde de aksama yaşanmamasıdır. İşletmeye ulaşacak ham madde ya da lojistikte yaşanabilecek aksaklık tüm süreci olumsuz etkileyecektir (İlgaz vd., 2006:168-169).

Tutundurma işletmenin geniş bir alana yayıldığı ve tüm tüketicilere ulaşmayı hedeflediği bir işlevidir. Tutundurmada temel amaç tüketicileri ürün ve işletme hakkında bilgilendirmektir. Tutundurmada söz edildiğinde akla ilk olarak reklam gelse de reklam süreç içerisindeki öğelerden sadece bir tanesini oluşturmaktadır. Satış geliştirme, halkla ilişkiler, kişisel satış gibi pek çok unsur tutundurma süreci kapsamında değerlendirilmektedir (İlgaz vd., 2006:168). Ürünü geliştirmek ve iyi fiyatlandırmak tüketicilerin ürünü tercih etmeleri için yeterli değildir. Aynı zamanda bu bilgilerin tüketicilere ulaştırılması da gereklidir. Doğru tüketiciye doğru sıklıkla ulaşan bilgi başarılı bir tutundurma sürecinin vazgeçilmez parçasıdır. Tutundurma sürecinde sadece işletmenin tüketicilere ulaşması yetersizdir. Aynı zamanda tüketicilerde istedikleri zaman işletmelerle ulaşabilmeli ve geri dönüş yapabilmelidir (Kotler, 2000:550).

3. METADOLOJİ VE YÖNTEM

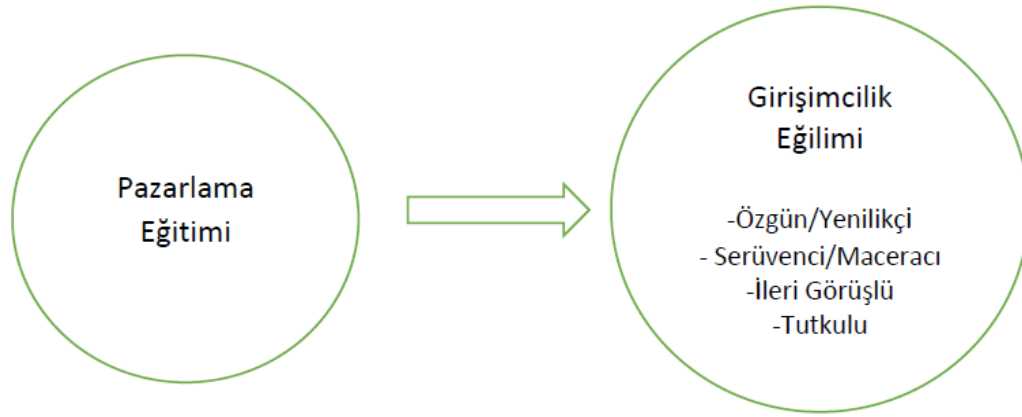
Bu çalışmada pazarlama eğitiminin girişimcilik eğilimi üzerine etkisinin ölçülmesi amacıyla bir saha araştırması yapılmıştır. Araştırmada Türkiye’de pazarlama ve perakende alanında öğrenim gören mesleki ve teknik anadolu lisesi öğrencilerinin görüşlerine anket yöntemi ile başvurulmuştur. 2022 yılı verilerine göre bu alanda eğitim gören öğrenci sayısı 17.307 olarak tespit edilmiştir (MEB, 2022). Bu kapsamda ülkemizde pazarlama ve perakende alanında eğitim gören 602 öğrenciye anket uygulanmış, uygulanan anketlerin 67 adedi gerekli tutarlılığa sahip olmaması nedeniyle çalışma dışı bırakılmış ve araştırma 535 anket verisi üzerinden gerçekleştirilmiştir. 535 örneklem sayısının mevcut evren için %95 güven aralığında olduğu (Altunışık vd., 2004) çalışmada yer alan kabul edilebilir örneklem büyüklüğü tablosundan faydalanılarak tespit edilmiştir.

Anket formunda sosyo-demografik özellikleri ölçen 14 soru, pazarlama eğitimi ve girişimcilik eğilimini ölçen 18 ifade yer almaktadır. Pazarlama eğitimi ölçeği tarafımdan hazırlanmış, girişimcilik eğilimi ölçeği ise (Ercan ve

Yıldıran, 2004) tarafından hazırlanan “Bireysel Girişimcilik Yönelimi Ölçeğinin Türkçeye Uyarlanması” çalışması gözden geçirilerek ortaya konmuştur. Araştırma verileri SPSS 23 ve AMOS 23 paket programları kullanılarak çözümlenmiştir.

Nihai araştırma öncesi pilot çalışma yapılmış elde edilen 45 anket verisi incelenerek ana çalışmayı etkileyebilecek anlam hataları giderilmiştir. Literatür incelemesi sonucunda Şekil 1 de gösterilen model kurulmuş ve hipotezler oluşturulmuştur.

Şekil 1 : Araştırma Modeli



H₁: Pazarlama eğitimi girişimcilik eğilimi alt boyutlarından özgün-yenilikçi alt boyutunu etkilemektedir.

H₂: Pazarlama eğitimi girişimcilik eğilimi alt boyutlarından serüvenci-maceracı alt boyutunu etkilemektedir.

H₃: Pazarlama eğitimi girişimcilik eğilimi alt boyutlarından ileri görüşlü alt boyutunu etkilemektedir.

H₄: Pazarlama eğitimi girişimcilik eğilimi alt boyutlarından tutkulu alt boyutunu etkilemektedir.

4. BULGULAR

Araştırmada 535 katılımcının yaş, cinsiyet, yaşadığı şehir, eğitim gördüğü sınıf düzeyi, kardeş sayısı, aile toplam gelirleri ve anne babalarına ait medeni durum, hayatta olma, eğitim durumu ve meslekleri ile ilgili sosyo-demografik özelliklerine ilişkin veriler toplanmış ve tablo 1 de frekans dağılımları belirtilmiştir.

Tablo 1: Katılımcılara Ait Sosyo-Demografik Özellikler

Yaş	Frekans	%Frekans	Şehir	Frekans	%Frekans	Cinsiyet	Frekans	%Frekans
14 yaş	21	3,9	Ankara	6	1,1	Kadın	223	41,7
15 yaş	111	20,7	Antalya	30	5,6	Erkek	312	58,3
16 yaş	180	33,6	Bursa	33	6,2	Kardeş sayısı	Frekans	%Frekans
17 yaş	117	21,9	Denizli	81	15,1	1 Kardeş	44	8,2
18 yaş	76	14,2	Hatay	61	11,4	2 Kardeş	190	35,5
19 yaş	30	5,6	İstanbul	179	33,5	3 Kardeş	164	30,7
Anne	Frekans	%Frekans	İzmir	49	9,2	4 Kardeş	75	14
Yaşıyor	527	98,5	Kırklareli	50	9,3	5 Kardeş	29	5,4
Vefat Etti	8	1,5	Konya	5	0,9	6 Kardeş	22	4,1
Baba	Frekans	%Frekans	Manisa	26	4,9	7 Kardeş +	11	2,1
Yaşıyor	511	95,5	Muğla	7	1,3	Gelir grubu	Frekans	%Frekans
Vefat Etti	24	4,5	Rize	8	1,5	4.000 TL ve altı	137	25,6
Anne Eğitimi	Frekans	%Frekans	Baba Eğitimi	Frekans	%Frekans	4001-5000 TL	145	27,1
Mezun Değil	74	13,8	Mezun Değil	48	9	5001-6000 TL	69	12,9
İlkokul	268	50,1	İlkokul	226	42,2	6001-7000 TL	51	9,5
Ortaokul	109	20,4	Ortaokul	136	25,4	7001-8000 TL	67	12,5

Lise	71	13,3	Lise	109	20,4	8001 TL ve üstü	66	12,3
Üniversite	13	2,4	Üniversite	16	3	Medeni Durum	Frekans	%Frekans
Anne Meslek	Frekans	%Frekans	Baba Meslek	Frekans	%Frekans	Evli	451	84,3
Çalışmıyor	363	67,9	Çalışmıyor	48	9	Boşanmış	84	15,7
İşçi	131	24,5	İşçi	309	57,8	Sınıf Düzeyi	Frekans	%Frekans
Memur	4	0,7	Memur	19	3,6	9. Sınıf	91	17
Çiftçi	7	1,3	Çiftçi	20	3,7	10. Sınıf	233	43,6
Kendi İşyeri	19	3,6	Kendi İşyeri	99	18,5	11. Sınıf	152	28,4
Emekli	11	2,1	Emekli	40	7,5	12. Sınıf	59	11

Sosyo-demografik veriler incelendiğinde katılımcıların %76,2’sinin 15,16 ve 17 yaşında olduğu, kadın-erkek dağılımının birbirine yakın olduğu, en çok katılımın İstanbul, Hatay ve Denizli gibi büyükşehirlerden olduğu, çoğunlukla 2 yada 3 kardeşe sahip olduğu, düşük gelir grubunda yer aldıkları, ailelerinde boşanma oranının yüksek olduğu, anne ve babalarının büyük çoğunlukta sağ olduğu, anne ve baba eğitim durumunun düşük, anne eğitim durumunun babaya göre de düşük olduğu, annelerinin yüksek oranda çalışmadığı, babaların çoğunluğunun işçi olduğu ve katılımcıların çoğunluğunun 10 ve 11. Sınıf öğrencisi olduğu görülmüştür.

Pazarlama eğitimi ölçeği ifadelerine ilişkin betimsel istatistikler tablo 2 de verilmiştir.

Tablo 2: Pazarlama Eğitimi Ölçeği İfadelerine İlişkin Betimsel İstatistikler

Pazarlama Eğitimi Ölçeği İfadeleri		1	2	3	4	5	Ortalama	Standart Sapma
PE1 Aldığım pazarlama eğitiminin gelecekte bana iyi bir kariyer saylayacağına inanıyorum.	F %	19 3,6	37 6,9	141 26,4	230 43,0	108 20,2	3,693	0,9846
PE2 Aldığım pazarlama eğitiminin mesleki gelişime olumlu katkısı olduğunu düşünüyorum.	F %	7 1,3	22 4,1	89 16,6	310 57,9	107 20,0	3,912	0,8013
PE3 Aldığım pazarlama eğitimi ile ilgili bir alanda çalışmak isterim.	F %	26 4,9	45 8,4	155 29,0	205 38,3	104 19,4	3,591	1,0452
PE4 Aldığım pazarlama eğitiminin iş bulmam konusunda fayda sağlayacağını düşünüyorum.	F %	17 3,2	27 5,0	140 26,2	259 48,4	92 17,2	3,714	0,9172

Katılımcılardan ifadelere katılma derecelerini “1 Hiç Katılmıyorum”, “2 Katılmıyorum”, “3 Kararsızım”, “4 Katılıyorum” ve “5 Kesinlikle Katılıyorum” şeklinde belirtmeleri istenmiştir. Tablo 2 incelendiğinde pazarlama eğitimi ölçeği ifadelerine verilen yanıtların tamamının 3’ün üzerinde ortalamaya sahip olduğu, en çok desteklenen ifadenin 3,91 ile pazarlama eğitiminin mesleki gelişime katkısı olacağı yönünde olduğu görülmüştür.

Girişimcilik eğilimi ölçeği ifadelerine ilişkin betimsel istatistikler tablo 3 de verilmiştir.

Tablo 3: Girişimcilik Eğilimi Ölçeği İfadelerine İlişkin Betimsel İstatistikler

Girişimcilik Eğilimi Ölçeği İfadeleri		1	2	3	4	5	Ortalama	Standart Sapma
GE1 Bilmediğim konularda cesaretle girişimde bulunmayı severim.	F %	19 3,6	83 15,5	137 25,6	195 36,4	101 18,9	3,516	1,0377
GE2 Yüksek getiri sağlayacağına inandığım bir fikre çok fazla zaman harcarım.	F %	6 1,1	37 6,9	99 18,5	252 47,1	141 26,4	3,907	0,905
GE3 Yüksek getiri sağlayacağına inandığım bir fikre çok fazla para harcarım.	F %	6 1,1	41 7,7	140 26,2	223 41,7	125 23,4	3,785	0,9264
GE4 Riskli durumlarda cesur davranma eğilimdeyim.	F %	12 2,2	38 7,1	135 25,2	243 45,4	107 20,0	3,738	0,9335
GE5 Standart olmayan yeni ve sıra dışı aktiviteler denemeyi severim.	F %	12 2,2	46 8,6	122 22,8	239 44,7	116 21,7	3,75	0,9642

GE6 Deneyeceğim aktivite riskli ise denemekten çekinmem.	F %	31 5,8	129 24,1	168 31,4	129 24,1	78 14,6	3,176	1,1264
GE7 İş konusunda kendi fikirlerimle özgün çalışmayı tercih ederim.	F %	5 0,9	38 7,1	120 22,4	266 49,7	106 19,8	3,804	0,8681
GE8 Yeni şeyler öğrenmeye açığımdır.	F %	11 2,1	15 2,8	46 8,6	248 46,4	215 40,2	4,198	0,8644
GE9 Bir problemi çözerken kendi fikirlerimle hareket ederim.	F %	7 1,3	60 11,2	127 23,7	227 42,4	114 21,3	3,712	0,9673
GE10 Bir işi başkasının yapmasını beklemek yerine kendim yaparım.	F %	7 1,3	35 6,5	110 20,6	250 46,7	133 24,9	3,873	0,905
GE11 Sektörde gelecekte yaşanabilecek problemleri öngörebilirim.	F %	11 2,1	31 5,8	219 40,9	207 38,7	67 12,5	3,538	0,86
GE12 Sektörde gelecekte ortaya çıkabilecek ihtiyaçları tahmin edebilirim.	F %	11 2,1	51 9,5	202 37,8	212 39,6	59 11,0	3,48	0,8864
GE13 Genellikle gelecekte yaşanabilecek değişiklikleri öngörebilirim.	F %	18 3,4	59 11,0	194 36,3	200 37,4	64 12,0	3,436	0,9535
GE14 Başkalarının yaptığı çalışmalara ortak olma eğilimindeyimdir.	F %	27 0,5	71 13,3	196 16,6	185 34,6	56 10,5	3,321	0,9988

Tablo 3 incelendiğinde girişimcilik ölçeğine ilişkin ifadelere verilen yanıtların tamamının ortalamasının 3'ün üzerinde ortalamaya sahip olduğu, en çok desteklenen ifadenin 4,19 ile katılımcıların yeni şeyler öğrenmeye açık olduklarını belirttikleri ifade olduğu görülmüştür.

Modelin ölçeklerine ilişkin açıklayıcı faktör analizi yapılmış, analiz yapılmadan önce modelin açıklayıcı faktör analizi yapılmaya uygunluğu Kaiser-Meyer-Olkin Örneklem Yeterliliği Ölçüm Testi (KMO) ile ölçülmüştür. Yapılan KMO ölçümlerinde 0-1 aralığında çıkan değer 0,70 in üzerinde olması açıklayıcı faktör analizi yapılması için yeterli görülmektedir (Alpar, 2014:529). Tablo 4 incelendiğinde yapılan KMO sonucunun 0,79 çıktığı bu nedenle örneklem büyüklüğünün yeter seviyede olduğu görülmüştür. Ayrıca Bartlett testi sonuçları da değişkenler arasında ilişkinin olduğu ve değerlerin anlamlı olduğunu göstermektedir.

Tablo 4: Girişimcilik Eğilimi Ölçeğine İlişkin KMO ve Bartlett Testi

KMO ve Bartlett Testi	
Kaiser-Meyer-Olkin Örneklem Yeterliliği Ölçüm Testi	0,79
Bartlett Testi	Yaklaşık Ki-Kare
	Serbestlik Derecesi (df)
	Anlamlılık (Sig.)
	1653,302
	91
	0

KMO ve Bartlett Testi sonuçlarının yeterli ve anlamlı olması sonrasında ölçeğin açıklayıcı faktör analizi yapılarak tablo 5 de gösterilmiştir.

Tablo 5: Girişimcilik Eğilimi Ölçeğinin Açıklayıcı Faktör Analizi Sonuçları

İfadeler	Faktör Yük Değerleri				Öz Değer	Varyans Açıklama Oranı
	Özgün-Yenilikçi	Serüvenci-Maceracı	İleri Görüşlü	Tutkulu		
GE7	0,719				3,801	14,828
GE9	0,694					
GE10	0,644					
GE8	0,629					
GE4		0,744			1,452	14,588
GE5		0,693				
GE6		0,690				
GE1		0,586				
GE12			0,775		1,376	14,357
GE13			0,775			
GE11			0,728			

GE2	0,841		
GE3	0,809	1,256	12,562
GE14	0,455		

Tablo 5 incelendiğinde girişimcilik eğilimi ölçeğinin toplam 14 ifade ve 4 faktörden oluştuğu, birinci faktörün 4 ifadeden oluştuğu ve toplam varyansın %14,828'ini açıkladığı, ikinci faktörün 4 ifadeden oluştuğu ve toplam varyansın %14,588'ini açıkladığı, üçüncü faktörün 3 ifadeden oluştuğu ve toplam varyansın %14,357'sini açıkladığı ve dördüncü faktörün 3 ifadeden oluştuğu ve toplam varyansın %12,562'sini açıkladığı, faktörlerin toplam varyansın %56,329'unu açıkladığı görülmüştür.

Pazarlama eğitimi ölçeğine ilişkin KMO ve Bartlett Testi sonuçları tablo 6 da verilmiştir. Tablo 6 incelendiğinde yapılan KMO sonucunun 0,768 çıktığı bu nedenle örneklem büyüklüğünün yeter seviyede olduğu görülmüştür. Ayrıca Bartlett testi sonuçları da değişkenler arasında ilişkinin olduğu ve değerlerin anlamlı olduğunu göstermektedir.

Tablo 6: Pazarlama Eğitimi Ölçeğine İlişkin KMO ve Bartlett Testi

KMO ve Bartlett Testi		
Kaiser-Meyer-Olkin Örneklem Yeterliliği Ölçüm Testi		0,768
Bartlett Testi	Yaklaşık Ki-Kare	584,983
	Serbestlik Derecesi (df)	6
	Anlamlılık (Sig.)	0

KMO ve Bartlett Testi sonuçlarının yeterli ve anlamlı olması sonrasında ölçeğin açıklayıcı faktör analizi yapılarak tablo 7 de gösterilmiştir.

Tablo 7: Pazarlama Eğitimi Ölçeğinin Açıklayıcı Faktör Analizi Sonuçları

İfadeler	Pazarlama Eğitimi	Öz Değer	Varyans Açıklama Oranı
PE1	0,676	2,421	60,53
PE2	0,568		
PE3	0,668		
PE4	0,509		

Tablo 7 incelendiğinde pazarlama eğitimi ölçeğinin toplam 4 ifade ve 1 faktörden oluştuğu, faktörün toplam varyansın %60,53'ünü açıkladığı görülmüştür.

Pazarlama eğitimi ve girişimcilik eğilimi ölçeklerine ait güvenilirlik analizi yapılmış ve tablo 8 de gösterilmiştir. Cronbach's Alpha (α) Katsayıları yapılan ölçümlerde 0-1 aralığında çıkmakta, değerin 0,70 in üzerinde olması testin güvenilirliği açısından yeterli görülmektedir.

Tablo 8: Ölçek Boyutlarına İlişkin Güvenilirlik Analizi Sonuçları

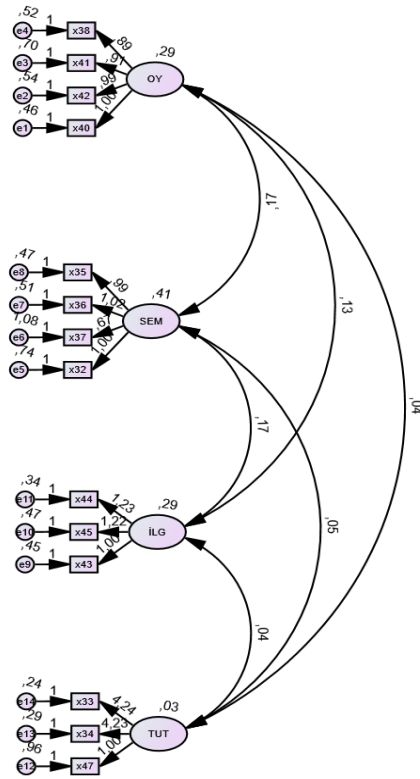
Ölçekler	Boyutlar	Madde Sayısı	Cronbach's Alpha (α) Katsayıları	
Pazarlama Eğitimi		4	4	0,779
Girişimcilik Eğilimi	Özgün-Yenilikçi	4	14	0,773
	Serüvenci-Maceracı	4		
	İleri Görüşlü	3		
	Tutkulu	3		

Tablo 8 incelendiğin ölçek ve ölçek boyutlarına ait güvenilirlik değerlerinin yeterli olduğu ve ölçeğin güvenilir olduğu görülmüştür.

Yapılan açıklayıcı faktör analizinde belirlenen ölçeklerin doğruluğunu ispatlamak için doğrulayıcı faktör analizi yapılmıştır. Bu sayede açıklayıcı faktör analizi ile ortaya konan ifadelerin doğrulayıcı faktör analizi kullanılarak ne derece doğru olduğuna bakılmıştır. AMOS 23 paket programı kullanılarak yapılan doğrulayıcı faktör analizinde veri setinin model ve modelin boyutlarına uyumluluk derecesi test edilmiştir.

Yapılan açıklayıcı faktör analizi ile girişimcilik eğilimi ölçeğinin özgün-yenilikçi, serüvenci-maceracı, ileri görüşlü ve tutkulu olmak üzere dört boyuttan meydana geldiği görülmüştür. Doğrulayıcı faktör analizi kullanılarak girişimcilik eğilimi ölçeğinin boyutları arasındaki etkileri oluşturulan yol diyagramı aracılığıyla şekil 2 de gösterilmiştir.

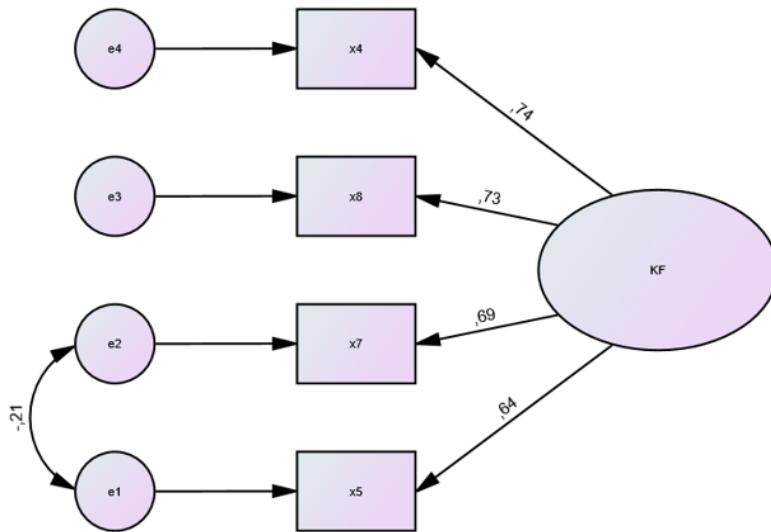
Şekil 2: Girişimcilik Eğilimi Doğrulamalı Faktör Analizi Diyagramı



Girişimcilik Eğilimi Ölçeği boyutları arasında uygulanan modifikasyon indeksleri sonucunda $p=0,000<0,05$ olduğundan modelin istatistiksel olarak anlamlı olduğu görülmüştür. Ortaya çıkan modelin uyum iyiliği değerleri Genel Model Uyumu $\chi^2/df=1920$, Normlaştırılmış Uyum İndeksi NFI=0,918, Normlaştırılmamış Uyum İndeksi NNFI (TLI)=0,947, Arttırılmalı Uyum İndeksi IFI=0,959, Karşılaştırmalı Uyum İndeksi CFI=0,959, Yaklaşık Hataların Ortalama Karekökü RMSEA=0,042, İyilik Uyum İndeksi GFI=0,964, Düzeltilmiş İyilik Uyum İndeksi AGFI=0,947 ve Ortalama Hataların Karekökü RMR=0,038 olarak hesaplanmıştır. Uyum iyiliği değerleri incelendiğinde modelin uyum kriterlerini karşıladığı görülmektedir.

Doğrulamalı faktör analizi kullanılarak pazarlama eğitimi ölçeği test edilmiştir. Ölçek ifadelerinin etkileri oluşturulan yol diyagramı aracılığıyla şekil 3 de gösterilmiştir.

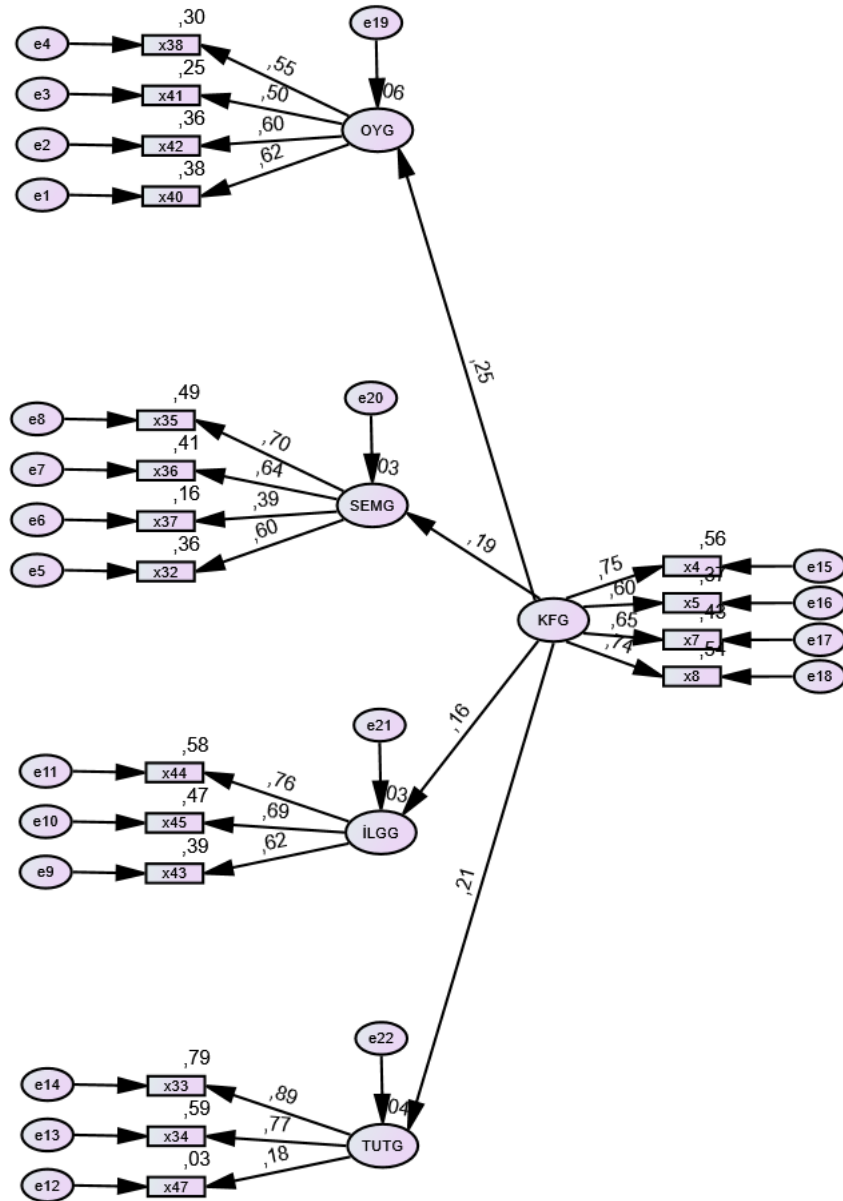
Şekil 3: Pazarlama Eğitimi Doğrulamalı Faktör Analizi Diyagramı



Pazarlama Eğitimi Ölçeği boyutları arasında uygulanan modifikasyon indeksleri sonucunda $p=0,000<0,05$ olduğundan modelin istatistiksel olarak anlamlı olduğu görülmüştür. Ortaya çıkan modelin uyum iyiliği değerleri Genel model uyumu $\chi^2/df=0,369$, Normlaştırılmış uyum indeksi NFI=0,999, Normlaştırılmamış uyum indeksi NNFI (TLI)=1,007, Arttırmalı uyum indeksi IFI=1,000, Karşılaştırmalı uyum indeksi CFI=1,001, Yaklaşık hataların ortalama karekökü RMSEA=0,000, İyilik uyum indeksi GFI=1,000, Düzeltilmiş iyilik uyum indeksi AGFI=0,997 ve Ortalama hataların karekökü RMR=0,004 olarak hesaplanmıştır. Uyum iyiliği değerleri incelendiğinde modelin uyum kriterlerini karşıladığı görülmektedir.

Pazarlama eğitimi ölçeği ve girişimcilik eğilimi ölçeği alt boyutlarının arasındaki ilişkileri ölçmek için araştırma modeli oluşturulmuş ve şekil 4 de gösterilmiştir. Ayrıca modele ilişkin tahmin edilen parametreler ve standartlaştırılmış toplam etkiler tablo 9 ve tablo 10 da belirtilmiştir.

Şekil 4: Araştırma Modeli Diyagramı



Tablo 9 : Modele İlişkin Tahmin Edilen Parametreler

			Regrasyon Katsayısı	S.E.	C.R.	P	Standartlaştırılmış Regrasyon Katsayısı	Belirlilik Katsayısı
OY	<--	PE	0,177	0,045	3,948	***	0,245	0,044
SEM	<--	PE	0,162	0,052	3,126	0,002	0,185	0,027
İLG	<--	PE	0,119	0,041	2,860	0,004	0,164	0,034

TUT	<--	PE	0,052	0,019	2,730	0,006	0,209	0,060
Tablo 10: Standartlaştırılmış Toplam Etkiler								
		PE	TUT	İLG	SEM	OY		
TUT		0,209	0,000	0,000	0,000	0,000		
İLG		0,164	0,000	0,000	0,000	0,000		
SEM		0,185	0,000	0,000	0,000	0,000		
OY		0,245	0,000	0,000	0,000	0,000		

Elde edilen veriler incelendiğinde Pazarlama eğitimi ölçeğinin girişimcilik eğiliminde yer alan tutkulu, ileri görüşlü, serüvenci-maceracı, özgün-yenilikçi alt boyutlarını anlamlı ve pozitif yönde etkilediği görülmüş elde edilen parametreler istatistiki olarak anlamlı olduğu görülmüştür. Modele ilişkin oluşturulmuş H1, H2, H3 ve H4 anlamlı pozitif yönde etkilendiğinden Doğrulanmıştır.

H₁: Pazarlama eğitimi girişimcilik eğilimi alt boyutlarından özgün-yenilikçi alt boyutunu etkilemektedir. / **Doğrulanmıştır.**

H₂: Pazarlama eğitimi girişimcilik eğilimi alt boyutlarından serüvenci-maceracı alt boyutunu etkilemektedir. / **Doğrulanmıştır.**

H₃: Pazarlama eğitimi girişimcilik eğilimi alt boyutlarından ileri görüşlü alt boyutunu etkilemektedir. / **Doğrulanmıştır.**

H₄: Pazarlama eğitimi girişimcilik eğilimi alt boyutlarından tutkulu alt boyutunu etkilemektedir. / **Doğrulanmıştır.**

5. SONUÇ

Küreselleşen dünyada ticaret hayatının içerisinde yer alan küçük ya da büyük tüm işletmeler mal ve hizmetlerini tüketicilere duyurmak için çeşitli pazarlama yöntem ve tekniklerine başvurumaktadırlar. Gerek geleneksel gerek dijital yöntemler aracılığıyla tüketicilere ulaşmayı hedefleyen işletmelerin ihtiyaç duyduğu ana kaynak nitelikli, donanımlı ve çağdaş şekilde eğitim almış insan kaynağıdır.

Girişimcilikte mikro ölçekte işletme kârlarını arttırırken makro bazda kaynakların optimizasyonunu, refahın artmasını, ekonomik gelişmelerin sağlanmasını ve yeniliğin ortaya çıkmasını sağlamaktadır. Girişimciliğin genellikle doğuştan gelen bir yetenek olduğuna inanılsa da eğitimle kişiler girişimcilik yetenekleri elde edebilmekte ve var olan yeteneklerini geliştirebilmektedir.

Pazarlama eğitimi almış insan kaynağının da genellikle girişimcilik eğilimine sahip olduğu düşünülmektedir. Yapılan bu çalışmada Türkiye de pazarlama eğitimi alan lise düzeyi öğrencilerin görüş ve yargılarına başvurulmuştur. Elde edilen verilerin farklı istatistiki yöntem ve teknikler kullanılarak analiz edilmesi sonucunda pazarlama eğitiminin girişimcilik eğiliminin serüvenci-maceracı, tutkulu, ileri görüşlü ve özgün-yenilikçi alt boyutları üzerinde anlamlı ve pozitif etkisinin olduğu görülmüştür.

Bu çalışma temel alınarak farklı mesleki alanlarda eğitim gören öğrenciler üzerinde daha geniş ve kapsamlı ölçekler kullanılarak çalışma yapılması ve ortaya çıkan sonuçların direk ve dolaylı etkilerinin ortaya konması önerilmektedir.

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Çağdaş Çeviri Anlayışının Yabancı Dil Öğretimine Katkısı

Öğr. Gör. Dr. Coşkun DOĞAN¹

¹ Trakya Üniversitesi / Eğitim Fakültesi / Yabancı Diller Bölümü, coskundogan2002@yahoo.de, ORCID:
<https://orcid.org/0000-0002-6072-2721>

Özet: Dünyada yaşanan hızlı teknolojik gelişmelere paralel olarak, her alanda olduğu gibi dillerarası çeviri anlayışında ve uygulamalarında değişimler olmuştur. Özellikle çeviri ve kültür; çeviri ve toplum ilişkisi bağlamında yapılan bilimsel araştırmalar, çevirinin farklı işlevlerini ortaya çıkardığı gibi, çalışma alanın da genişlemesine neden olmuştur. Ayrıca bu çalışmalar, çevirinin özgün bir bilimsel disiplin olarak bilim dünyasında yer bulmasına da olanak sağlamıştır.

Yabancı dil öğrenmek, farklı bir dile ait kültürü ve bu kültürün uygulandığı toplumu da tanımak anlamına gelmektedir. Bu açıdan bakıldığında, yabancı dil öğretim yöntemlerinin, çevirinin dilsel ve kültürel aracılığı göz ardı etmemesi gerekliliği ortaya çıkmaktadır. Çünkü, kültürlerarası iletişim dili çeviridir. Özellikle, farklı kültürlerle sahip toplumların sıkça bir araya geldiği bugünkü dünyada, farklı olanı anlamak ve kendini ifade etmek için, yabancı dil öğretiminde çevirinin katkısı büyüktür.

Çeviri eyleminin son yüzyıl içerisinde yaşadığı işlevsel değişim ile yabancı dil öğretimi arasında çok sıkı bir ilişki vardır. Çeviribilim alanında yapılan kültürlerarası araştırmaların, kültüre aracı olan dilin, yabancı dil olarak öğrenilmesine büyük katkısı söz konusudur. Yabancı dil öğretimi, yeni bir kültürle karşılaşmak anlamına gelmektedir. Farklı kültürlerin öğrenme sürecinde karşılaşması, yabancı olanı öğrenirken kendi olanın da farkına varmayı sağlayacaktır. Bu bağlamda çağdaş anlamda çeviri anlayışı, yabancı dil öğretiminde kullanılması kaçınılmazdır.

Bu çalışma, ilk olarak çeviri eyleminin çalışma anlayışının değişimine vurgu yapacaktır. İkinci olarak geleneksel yabancı dil öğretiminde çevirinin yerini açıklarken, çevirinin değişen anlayışı ile birlikte yabancı dil öğretimine sağlanacak katkılar irdelenecektir. Yabancı dil öğretimine, dilsel, kültürel ve toplumsal anlamda büyük katkı sağlayacağı düşüncesinden hareketle; çeviri alanında meydana gelen değişimler, bilimsel örneklerle literatür tarama yöntemi ile ortaya konmaya çalışılacaktır.

Anahtar Kelimeler: Çeviri, Yabancı Dil Öğretimi, Değişim

Contribution of Contemporary Translation Approach to Foreign Language Teaching

Abstract: Parallel to the rapid technological developments in the world, there have been changes in the understanding and practices of interlingual translation as in every field. Especially translation and culture; Scientific researches carried out in the context of translation and society relations have revealed the different functions of translation and also led to the expansion of the field of study. In addition, these studies have enabled translation to find a place in the scientific world as a unique scientific discipline.

Learning a foreign language also means getting to know the culture of a different language and the society in which this culture is practiced. From this point of view, it becomes clear that foreign language teaching methods should not ignore the linguistic and cultural mediation of translation. Because the language of intercultural communication is translation. Especially in today's world where societies with different cultures come together frequently, translation has a great contribution in foreign language teaching in order to understand the different and express oneself.

There is a very close relationship between the functional change experienced by the translation act in the last century and foreign language teaching. Intercultural studies in the field of translation studies have made a great contribution to the learning of the language, which is a tool for culture, as a foreign language. Teaching a foreign language means encountering a new culture. The encounter of different cultures in the learning process will enable you to realize your own while learning the foreign. In this context, it is inevitable to use the understanding of translation in the contemporary sense in foreign language teaching.

This study will first emphasize the change in the working understanding of the act of translation. Secondly, while explaining the place of translation in traditional foreign language teaching, the contributions to be made to foreign language teaching with the changing understanding of translation will be examined. Considering that it will make a great contribution to foreign language teaching, linguistically, culturally and socially; Changes in the field of translation will be tried to be revealed with scientific examples and literature review method.

Keywords: Translation, Foreign Language Teaching, Change

1. GİRİŞ

İnsanlık tarihinden her döneminde varlığından söz edilen çeviri, insanlararası gerçekleşen iletişimde anlaşılma sürecini anlaşılır kılmak için kullanılan bir anlaşma aracıdır. Sağlıklı dilsel iletişimin gerçekleşmesi, sosyo-kültürel yapıya sahip farklılıklar arasında doğabilecek olumsuz çatışmaların önüne geçecektir. Bu anlamda çeviri, insanların her alanda paylaşımında ve uygarlıkların gelişmesinde her dönem önemli rol oynamıştır. Diller ve kültürler arasında dilsel bir aktarım aracı olan (Vardar, 1982:18) çeviri, insanlık tarihinin her çağında farklı toplamları birbirine karşı daha toleranslı kılmıştır. Çeviri etkinliği her ne kadar, kaynak dil metinlerinden amaç dile dilsel aktarım gibi düşünülse de, uygarlığın gelişmesine paralel olarak, farklılıkların kültürel birikimlerine anlamsal eşdeğerlilik sağlamak amacıyla kendini kapsam ve çalışma alanını genişletmiştir. Bu bağlamda çevirinin uygulanışı şekillerinde de değişimler olmuştur.

Çeviri etkinliği oldukça karmaşık bir süreçtir. Çeviri sadece sözcüklerin farklı dilde aktarılması şeklinde gerçekleşmemektedir. Çeviri etkinliğinin disiplinlerarası ilişkilerin en çok gerekliliğinin duyulduğu bir alandır. Çeviri etkinliğinde özellikle, dilsel alanda her iki dilin çok iyi bilinmesi, gerekliliğine karşın, her iki dilin ait olduğu kültürün de çok iyi bilinmesi önemlidir. Dil ve kültür arasında sıkı bir bağ olduğu gibi, kültürün uygulandığı toplumun yapısının da yani dilin pratikte kullanıldığı yer olarak çeviri etkinliğinde anlamı büyüktür. Dilsel bağlamda çeviri etkinliği özellikle yüzyıllardır bir alt ögesi olarak kaldığı bilim dalı dilbilimin çalışma alanına dâhildir. Ayrıca çeviri, Kuran'a göre (1993). metinbilim, ruhbilim, göstergebilim alanlarının araştırmalarına da konu olmaktadır. Kültür boyutu ile, edebiyatçıların, tarihçilerin, toplumbilimcilerin, inceleme alanları olmuştur (Akt.Yalçın, 2015:12).

Çeviri etkinliğini. Yücel'e göre (2016:7). genel olarak bilim dışı söylemlerin hüküm sürdüğü dönemler ve bilimin hakim olduğu şeklinde iki bölümde incelemek gerekmektedir. Ancak çeviri uygulamaları bağlamında her iki dönemin de bilinmesi ve birbirinden ayrılmaması önemlidir. Çevirinin 20. Yüzyılın ikinci yarısından itibaren dilbilimden ayrılarak bağımsız bir bilim dalı olarak ortaya çıkmasında çeviri alanında yapılan araştırmaların önemi büyüktür. Bu anlamda çeviri kuramcılarının yaşanan çağa uygun olarak çeviri anlayışı oluşturmaya çalışmaları, çeviri etkinliğine ayrı bir yön vermiştir. Her bilimsel alanla ilişkilendirilen çeviri etkinliğinin, eğitim alanında özellikle de çevirinin ana çalışma aracı olan yabancı dil öğretimin de de kullanılması kaçınılmazdır.

Çeviri etkinliğinin, öteden beri yabancı olanı tanıdık kılmak gibi görevi olduğu bilinmektedir. Bu anlamda çeviri tarihsel süreç içerisinde yabancı bir dil öğretiminde çeşitli yöntemlerle kullanılmıştır. Yabancı dil öğretiminde salt çevirinin kullanılması (Dilbilgisi- Çeviri Yöntemi) çok etkili olmadığı için, zaman zaman çeviri ders dışı bırakılmış, bunun yerine sadece amaç dil kullanılmıştır. Ancak, çeviri etkinliğinin, kapsam alanı genişledikçe ve farklı bilimsel disiplinlerle çalışma alanları kesiştikçe, çeviri etkinliğinin bilgi paylaşımında yaşamsal bir rol oynadığı görülmüştür. Özellikle bugün, teknolojinin çok hızlı gelişmelere kaynaklık ettiği bu yüz yılda, çeviri, insan etkinliklerinin anahtar olgusu haline gelmiştir. Yabancı bir dil bilmenin yanında o dile ait kültür ve toplumsal yapının da tanınması gerekliliği, çeviri etkinliğini yabancı dil öğretimi sürecinde neredeyse zorunlu hale getirmiştir.

2. ÇEVİRİNİN TANIMI VE ÇEVİRİNİN TARİHSEL SÜRECİ

Çeviri, insanlık tarihinin en eski iletişimsel etkinliğidir. Bireyin var olduğu coğrafyada çevresindeki canlıları tanımak ve onları tanımlama için, ses taklitleri yapmıştır. Bir tür anlaşma aracı olan sesli taklit, en doğal çeviri etkinliğidir. Ancak dünyada farklı dillere sahip insan grupları yaşamaktadır. Çeşitli vesilelerle karşılaşan bu gruplar, birbirlerini anlamak için dilsel iletişim sorunlarına çözüm aramışlar ve çeviri bu farklılıklara anlaşma dili olarak buluşma noktası olmuştur. Bu anlamda çeviri, en basit anlamda, bir dilden farklı bir dile aktarım etkinliğinin adıdır (Yalçın, 2015:10). Çeviri diller arasında salt sözcüklerin eşdeğerliklerini bulmak anlamına gelmemektedir. Çeviri kültürlerarası bir eylemdir. Farklı kültürlerin buluştuğu bir ortamdır. Çeviri, farklı kültürler arasındaki sorunların çözümünde kullanılan iletişimin özel bir şeklidir (Ammann, 2008:35). Çalışma hayatında kapsam alanı gittikçe genişleyen çevirinin, tanım açısından oldukça zengindir. İnsanlık tarihini yakından etkileyen ve insanlığın varoluşundan beri farklılıklar arasında iletişim hizmeti sunan çeviri, uygarlıkların gelişimine paralel olarak görev değişimleri yaşamıştır.

Eski Yunan'dan başlayarak Uygur Türkleri, Mısır İskenderiye, Bağdat, İslam Medeniyeti, Latin âleminde, Avrupa'da ve dünyanın diğer ülkelerinde uygarlığın gelişmesinde çeviri büyük rol oynamıştır. Çeviri etkinliğinin olmadığı ve kesintiye uğradığı zamanlarda insanlığın uygarlaşmaya yönelik ileriye dönük atımları durmuştur. Buna en iyi örnek Ortaçağ dönemidir. Daha sonra Avrupa'da yaşanan Rönesans hareketleri ve din de reform çeviri etkinliği aracılığı ile yaşanmıştır (Ülken, 2016: 3-4).

Çeviri etkinliği antik çağdan bilimin etkin hale geldiği yeniçağa kadar klasik yöntemlerle yapılmış bir etkinliktir. Özellikle yazının ve matbaanın bulunmasıyla birlikte çeviri etkinliği, insanlık tarihinin her alanında etkin rol oynamıştır. İnsan coğrafik olarak dünyayı keşfettikten sonra oldukça farklı kültürle karşılaşmıştır. Bu kültürleri tanımak ve onları anlık ortak bir dil ortamından geçmektedir. Bu da çeviri etkinliği ile olasıdır (Yücel, 2016:12). Çeviri uzun süre dilbilimin yapısalcı düşüncesi altında dil sentezi şeklinde varlığını sürdürdü. Ancak dünyada yaşanan hızlı değişimler çeviri alanını da yakından etkilemiştir.

İçerisinde yaşanan yüzyılın son çeyreğinde çeviribilim alanı, dilbilimin alt bir ögesi olmaktan çıkarak kendi özgün kimliğine kavuşmuştur. Kendine özgün dilbilimden farklı bir bilimsel alanı olan çeviri, farklı bilimsel disiplinlerle olan ilişkileri ve alanda yapılan araştırmalarla kapsam alanı oldukça genişlemiştir. Çevirinin salt belli sınırlar içerisinde görmek, çağdaş çeviri anlayışı ile zıtlık oluşturmaktadır. Çevirinin alanlar arası bir bilim dalıdır. Çevirinin, siyaset, ekonomi, sosyoloji, dilbilim, etimoloji, psikoloji gibi alanlarla her zaman etkileşim içerisinde bulunmaktadır (Yücel, 2016:22). Çağdaş çeviri anlayışıyla kültür ve kültürlerarasık ön plana çıkmıştır. Özellikle erek kültür ve kültürün uygulandığı toplumsal yapı çeviri eyleminin birincil hedefi olmuştur. Bu anlamda yapılan çeviri çalışmaları, günümüz çeviri araştırmalarına ışık tutmuştur. Bu çeviri yaklaşımlarının amacı ve çeviri çalışmalarında bulunduğu karşılıklar kısaca şu şekildedir.

1-Çağdaş çeviri yaklaşımları “Betimleyici Çeviribilim Çalışmaları” (Descriptive Translation Studies/DTS) Gideon Toury’nin Itamar Even-Zohar’ın çoğul dizge kuramını geliştirmesiyle başlamıştır. Betimleyici çeviribilim çalışmaları, erek kültür odaklı çeviri çalışmalarının ön plana çıktığı bir yaklaşımdır. Çeviri etkinliği, kaynak metni göz ardı ederken sadece erek kültürün bir parçası olarak görülmektedir. 2- Çağdaş çeviri yaklaşımlarından Even-Zohar’ın “ Çoğul Dizge Kuramı”, çevirinin toplumsal baskılar nede kiyle erek kültürdeki işlevi önemlidir. Erek kültürle çeviri arasında ki nedensellik ilişkisi irdelenmektedir. 3- Bir Eylem Olarak Çeviri (Holz-Mänttäri), çevirinin amaca dayalı bir eylem olduğunu vurgularken, çevirinin kültürlerarası bir iletişim olduğunu ve erek kültürün ve normlarının çeviride göz önünde bulundurulması gerektiğini savunmaktadır.4-Skopos kuramına göre ise, çeviri diğer kazanımlar gibi bir ereğe ve işleve yönelik gerçekleştirilmelidir. Çeviri eyleminde erek dilin kültürünün biricil öncelik olarak ele alınması önemlidir. Yani çeviri, kaynak metnini ne getirdiğine bakılmaksızın erek kültürün beklentilerine göre uyarlanmalı düşüncesi savunulmaktadır (Okuyan, 2021:61-66). .

3. YABANCI DİL ÖĞRETİM YÖNTEMLERİ

Dil, bireyin yaşamsal gereksinimlerini karşılamak ve içerisinde yaşadığı toplumsal yapıya katılım merkezidir. Dil, bir kültürün taşıyıcısı olarak bireyin edindiği kültürle birlikte düşünme aracıdır. Bir dili edinmek, dili her anlamda kullanmak değil aynı zaman da dilin ait olduğu kültürü de yaşam içerisinde uygulamak demektir (Tosun 2022:5). Birey, anadilini edinirken her hangi bir kurallar ya da kuramlar çerçevesinde öğrenmemektedir. Ana dilini edinmektedir. Hatta birey ikinci bir dili de edinebilir. Her dilin içerisindeki özgün gizli sistemli kurallar, bireyin doğumundan itibaren ilk çocukluk döneminde deneme- yanılma, çok tekrarlar şeklinde anlamsal anlamda kazılmaktadır. Dil öğretimi ise, anlamsal anlamdan çok yapısal bağlamda dilin özelliklerini öğrenmektedir. İster yabancı dil olsun ister ana dil olsun dilin yapısal olarak öğrenilmesi, dili sistematik belli kural ve yöntemler çerçevesinde öğretilmesidir.

Hızlı teknolojik gelişmelerin beraberinde getirdiği her alandaki kolaylıklar, farklı dillerin kısa sürede öğretilmesini ve öğrenilmesini zorunlu hale getirmiştir. Bu bağlamda dil araştırmacıları dillerin gereksinimi ve öğrenen kimselerin öğrenme hedeflerini göz önünde bulundurarak, her çağa uygun olarak yeni yabancı dil öğretim yöntemleri geliştirmişlerdir. Bireyin kendinden farklı olan şeyi öğrenmesinin en kolay yolu taklittir. Tarih süreç içerisinde yabancı ya da farklı olanı taklit yoluyla anlamaya ve onlarla anlaşmaya çalışan birey, zamanla bunu başarmış ve kısa sürede daha etkin olması için çaba göstermiştir. Bu bağlamda yabancı dil öğretimi için belli yöntemler oluşturulmuştur. Özellikle, tüm dünyada farklı dil ve kültürlerle ait çok mensubu olan büyük dinlerin anlaşılır kılınması için yabancı dil öğretimi bir koşul olmuştur. İncili anlamak için eski Yunanca ve Latince, Tevrat’ı anlamak için İbranice Ve Kuran-ı anlamak için Arapça öğrenmek gerekmiştir. Bu dönemlerde daha çok hem anlamsal hem de yapısal yabancı dil öğretim yöntemleri kullanılmıştır. Bunların en önemlisi olan ve 20. Yüzyılın başlarına kadar kullanılan Dilbilgisi – Çeviri Yöntemidir (Asutay, 2020:21). Bu yöntem aracılığı ile yabancı dil öğretimi, amaç dildeki sözcüklerin öğrenilerek hedef dilde ki anlamına uygun olarak çevrilmesi yoluyla gerçekleştirilmiştir.

Ancak, sanayi devriminden sonra hızlanan uluslararası ilişkiler ve bugünün dünyasında son çeyrek yüzyılda yaşanan hızlı ulaşım ve iletişim olanakları, yabancı dil öğrenimini belli bir zümrenin işi olmadığı, aksine tüm herkesin yabancı dil veya diller öğrenmesini zorunlu hale getirmiştir (Neuner & Hunfeld, 1993:45). Bu bağlamda, yabancı dil öğrenenlerin gereksinimleri ve amaçları doğrultusunda yeni yabancı dil öğretim

yöntemleri geliştirilmiştir. Farklı yabancı dil öğretim yöntemlerinin ortaya çıkması, yabancı dil öğreniminin farklı bilimsel alanlarla olan yakın ilişkisine de bağlıdır. Bu anlamda Tapan (1985: 5) şöyle düşünmektedir: Yabancı dil öğretiminin kuramsal temelini belirleyen çeşitli bilim dallarıdır. Bu değişimler, yabancı dil öğretim yöntemlerinin de beraberinde getirmektedir (Akt: Tosun& Yüksel: 2022:9).

Bugün yabancı dil öğretim yöntemlerinde oldukça çok çeşitlilik görülmektedir. Ancak hangi yabancı dil öğretim yönteminin daha etkin olduğunu söylemek olası değildir. Aynı anda birden çok yöntemin de karışık olarak kullanılması mümkündür. Yabancı dil öğretiminde faydalı olarak görülen yöntemler, her zaman için kendine yabancı dil öğretim kitaplarında yer bulmuştur. Yabancı dil öğretiminde kullanıla oldukça çok yöntem olduğu görülmektedir. Ancak bunlardan en çok kullanılan yöntemleri tarihsel kullanım sırasıyla saymak gerekirse; Dilbilgisi-Çeviri Yöntemi, Düzevarım Yöntemi, İşitsel- Dilsel Yöntem, İşitsel- Görsel yöntem, Bilişsel Yöntem, İletişimsel Dil Öğretim Yöntemi, Kültürlerarası Yaklaşım, Yapılandırıcı Yöntem, şeklinde yer almaktadır. Her yöntemin kendine göre olumlu ya da günün koşullarına göre olumsuz yönleri söz konusudur. Ancak, yöntemler her zaman öğrenim ve öğretim esnasında birbirlerini tamamlayıcı niteliktedir.

4. ÇEVİRİNİN YABANCI DİL ÖĞRETİMİNDE GEREKLİLİĞİ

Yabancı dil öğretiminin nasıl etkin şekilde gerçekleştirileceği her zaman bir tartışma konusu olmuştur. Çağlar boyunca çeşitli yabancı dil öğretim yöntemleri ortaya konmuş ve uygulamaya sokulmuş, ancak sürekli yeni bir öğrenme ve öğretme yöntemine ihtiyaç duyulmuştur (Memiş & Erdem, 2013: 298). Kullanılan yabancı dil öğretim yöntemlerini iyi tanımak ve bunların üzerinden hareket etmek, yabancı dil öğretiminde belli bir kazanım olacaktır. Ancak değişen dünya yapısına ve insan ihtiyaçlarına yönelik olarak yeni yabancı dil yöntemlerinin oluşturulması gerekliliği de unutulmamalıdır.

Her yabancı dil öğretim yöntemi öğretim olarak başarılı olduğu iddiasındadır. Ancak yabancı dil öğretiminde farklı öğrenme ve öğretme yöntemlerinin varlığı bu düşüncüyü çürütmektedir. Öncelikle yabancı dil öğretim yöntemlerinin ilk zamanlarda büyük dinlerin kutsal kitaplarını okumak ve anlamak amaçlı ortaya çıktığı ve daha sonraları da dünyada emperyalist yayılmacı bir politika uygulayan özellikle Avrupa dillerinin öğretimi ile alakalı ortaya bilinmektedir (Memiş & Erdem, 2013: 317). Yabancı dil öğretiminin anlamsal ya da yapısal öğretimi, uygulanacak yöntemlerin de değişimine neden olmaktadır. Özellikle günümüzde yaşanan insan hareketliliği farklı kültürlerin sık karşılaşmasına ve hatta küreselleşme nedeniyle birlikte yaşamalarına olanak sağlamaktadır. Bu bağlamda ortaya çıkan ortak bir anlaşma dili, tüm kesimleri yabancı bir dili veya dilleri öğrenmeye zorlamaktadır. Ortak dil zemininde buluşmak ve birbirini anlamak aslında çeviri eyleminin ta kendisidir. Bu bağlamda çeviri eyleminin yabancı dil öğretimine ve öğretimine katkısı tartışılmaz oranda büyüktür.

Çevirinin çok etkili rol oynadığı yabancı dil öğretim yöntemleri tarihsel süreç içerisinde kullanılmış ve hatta bugün de bu yöntem yabancı dil öğretiminde sıkça başvurulmaktadır. Dilbilgisi- Çeviri yöntemi çok klasik olarak bir yabancı dil öğretim yöntemi olarak bilinse de geçerliliği halen sürmektedir. Karl Julius Plötz (1819-1881) tarafından geliştirilen ve belli kurallar üzerine oturtulan Dilbilgisi- Çeviri Yöntemi, sistematik olarak Avrupa'daki okullarda yabancı dil öğretim yöntemi olarak 18. Yüzyıl başlarından itibaren uygulanmaya başlanmıştır (Demirel, 2014: 36). Dilbilgisi çeviri yönteminin diğer temsilcisi ise, Gustav Tanger'dir Genellikle yazılı metinden hareketle uygulanan bu yöntem, anlaşılması gereken metnin biçim ve içerik olarak kavranması ile öğrenilmektedir. Neuner ve Hunfeld (1993) ise, metin çözümlemesi yoluyla dilin bütününe öğrenileceğini savunmaktadır.

Farklı yabancı dil öğretim yöntemleri içerisinde de çeviri kullanılabilmektedir. Özellikle yabancı dilde yazılı metinlerin okuması yapılırken çevirinin kullanılması, öğrenen kimselerin anlama yeteneklerini geliştirmektedir. Snell-Hornby (2006) göre, metni okumak için son derece titiz bir metin çözümlemesi gerektirir (Durhan &Şad, 2010. 153). Yabancı dil öğretiminde çeviriyi kullanmak, öğrencilerin değerlendirmesi açısından da gereklidir. Öğrencinin değerlendirilmesi amacıyla kullanılan "yaptırma", "aktarma", "soru-cevap", "açıklama", ve "taklit etme" gibi tekniklerin yanı sıra, ders içinde öğrenciden işlenen okuma parçası vb. gibi metinlerin bir bölümünün çevrilmesi istenebilir (Durhan &Şad, 2010. 153). Bunların dışında Grupa dil öğrenme yöntemi çevirinin etkin kullanıldığı bir yöntemdir. Bu yöntemde yabancı dil öğrenen öğrenciler, öğretmen için seçtiği metni çevirirken kendi ana dillerinde tartışabilmektedirler. Kayıt altına alınan konuşmalar daha sonra öğrenciler tarafından tekrar edilerek konu pekiştirilir.

Çeviri yabancı dil öğretiminde salt bir yöntem olarak başvurulması gereken bir yol değildir. Ancak çeviri dilsel farklılıklardan doğan sorunları öğrencilerin daha iyi çözümlemesi için kullanabilecekleri bir araçtır. Bu bağlamda yabancı dil derslerinde öğrenilmesi gereken dört temel beceri (Duyma-Anlama, Konuşma, Yazma, Okuma) yanında öğrenilmesi ve öğrenciye kazandırılması gereken yetidir (Oğuz, 2014: 58). Çevirinin ders içinde

kullanılması, farklılıkların karşılaştırma yoluyla daha kalıcı öğrenilmesini sağlayacaktır. Çevirinin yabancı dil öğretiminde çok yönlü olarak kullanılması da konuşma ve yazma becerilerini de olumlu yönde etkileyecektir. Çevirinin ders içerisinde uygulamaya sokulması, öğrencinin kendi ana dilinin sözdizimini öğrenirken, yabancı dili de gerek anlamsal gerekse yapısal anlamda kolayca anlayacaktır.

5. SONUÇ

Farklı dil ve kültürler sahip toplumların birbirini anlaması ve kendilerini anlaşılır kılmaları için ortak bir iletişim dilinde buluşmaları gerekmektedir. Bunun için, dillerarası bir yolculuk olan çeviri eylemi insanlığın dilsel iletişimine katkı sunmaktadır. Çeviri iki farklı dil ve kültür arasında kurulmuş bir köprüdür. Çeviri eyleminin sunduğu dilsel hizmet, birbirleri için konuştukları dillerin yabancı olması nedeniyle aracı olmaktadır. Anlaşma aracı olan çeviri etkinliği, farklı dil ve kültüre sahip bireylere aracısız anlaşabilmeleri için yabancı dil öğretimine sunacağı katkı önemlidir. İnsanlık tarihi boyunca çeviri, sürekli olarak farklı olanı tanıma konusunda yardımcı olmuş ve bu bağlamda yabancı dil öğretiminde de başvurulan yöntemlere kaynaklık etmiştir. Bunun en güzel örneği uzun yıllar kullanılan ve halen de kullanılmakta da olan Dilbilgisi- Çeviri Yöntemidir.

Yabancı dil öğretim yöntemleri, hedef dili kısa sürede en etkin şekilde nasıl öğretilbilir çabası içerisindedir. Bunun için günün koşullarına ve olanaklarına göre farklı yabancı dil öğrenme yöntemleri uygulanmıştır ve ya uygulanmaktadır. Ancak yabancı dil öğrenen kimselerin ana dil ve kültürü, farklı olanı anlama ve algılama konusunda etkin rol oynamaktadır. Yabancı dil öğretiminde farklılıklara karşılaştırma yapma olanağı sunan çeviri kullanılmalıdır. Yabancı dil öğrenmek sadece, yabancı dilin yapısal durumunu bilmek ve sözcükleri buna göre sıralamak değildir. Anlamsal bağlamda da yabancı dili öğrenmek ve sözcükleri dilin kendi kültüründe kullanıldığı şekilde etkin kullanabilmektir. Bu anlamda çevirinin yabancı dil derslerinde kullanılması kaçınılmazdır. Ayrıca öğrenci değerlendirmelerinde yaptırılacak seviyeye uygun metin çevirileri, öğrenilen yabancı sözcüklerin pekişmesini sağlayarak, öğrenciye yabancı dilde hem okuma hem de yazma konusunda katkı sunacaktır.

Diller, insanlığın oluşturduğu uygarlıkların gelişim düzeyine göre sürekli olarak gelişim ve değişim içerisindedir. Bu nedenle dillerin yabancı dil olarak öğretilmesi tek bir yöntemle öğretilmesi olası değildir. Yabancı dil öğretim yöntemleri, toplumların yaşadığı değişimlere göre uyarlanmalı ve insanlığın dilsel iletişim bağlamında anlaşabilmelerini sağlayacak devamlılık ve değişim içerisinde olmalıdır. Yabancı dil öğrenmek sadece bir dili öğrenmek değildir. Dilin taşıyıcısı ve ait olduğu kültürü de öğrenmek gerekmektedir. Bu nedenle çeviri yabancı dil öğretiminde başvurulması gereken en önemli dilsel anlaşma eylemdir.

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Hoşgörü Bağlamında Toplum Çevirmenliğinin Gerekliliği

Öğr. Gör. Dr. Coşkun DOĞAN¹

¹ Trakya Üniversitesi / Eğitim Fakültesi / Yabancı Diller Bölümü, coskundogan2002@yahoo.de, ORCID:
<https://orcid.org/0000-0002-6072-2721>

Özet: İnsan, toplumsal bir varlıktır ve topluluk şeklinde yaşamak zorundadır. İnsanlar, dünyada geniş bir coğrafyada farklı yerlerde yaşadıkları, farklı toplumların üyeleridir. Bu nedenle, her bir toplumun kendilerine özgün farklı dil ve kültürleri vardır. Tarihsel süreç içerisinde birbirleri ile kısıtlı ilişkileri olan bu toplumlar, teknolojinin insanlığa sunduğu hızlı iletişim ve ulaşım olanakları sayesinde daha kolay ve sık bir araya gelmeye ve hatta bir arada yaşam sürdürmeye başlamışlardır. Bu bağlamda, farklı toplumlar, birbirlerini tanıma ve kendilerini tanıtmaya gerek duymaktadırlar. Karşılıklı tanıma, toplumların birbirlerine katlanmaları açısından önemlidir. Toplumların, kendi yaşam tarzlarına uygun düşme bile, farklılıkları hoşgörü, yani anlayışla karşılamaları anlamına gelmektedir. Farklı yaşam deneyimleri olan kimselerin birbirlerine ön yargısız yaklaşımları ve farklı olana yaşam hakkı tanımaları, dünyada yaşamın insanlık için daha kaliteli olmasını sağlayacaktır.

Her bir toplumun farklı kültürünün ve yaşam tarzının olduğu düşüncesinden hareketle; uluslararası ilişkilerin her alanda yoğun olarak yaşandığı dünyada, ortak bir iletişim dili gerekliliği söz konusudur. Farklılıkların arasında köprü rolü oynayacak ve onların buluşmasını sağlayacak ortak dil çeviridir. Çeviri farklılıkların anlaşmasını ve birbirlerini anlamasını sağlayacak ortak dilin kendisidir. Bu açıdan bakıldığında, çeviri, farklılıkların kültür bağlamında yaşam hakkı kazanmasında hoşgörü anlayışının anahtarı görevini üstlenmektedir. Çalışma alanı gittikçe genişleyen çeviri eylemi, sosyo-kültür bağlamında toplum çevirmenliği olarak işlev göstermektedir.

Toplum çevirmenliği, farklı kültürel yapıya sahip toplumların daha sık bir araya gelmek durumunda oldukları eylemlerde önemli hale gelmektedir. Toplum çevirmenliği, dilsel iletişimin yanında farklı dil ve kültürlerin dokusunu bilen ve birer toplum uzmanı niteliği taşıyan alanında donanımlı kişiler tarafından yürütülmektedir. Aynı zamanda, farklılıkların uyum içerisinde, hoşgörü çerçevesinde birbirlerini kabullenmeleri yönünde çalışmalar yapmak durumundadırlar. Bu nedenle toplum çevirmenliği farklılıklar arasında oluşması beklenen hoşgörü açısından gereklidir.

Bu çalışmada, hoşgörü kavramı ve hoşgörülü yaşamın bugünkü dünya yaşam düzeninde gerekliliği kaynak tarama yoluyla incelenecektir. Hoşgörü ve toplum çevirmenliğinin yakın ilişkili olduğu ve uyumlu bir toplumsal yaşam için soyo-kültürel iletişimin ne denli önemli bir çözüm aracı olduğu, nitel bir araştırma yöntemi ile betimleme yoluyla irdelenecektir.

Anahtar Kelimeler: Hoşgörü, Uyum, Toplum Çevirmenliği, Farklılık

The Necessity of Community Interpreting in the Context of Tolerance

Abstract: Man is a social being and has to live as a community. People are members of different societies that they form in different places in a wide geography in the world. Therefore, each society has its own unique language and culture. These societies, which have limited relations with each other in the historical process, have started to come together more easily and frequently, and even to live together, thanks to the rapid communication and transportation opportunities offered to humanity by technology. In this context, different societies need to know each other and introduce themselves. Mutual recognition is important for societies to put up with each other. It means that societies accept differences with tolerance, that is, understanding, even if they do not suit their own lifestyles. People with different life experiences approaching each other without prejudice and giving the right to live to those who are different will ensure that life in the world will be of better quality for humanity.

Based on the idea that each society has a different culture and lifestyle; In a world where international relations are intense in every field, there is a necessity for a common communication language. The common language that will act as a bridge between the differences and enable them to meet is translation. Translation is the common language that will enable the understanding and understanding of the differences. From this point of view, translation assumes the role of the key to the understanding of tolerance in gaining the right to life of differences in the context of culture. The act of translation, whose field of study is gradually expanding, functions as a community translator in the context of socio-culture.

Community interpreting becomes important in actions where societies with different cultural structures have to come together more frequently. Community interpreting is carried out by well-equipped people who know the texture of different languages and cultures as well as linguistic communication and who are social experts. At the same time, they have to work towards the mutual acceptance of differences in harmony and tolerance. For this reason, community interpreting is necessary for the expected tolerance between differences.

In this study, the concept of tolerance and the necessity of tolerant life in today's world life order will be examined through literature review. The close relationship between tolerance and community interpreting and how socio-cultural communication is an important solution tool for a harmonious social life will be examined through a qualitative research method and description.

Keywords: Tolerance, Harmony, Community Interpretation, Difference

1. GİRİŞ

Toplum ve birey birbirleri ile yakından ilişkilidir. Toplum olmadan birey, bireyler olmadan da toplumlar varlıklarını sürdüremezler. Ancak toplumun birey üzerindeki etkisi oldukça fazladır. Bireye şekil veren ve onu toplumun bir üyesi haline sokan toplumsal deneyimler, toplumun aracı kurumları ile aktarılmaktadır. Toplumun normları, gelenekleri, düşünce şekli, birey daha doğmadan oluşturulmuştur. Birey, toplumsallaşma sürecinde bunlarla yoğrulmakta ve gelecekte farklı toplumun üyeleri ile bu düşünceler üzerinden ilişki kurmaya çalışmaktadır. Sadece kendi toplumunun yapısını tanıyan bireyle tabi ki diğer toplumlara karşı önyargıları olacaktır. Farklı toplumsal yapıları tanımak, anlamaya çalışmak ve bunun yanında kendini ötekine anlatmak, onları birbirlerine yakınlaştıracaktır. Böylece, birbirlerine yönelik karşılıklı hoşgörü temelinde katlanma ve saygı oluşacaktır.

Hoşgörü, çokkültürlü toplumlarda farklılıkların birbirlerine gösterdikleri saygı anlamına gelmektedir. Kendinden farklı bir kimseye ya da düşünceye hoşgörü ile yaklaşmak, farklılıklara katlanmak ya da tahammül etmek eylemleri ile iniltidir. Bu eylemlerin gerçekleşmesi, farklılıklarla ilgili önyargılardan uzaklaşmak ve tanımakla olasıdır. Birey tanıdığı ve bildiği ortamda kendini güvende hissetmektedir. Hoşgörünün temelinde kabul edilme ve edilme söz konusudur. Birey, kendi normatif uygulamalarının kabul görüldüğü ve kendini ifade edebildiği yerde çatışmalardan uzak duracaktır. Özellikle din ve geleneklerle ilişkilendirilen hoşgörü kavramı, farklı olana yaşama hakkı tanımak anlamında kullanılmaktadır. Aslında hoşgörünün temelinde hümanist bir yaklaşım egemendir. Bu egemenliğin devamı için, karşılıklı anlam ve anlaşma olmalıdır. Bu sürecin yönlendiricisi olan eylem de çeviridir.

Çeviri, farklılıklara ortak bir buluşma noktası ve kültürlerarası bir dilsel anlaşma aracıdır. Bu uygulama beraberinde farklı olan karşı hoşgörüyü ve saygıyı getirmektedir. İletişim içerisinde kalan, birbirlerini anlayan ve uyum içerisinde yaşayan farklı sosyo- kültürel yapıya sahip toplumlar, önyargısız ve sevgi içerisinde yaşamlarını sürdürebilirler. Aksi halde hoşgörüsüzlük ve farklı olanı anlamaya çalışmamak beraberinde çatışmayı getirecektir. Çeviri dili, farklılıkların sorunlarının çözümünde ve kendi varlıklarını özgür bir şekilde sürdürmelerinin bir anahtarıdır. Bu anlamda çeviri farklılıkları önyargılarından arındırıp hoşgörüye yönlendirecek bir uzlaşma aracıdır.

Çeviri, sadece diller arasında anlaşılmayan sözcüklerinin anlamının aktarımı değildir. Çevirinin kültürlerarası bir aktarım işlevi varken, çeviri eyleminin her kültürün yaşam içerisinde uygulandığı toplumların yapısını da değerlendirmeye alması gerekmektedir. Çevirinin sosyo- kültürel farklılıkları dikkate alması farklı dil ve kültüre sahip toplumları birbirine yaklaştıracaktır. Çevirinin değişen işlevi üzerinden hareketle, çeviriyi kurumsal bir yapı ve çevirmeni de bir toplumlararası aracı olarak gören toplum çevirmenliği olarak adlandırılmaktadır. Toplum çevirmenliği, bugün dünyada artan uluslararası insan hareketlilikleri, tüm dünyayı etkileyen ortak sorunların çözümünde ve çok uluslu yapılan çeşitli organizasyonlarda toplum çevirmenliği adı altında sosyo- kültürel tabanda dilsel iletişim hizmeti sunulmaktadır. Toplum çevirmenliği uğraşısı sonucunda, temel noktalarda birbirini anlayan ve kendini ötekine ifade eden toplulukların önyargısız bir arada hoşgörü çerçevesinde yaşam sürme olanağı bulacaktır.

2. HOŞGÖRÜNÜN TANIMI VE GEREKLİLİĞİ

Hoşgörü sözcüğünün olumlu anlamda birçok tanımı vardır. Bireye ters gelebilecek olaylar ve düşünceler de dahil, her şeyi anlayışa karşılama gibi bir anlamı varken, batı dillerindeki karşılığı olan Latince kökenli “tolerare yani tolere etme” bugün dilimiz Türkçe ’de de kullanılmaktadır. Hoşgörü sözcüğüne, tahammül etmek, katlanmak, bir noktada sabır etmek anlamında olumlu anlamlarının yanında görmezden gelme, müsamaha, göz yumma gibi olumsuz sayılabilecek anlamlarda yüklenmiştir (<https://tr.wikipedia.org/wiki/Ho%C5%9Fg%C3%B6r%C3%BC>). Hoşgörü sözcüğü Milli Eğitim Bakanlığı Örnekleriyle Türkçe Sözlüğünde “Anlayışla karşılama, anlayış gösterme, hoş görme, müsamaha, tolerans” şeklinde açıklanmıştır.

Hoşgörü sözcüğünün önyargısız şekilde farklı olanlara sabırla yaklaşımından hareketle; bir durağanlık, eylemsizlik içerdiği söz konusudur. Farklı olan hareket özgürlüğü vermek, affetmek bir aktivite gerektirmez. Ancak hoşgörüsüzlük bir eylemdir ve farklı olanları aynı yerde buluşturma düşüncesini reddetmektir. Farklı olana katlanmamak, ortak anlayış içerisinde olmamak demektir (www.dmy.info/hosgoru-nedir-tanimi-ve-anlami). Hoşgörü, karşısındaki farklı olanı tanımak ve ona farklılığından ötürü kötü davranmamayı gerektirmektedir.

Dünya tarihine bakıldığında toplumsal yaşamı doğrudan etkileyen ve hatta Aydınlanma döneminin motto sözcüklerinden bir tanesi olan “Hoşgörü (Tolerans)” sözcüğü, Ortaçağ’ın beraberinde getirdiği dini bağnazlığından kurtuluş ve farklı dinlere de yaşam özgürlüğü vermek anlamında kullanılmıştır. Dini hoşgörü, bilimin önünü açmış ve bireylere kendi akıllarını kullanma cesareti vermiştir (Usta, 2018:81). Hoşgörüsüzlüğün akla aykırılığı, özgür düşüncüyü engellemiş ve Ortaçağ’da özellikle Avrupa’da kilise tarafından oluşturulan dogmalara kaşı aklın ön plana çıkarılması mücadelesi verilmiştir. Bu bağlamda Alman yazar ve filozof A. von Lessing, hoşgörüü öncelleyen eseri “Akıllı Nathan (Nathan der Weise)” tiyatrodan sahneleterek halkın hümanizm ve hoşgörü kavramlarını tanımasına vesile olmuştur (Kurt, 2010: 131). Dini temalı özgür düşüncüyü yazan Lessing, önyargıların farkına varılması ve farklılıklara saygı gösterilmesi konusunda, üç büyük dine mensup insanların birlikte yaşayabileceğini hoşgörü çerçevesinde ortaya koymuştur.

Hoşgörü ya da diğer adıyla tolerans aslında her çağda geçerli olan bir eylem şeklidir. Dünyada dün yaşanan olaylar farklı boyutlarda gelişirken hoşgörü gereklidi; bugün yaşanan insan eylemlerinden kaynaklanan olaylar karşısında da hoşgörü gereklidir. Hoşgör, farklılıklar arasında bir iletişim sürecidir. Kaya’ya (2013) göre; hoşgörü bireylerin toplum içerisinde birbirleriyle karşılıklı saygı, sevgi ve anlayış çerçevesinde iletişim kurmaları durumunu açıklar (Çavuş, 2019: 28). Çünkü farklı dil ve kültüre sahip toplumların birbirlerine katlanmaları, önyargısız birlikte yaşamaları artan dünya nüfusu nedeniyle daha da gereklidir. Özellikle ulaşım ve iletişim olanaklarının çok hızlı olduğu bugün, farklılıklara sahip toplumlar daha kolay bir araya gelmekte ve iletişim kurmak zorunda kalmaktadır. Birlikte dünyada bulunan kıt kaynakların ortak paylaşımı ve uyum içerisinde yaşam için hoşgörü tüm herkes için bir zorunluluktur. Dünyanın herhangi bir yerinde yaşanan bir sorun tüm insanlığı ilgilendirmektedir. Bu anlamda sorunun çözümünde farklılık olmaksızın tüm insanlığın görev olması beklenmektedir. Bunun temelinde farklılıklara önyargısız yaklaşım ve farklı olana yaşam hakkı vermek yatmaktadır.

3. TOPLUM ÇEVİRMENLİĞİNİN TANIMI VE ÖNEMİ

Son yüzyılda yaşanan hızlı teknolojik gelişmeler, insan yaşamını her alanda çok yakından etkilemiştir. Dünyada insan hareketliliğinin çok yoğun olarak yaşandığı ve farklı dil ve kültürlere sahip insan topluluklarının sürekli olarak karşılaştığı bir çağ yaşanmaktadır. Bu bağlamda insanların iletişim ihtiyaçları da geleneksel ihtiyaçlara göre oldukça çeşitlilik göstermektedir. Özellikle farklı sosyal yapıya ve kültürlere ait toplumların birbirlerini anlamak ve hoşgörü çerçevesinde etkileşim içerisinde olmak istemeleri, onları ortak bir dilde buluşturan çeviri etkinliğinin de rolünün değişmesini gerektirmiştir. Uzun yıllarca karşılaştırmalı dilbilimin içerisinde alt bir disiplin olarak yer alan çeviri, yeni paradigma düşüncesinden hareketle, çeviri sosyolojisi ve kültürene yönelik çalışmaların yapıldığı özgün bir bilimsel disiplin olarak ortaya çıkmıştır (Ari, 2014: 18). Çeviribilim adı altında yaşanan bu yeni dönüşüm hareketi, çeviri çalışmalarının kapsam alanını ve diğer bilimsel alanlarla birlikte araştırılmasının önünü açmıştır.

Çevirinin yazılı ve sözlü çeviri alanlarının eylemsel farklılığı, her iki alana özgü çeviri anlayışının gelişmesini zorunlu kılmıştır. Yazılı çeviriden daha eski kullanımı olan sözlü çeviri, tarihin her döneminde farklı toplumların dilsel iletişim ihtiyacını karşılamıştır. Ve sözlü çeviri çalışmalarının yapıldığı alanlar oldukça fazladır (Doğan, 2015: 13). Bunları yapılsı şekillerine göre “Ardıl ve Andaş” sözlü çeviri” diye ayırmak gerekmektedir. Diğer sözlü çeviri türlerini ise gerçekleştirildiği konu alanlarına göre ayırmak yerinde olacaktır. Sözlü çeviri alanı içerisinde “Toplum Çevirmenliği” de araştırma konularına dâhil edilmiştir. Konferans çevirmenliği gibi anında yapılan bir çeviri türüdür. Özellikle son yıllarda, sözlü çevirinin içerisinde oldukça yoğun ilgi gören bir çeviri eğilimidir (Moser-Mercer, 2021:57). Ardıl bir çeviri türü olan toplum çevirmenliği genelde gönüllülük esas çerçevesinde yapılmaktadır.

Toplum çevirmenliği, son yıllarda yaşanan uluslararası insani kitlesel hareketliklerin (göç, deprem, sel gibi doğal felaketler, uluslararası sportif etkinlikler gibi) sonucunda sıkça kullanılmaya başlanmıştır. Toplum çevirmenliği adı altında yeni yeni tanınma bu sözlü çeviri türü, farklı ülkelerde değişik isimlerle adlandırılmaktadır (ing. Community interpreting, alm. Sprac-und Kulturmittler, fran. Interprétiariat communautaire gibi). Farklı dilleri konuşan ve her hangi bir nedenle kendi yurdundan ayrı kalmış kimselerle, bulundukları ülkelerin kamu hizmetlerinden faydalanmaları bağlamında yaşadıkları dilsel sorunların giderilmesinde toplum çevirmenleri kendilerine gönüllü olarak yardım etmektedir. Sağlık merkezlerinde, polis merkezlerinde, mahkemelerde, sosyal hizmetler kurumlarında, okullarda ve benzeri kuruluşlarda toplum çevirmenliği aracılığı ile sözlü çeviri hizmeti sunulmaktadır Akt: Kurultay/Bulut, 2012:79).

Toplum çevirmenliği çalışma alanı gittikçe çoğalan bir sözlü çeviri şeklidir. Bunun için toplum çevirmeni olmak isteyenlerin salt dil bilmesi yeterli olmayacaktır. Toplum çevirmenleri, çalışmak istedikleri alanlarla ilgili özel

bilgi donanımlarına sahip olmak zorundadırlar. Aksi halde yardım etmek yerine engel teşkil edeceklerdir. Bunun en güzel örneği 6 Şubat 2023’de etkilediği alan ve şiddet açısından büyük olan Kahramanmaraş depremlerinde görev alan toplum çevirmenleri, daha önceden Çeviri derneği aracılığı ile deprem konusunda gerekli bilgileri almışlardır. Geniş ve güçlü bir eğitim alt yapısına sahip olması beklenen toplum çevirmenlerinin üniversite eğitimlerinin yanında gerek teknik gerek teorik olarak eğitim almaları gerekmektedir (Pöchhacker,2021:5). Toplum çevirmenliği her ne kadar gönüllü yapılsa da uzmanlık gerektiren mesleki bir uğraştır.

4. HOŞGÖRÜ VE TOPLUM ÇEVİRMENLİĞİ İLİŞKİSİ

Yaşanılan yüzyılda dünyada yaşanan akıl almaz ekonomik, siyasal ve toplumsal değişimler, uluslararası insan hareketliliklerini arttırmıştır. Küreselleşme, dünyada bütüncül bir ekonomik yapı oluşmasına neden olmuştur. Değişik ülkelerden farklı dil ve kültürlerle sahip insanların bir araya getirilmesi, sosyal yaşam için de bir bütünlüğü öngörmektedir. Farklı kültürlerle sahip toplumların uluslararası kültürel hareketleri beraberinde farklılıkların birlikte yaşamını da getirmektedir. Wolf’a (2007a) göre, toplumların değişimi kültürel değişimlerden daha hızlı olmaktadır. Her toplumun dışa açık olamayacağı için toplumlararası interaktif bir iletişim ortamı oluşmaktadır. İletişim farklılıkların kendilerini anlaşılır kılmak için özel bir çözüm kapısıdır. Kültürlerarası iletişimin sağlanması, kültür odaklı çeviri ile olasıdır. Çeviribilimin son dönemlerde yöneldiği alan olarak kültürlerarası iletişim çalışmaları, bu alanda yeni yönelimlere kaynaklık etmiştir (Akt: Karaca,2011: 352). Bulundukları yabancı ülkelerde kendi öz kültürlerini yaşamak isteyen her bir farklı topluluk için özel bir özgür alan oluşturmak oldukça zordur. Bu bağlamda, ülke toplumu içinde ve diğer topluluklarla uyum içinde yaşamaları için uzun süreçte ortak değerler etrafında birleşmeleri sağlanmalıdır.

Hoşgörü, karşılıklı sevgi ve saygıya dayalı ilişkilere ve farklılıkların kendilerini güvende hissedebilecekleri yerde olmalarını ifade eden bir kavramdır. Ötekini farklılığından ötürü, yok saymayan, aksine onu yaşatmaya çalışan bir tahammül duygusudur. Böyle bir ilişkinin yolu kendini ifade etme ve ötekini iyi tanımaktan geçmektedir. Ayrıca hoşgörü, farklılıklar için kendi varlığı için herhangi bir zarar gelmeyeceğinin garantisidir. Tüm bunların temelini de karşılıklı iletişim oluşturmaktadır. İletişimin aracı da ortak dildir, yani çeviridir. Bu anlamda Hönig (1982) çeviriyi, bir kültürden diğerine köprü olarak nitelemektedir. Çeviri köprüsünün, bir kültürden diğerine aktarımını sağlarken, farklı toplumları da birbirine bağlamaktadır (Akt.: Tosun, 2017:266). Çeviri aracılığı ile yapılan kültür aktarımının yanında düşünce aktarımı da yapılmaktadır. Çünkü her dil, konuşulan toplumun düşünce şeklini de yansıtmaktadır. Birbirini anlayan ve düşünce yapısını çözümleyen toplumlar arasında hoşgörü hakim olmaktadır.

Sanayi devrimi ile toplumların dünyada yerleşim tarzları oldukça değişmiştir. Özellikle sanayinin sembolleri olan fabrikaların olduğu bölgeler kırsaldan büyük göçler olmuştur. Ulusal çaplarda yaşanan bu göçlerde aynı dil ve kültüre sahip olmalarına rağmen, köylü ile kent kültürü çatışması yaşanmıştır. Ancak bu yüzyılın son çeyreğinde akıl almaz hızla yaşanan uluslararası insan hareketlilikleri ve yaşanan doğal felaketler, farklı toplumların yeniden yaşam kurma düşüncesiyle yabancı ülkeler yerleşme çabaları, dilsel iletişim sorununu yaşamalarına neden olmuştur. Bu bağlamda çeviri sosyo- kültürel odaklı bir misyon üstlenmiş ve özellikle farklılıklara yönelik dilsel hizmet verme uğraşısı içerisine girmiştir. Çalışma alanı genişleyen çeviri eylemi, farklı alanlarda ve farklı bilimsel disiplinlerle ortak çalışmalar yapmaya başlamıştır. Sözlü çevirinin bir türü olan toplum çevirmenliği insan yaşamının merkezine oturmuştur (Ari, 2014:36).

Bir toplum uzmanı olarak çalışan toplum çevirmenleri, dilsel çeviri hizmeti verirken, farklılıklar arasında bir uzlaşa sağlamaya ve onlar arasında iletişimi güçlendirmeye çalışmaktadır. Salt yabancı bir dili bilmekten çok, farklı kültürel ve toplumsal yapıları tanımaları beklenen toplum çevirmenleri, aynı ortamda bulunması zorunlu farklı insan toplulukları arasında ortak bir bağın oluşması konusunda da hizmet vermektedirler. Göç alan zengin batılı ülkelerde birere yerel yönetimlerin sosyal uzmanları olarak çalışan toplum çevirmenleri, göçmenlerin hem yaşadığı toplumla hem de birlikte yaşadığı diğer farklı ülkelerden gelen insanlarla uyum içerisinde yaşamaları yönünde çalışmalar yapmaktadırlar (<https://docplayer.org>). Göçmenlerin, kendi özgünlüklerini yaşayarak, kendinden farklı olana saygı göstererek hoşgörü içerisinde bulunması konusunda toplum çevirmenleri yardımcı olmaktadır.

5. SONUÇ

İnsan toplumsal bir varlıktır. Birlikte yaşamaya ihtiyaç duymaktadır. Birey, toplu yaşam içerisinde bulunması nedeniyle belli bir kültür çerçevesinde tutum ve davranış geliştirmek zorundadır. Konuşma ve düşünme yeteneği sayesinde, olayları kavrayabilme ve yorumlayabilme olanağına sahiptir. Birlikte yaşamak, bireye diğer insanlara ve gelişen olaylara karşı tahammül, nüshama, sabır gösterme, saygı duyma gibi birçok eylemi yerine

getirmesini gerektirmektedir. Gelişen olayları zihninde analiz edip, diğer kimselerle iletişim kurarak anlamaya, tanımaya çalışmalı ve birlikte yaşamın gerektirdiği koşullara hoşgörü ile yaklaşabilmelidir. Hoşgörülü yaklaşımın yolu iletişimden geçmektedir.

Dilsel iletişim kurmak aynı dil ve kültüre sahip bireylerle oldukça kolaydır. Ancak dünyada oldukça çok farklı dil ve kültüre sahip toplumların mevcudiyeti söz konusudur. Diğer taraftan bugün yaşanan teknolojik gelişmelerle birlikte, hızlı iletişim ve ulaşım olanakları artan farklı toplumlardan bireyler daha kolay bir araya gelmekte ve hatta birlikte farklı ülkelerde yaşamlarını sürdürmektedir. Farklı dil ve kültürle ait kimselerin bir arada yaşadıkları ortamda, onların anlaşmak için ortak bir dile ihtiyaçları vardır. Bu da çeviridir. Çeviri yoluyla dilsel iletişim sorununu çözen bireyler, birbirlerini daha kolay anlayabilecekler ve birbirlerini tanıdıkları için, karşılıklı saygı ve güven içerisinde yaşamlarını sürdüreceklerdir. Bu anlamda çeviri, hoşgörü çerçevesinde birlikte yaşamın anahtarıdır.

Çeviri etkinliğinin, iletişim yönünü en çok öne çıkaran türü sözlü çeviri şeklindedir. Her sözlü çeviri türü de toplumsal olayların yaşandığı yerlerde kullanılmazlar. Sözlü çevirinin bir alt disiplini olan toplum çevirmenliği, farklı dil ve kültürle sahip kimselerin yabancı ülkelerde yaşamların kolay hale getirmek ve o ülkenin kamu hizmetlerinden faydalanmalarını sağlamak amacıyla yürütülen çeviri hizmetidir. Toplum çevirmenleri, farklılıkların içinde yaşadıkları topluma uyumları ve kendilerinin de o toplumun yapısını kabullenmeleri için özel bir toplum uzmanı olarak çalışmaktadır. Ayrıca dünyada yaşanan doğal felaketler sonucu uluslararası yardımlaşma konusunda olay yerlerinde bizzat bulunarak, farklı dilleri olan teknik heyetlere çeviri hizmeti sunmaktadırlar. Toplum çevirmenliğinin bu tür hizmetleri uluslararası büyük organizasyonlarda da kendini göstermektedir. Bu ortamlarda çeviri hizmeti sunan toplum çevirmenleri farklı kültürleri ve toplum yapılarını tanımak zorundadır. Vereceği hizmet sadece çeviri hizmeti değildir. Farklılıklar arasında sempati oluşturacak ve onların kendilerinin kabul ettireceği, anlatacağı ortamlar hazırlamaktır. Bu bağlamda farklı toplumların birbirine karşı hoşgörü içerisinde olmaları sağlanacaktır. Birere toplum ve kültür uzmanı olan toplum çevirmenleri hoşgörülü bir ortamın hazırlanması konusunda çalışmalar yapmaktadırlar. Hoşgörülü yaşam için toplum çevirmenliği zaruri bir uğraştır.

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Türkiye’de ARGE Harcamaları ile İhracat Arasındaki Uzun Dönem İlişkisi

Cüneyt KOYUNCU¹

Alev ŞAHİN²

¹Prof. Dr., Bilecik Şeyh Edebali Üniversitesi, İİBF, İktisat Bölümü, Bilecik/Türkiye, ORCID: 0000-0002-8638-2761

²Yüksek Lisans öğrencisi, Bilecik Şeyh Edebali Üniversitesi / Sosyal Bilimler Enstitüsü, İİBF, İktisat,
alev1sahin@hotmail.com, ORCID: 0009-0006-1794-6718

Özet: Bu çalışmanın amacı Türkiye’de Araştırma-Geliştirme (ARGE) harcamaları ile ihracat arasındaki uzun dönem ilişkisini ARDL yöntemi yardımıyla 1996-2020 yıllarına ait zaman serisi verilerini kullanarak ortaya koymaktır. ARGE harcamaları gerek mevcut üretim tekniklerinin verimliliğini arttırarak gerekse de yeni buluşların önünü açarak üretimin artmasına sebebiyet verebilir. ARGE harcamalarından kaynaklı bu üretim artışları da Türkiye’nin ihracat kapasitesini arttırabilir. Öncelikle değişkenlerin durağanlık düzeylerini tespit etmek için birim kök testleri yapılmıştır ve birim kök testleri sonrasında değişkenlerin her birinin birinci farklarda durağan olduğu tespit edilmiştir. Değişkenlerin her birinin ARDL eş-bütünleşme testinin şartı olan düzeylerde veya birinci farklarda durağan olma şartını sağladığı görüldüğünden dolayı ARDL eş-bütünleşme testi uygulanmıştır. ARDL eş-bütünleşme testi sonuçları ARGE harcamaları ile ihracat değişkeni arasında eş-bütünleşme ilişkisi olduğuna işaret etmektedir. Yani Türkiye’de 1996-2020 periyodunda ARGE harcamaları ile ihracat uzun dönemde birlikte hareket etmektedir. Uzun döneme ilişkin tahmin edilen modelden elde edilen uzun dönem katsayı tahmin sonuçları Türkiye’de ARGE harcamalarının ihracatı istatistiksel olarak anlamlı bir biçimde arttırdığını göstermektedir.

Anahtar Kelimeler: Türkiye, ARGE Harcamaları, İhracat, Birim Kök Testi, ARDL Analizi

Abstract: The aim of this study is to reveal the long-run relationship between R&D expenditures and exports in Turkey for the period of 1996-2020 by using ARDL method. R&D expenditures may lead to an increase in production both by increasing the efficiency of existing production techniques and by leading to new inventions. These production increases may also increase Turkey's export capacity. First of all, unit root tests were conducted in order to determine the stationarity levels of the variables and after the unit root tests, it was determined that each of the variables was stationary at first differences. Since it is seen that each of the variables meets the condition of being stationary at levels or first differences, which is the condition of ARDL co-integration test, ARDL co-integration test was performed. The results of the ARDL cointegration test indicate that there is a cointegration relationship between R&D expenditures and export variables. In other words, R&D expenditures and exports in Turkey move together in the long-run for the period of 1996-2020. The long-run coefficient estimation result obtained from the long-run model discloses that R&D expenditures increase exports in Turkey in a statistically significant manner.

Key Words: Turkey, R&D Expenditures, Exports, Unit Root Test, ARDL Analysis

1. GİRİŞ

İktisat teorisine göre büyüme içsel ve dışsal yaklaşım olarak iki konuda ele alınmıştır. Neo-klasik büyüme teorisi, teknolojik gelişme ve yenilikleri dışsal değişken olarak incelemiştir. Teknolojik gelişimin dışsal olduğunu savunan Solow’un modeli zamanla etkisini yitirmiş, onun yerine Schumpeter’in büyüme teorisi olan teknolojin içselliliği ile ülkelerin uluslararası gelişmişlik farklılığını bu modelle açıklamışlardır. Schumpeter’in içsel büyüme modeline göre Ar-Ge ile büyüme arasında bağlantılı olduğunu savunmuştur. Ar-Ge sürekli olarak ele alan içsel büyüme modelinin öncüleri Romer (1990), Grossman ve Helpman (1991) ve Aghion ile Howitt (1992) uzun dönemde büyümenin temel noktası inovasyondur. Yani uzun dönemli büyümenin tekniği Ar-Ge’nin verimliliğinin artırılması ile sağlanmaktadır. İçsel büyüme modeli, piyasalardaki şirketlerin temelini Ar-Ge faaliyetleriyle yaratılan yenilikler oluşturmaktadır (Yıldırım ve Kesikoğlu, 2012: 166).

Sanallaşan ve dijitalleşen bu ekonomik evrede, piyasadaki şirketler arasındaki rekabet gücü büyük önem kazanmıştır. Bir ülkenin dış ticarete varlığını sürdürebilmelerinin ön şartı yeni ürün veya rakiplerin ürünlerine göre üstünlük sağlayabilecek niteliklerde farklı üretilmiş ürünlerle elde edebilir. Ülkelerin ihracatta varlıklarını gösterebilmeleri tek şartı teknolojiye gelişmişlik ve üstünlüklerine bağlı hale gelmiştir. Ülkelerin yenilik üretebilmelerinin tek yolu ise Araştırma – Geliştirme faaliyetleridir. Herhangi bir ülke Ar-Ge çalışmalarının üzerinde ne kadar çok durursa yenilik üretebilmede ve rakipleri karşısında bir o kadar daha güçlü olabilir. Bir ülke Ar-Ge giderleri için ayrılan payı artırırsa, Ar-Ge çalışmaları da o kadar artmakta ve yeni ürünler üretebilme de o kadar olanak sağlanmaktadır. Bundan dolayı ülkelerin ihracat potansiyelini artmasını sağlamak için Ar-Ge harcamalarına ile çalışmalarına ayrılan payın oranını arttırmaları önem arz etmektedir (Eygü ve Coşkun, 2020: 2).

Araştırma-Geliştirme, bilimsel ve teorik olarak bilgi birikimlerini arttırmak için sistematik yürütülen çalışmalardır. Ar-Ge fonksiyonlarına yapılan harcamalar ülkelerin ve şirketlerin gelişmişlik derecesini saptamak için kullanılan parametredir (Aslan,2022: 372). Ar-Ge çalışmalarının, ekonomik büyümeyi sağlasa da uzun dönemde büyüme hızının düşmesine yol açabilir. Fakat Ar-Ge çalışmaları, kısa dönemde ise refahı artırmaktadır. Ülkelerin rekabet gücü ve gelişmişlik seviyesinin belirlenmesinde Ar-Ge faaliyetleri gösterge durumundadır (Diaio vd., 1999: 343-344).

Bu çalışmada Türkiye'nin Ar-Ge harcamalarının ihracat üzerinde uzun dönemde meydana getireceği gelişmeleri ve etkileri incelenmesi amaçlanmıştır. Amaç doğrultusunda konu ile ilgili çalışmalar ele alınarak literatür taraması yapılacaktır. Literatür taramasından sonra 1996-2020 yıllarına ait veriler ile Türkiye'nin Ar-Ge harcamaları ile ihracat arasındaki uzun dönem ilişkisi zaman serisi analiziyle incelenecek ve son bölümde ise analiz sonucu özetlenerek tartışılmaktadır.

2. LİTERATÜR TARAMASI

Ar-Ge harcamaları ile ihracat arasındaki ilişkiyi araştıran ve inceleyen çalışmalar her geçen gün artmaktadır.

Özer ve Çiftçi (2009), bu çalışmada OECD ülkeleri için ihracat ve Ar-Ge arasındaki ilişkiyi panel veri tekniği ile analiz edilmiştir. Panel veri analizinde 1993-2003 dönemleri arasındaki veriler kullanılmıştır. Analiz sonucunda, ihracat ve Ar-Ge arasındaki pozitif ve yüksen oranlı ilişki olduğuna yönelik bulgular elde edilmiştir.

Özçelik, Aslan ve Özbek (2018) bu çalışmanın amacı, Ar-Ge ve yüksek teknoloji ihracatı arasında uzun dönemli bir ilişkinin varlığını incelemektir. Bu doğrultuda, 10 OECD ülkesinin 1996-2014 dönemlere ait verileri kullanarak panel veri analiz tekniği ile analiz edilmiştir. Analizin sonucunda, yüksek teknoloji ihracatı ile Ar-Ge harcamaları arasındaki çift yönlü bir nedensellik ve eş bütünleşme ile ilişkisi tespit edilmiştir.

Turan, Berber ve Zeren (2023), yaptıkları bu çalışmada G7 ülkeleri olan Fransa, Almanya, İtalya, Japonya, İngiltere, ABD ve Kanada ülkelerinin 1981-2020 yıllarına ait veriler kullanılarak Ar-Ge harcamalarının ihracat üzerindeki etkisi üzerinde durulmuştur. Tahminci olarak, Fourier ADL eşbütünleşme testi ve Fourier Nedensellik testi ile analiz edilmiştir. Bu iki tahminciye göre, Fourier Nedensellik testinde Ar-Ge harcamalarının ihracata yönelik Japonya ile çift yönlü ilişki bulunurken, eşbütünleşme testine göre Fransa ile pozitif yönlü, İngiltere ile negatif yönlü bir ilişkinin olduğuna ulaşılmıştır.

Ceylan ve Erçakar (2023) ise, Ar-Ge'nin, yüksek teknoloji ürünü ihracatı arasındaki ilişki üzerinde durmuştur. Çalışmasında panel veri analizi ile OECD ülkelerinin 2010-2018 dönemine ait veriler alınarak analiz edilmiştir. Analize göre, Ar-Ge harcamaları ile yüksek teknoloji ürünü ihracatı arasında doğru ve pozitif yönde etkilediğini, Ar-Ge harcamaları yüksek teknoloji ürünü ihracatını aynı oranda artırdığı incelenmiştir.

Karagöz ve Yıldırım (2023), bu çalışmada Türkiye'nin 1996- 2019 yılları arasındaki veriler kullanılarak Ar-Ge ve ihracat arasındaki nedensellik ilişkisi incelenmiştir. Nedensellik ilişkisini Granger ve Toda-Yamamoto testleriyle analiz edilmiştir. Granger Nedensellik Testi ve Toda-Yamamoto testine göre ihracattan, Ar-Ge'ye doğru tek yönlü bir nedensellik olduğu ve ihracattaki artışın Ar-Ge faaliyetlerinde artış sağlarken, Ar-Ge faaliyetleri ise ihracat değerlerinde artışa neden olmamaktadır.

Canbay (2020), çalışmasında Türkiye'nin 2004-2017 dönemlerine ait verileri ARDL sınır testi yardımı ile Ar-Ge harcamalarının ihracat üzerindeki etkilerini incelemiştir. ARDL sınır testi sonucuna göre, kısa ve uzun dönemde Ar-Ge harcamaları ile ihracat arasında anlamlı bir bağlantının olduğuna ulaşılmıştır. Ar-Ge harcamalarındaki artış ihracatı olumlu yönde etkileyerek artışa neden olduğu sonucuna varılmıştır.

Külünk (2018) ise, Türkiye'nin 1996-2016 yılları arasındaki verileri kullanarak Ar-Ge, ihracat ve GSYH arasındaki ilişkiyi çoklu doğrusal regresyon analizi ile incelemiştir. Analize göre, Ar-Ge harcamaları ile ihracat arasında pozitif etkinin olduğu ve ihracat ile büyüme arasında pozitif etkinin olduğu, GSYH ile Ar-Ge harcamaları arasında ise doğrudan bir ilişki bulunamamıştır.

Literatürde incelenen çalışmaların farklı yıllara ait verileri ele alınması ve kullanılan analizlerin farklılığı nedeniyle birbirinden farklı sonuçlar elde edilmiştir. Bazı çalışmalarda ise nedensellik ilişkisi aranmış ve yönleri tek yönlü ya da çift yönlü ilişkilere ulaşılmıştır. Fakat çalışmalardaki yöntemler ve değişkenler farklı olsa da geneline bakıldığında Ar-Ge harcamaları ile ihracat arasında pozitif bağlantıların olduğu ve anlamlı bir ilişkinin bulguları elde edilmiştir.

3. DATA ve METEDOLOJİ

Bu çalışma Türkiye’de ARGE harcamaları ile ihracat arasındaki uzun dönem ilişkisini ARDL tahmin yöntemi yardımıyla 1996-2020 yılları için analiz etmektedir. ARGE harcamaları gerek mevcut üretim tekniklerinin verimliliğini arttırmak gerekse de yeni buluşların önünü açmak suretiyle Türkiye’de üretimin artmasına yol açabilir. Bu bağlamda çalışmanın hipotezi ARGE harcamalarının Türkiye’de ihracatı arttıracığı savını öne sürmektedir. Çalışmada kullanılan ihracat değişkeni (İHRACAT) 2015 sabit fiyatlarıyla ABD doları cinsinden mal ve hizmetler ihracatını göstermektedir. ARGE harcamaları değişkeni (ARGE) ise ARGE harcamalarının milli gelir içindeki payı tarafından verilmektedir. Veriler Dünya Bankası WDI veritabanından alınmıştır ve tüm değişkenlerin logaritmik halleri analizlerde kullanılmıştır.

ARDL sınır testi için aşağıdaki model tahmin edilmiştir:

$$\Delta \dot{I}HRACAT_t = \alpha_0 + \sum_{i=1}^p \delta_i \Delta \dot{I}HRACAT_{t-i} + \sum_{i=0}^q \phi_i \Delta ARGE_{t-i} + \theta_0 \dot{I}HRACAT_{t-1} + \theta_1 ARGE_{t-1} + \varepsilon_t \quad (1)$$

Yukarıdaki Eşitlik 1’de; θ_0 ve θ_1 notasyonları uzun dönem katsayılarını, δ_i ve ϕ_i notasyonları kısa dönem katsayılarını, Δ sembolü birinci derece fark operatörünü, α_0 notasyonu model sabit terimini, ε_t notasyonu da modelin beyaz gürültü hata terimin göstermektedir.

ARDL sınır testinin sıfır hipotezi $H_0: \theta_0 = \theta_1 = 0$ şeklinde olup iki değişken arasında es-bütünleşme ilişkisinin olmadığı savını öne sürmekteyken alternatif hipotezi $H_1: \theta_0 \neq \theta_1 \neq 0$ şeklinde olup iki değişken arasında es-bütünleşme ilişkisinin olduğu savını öne sürmektedir. ARDL sınır testine ilişkin elde edilen F-istatistik değeri üst sınır kritik değerinde büyük olduğu sürece ARGE harcamaları ile ihracat arasından eş-bütünleşme ilişkisi olduğu sonucuna varılır.

Kısa ve uzun döneme ait parametre tahmincilerini elde etmek için aşağıdaki model tahmin edilmiştir:

$$\dot{I}HRACAT_t = \beta_0 + \sum_{i=1}^p \alpha_i \Delta \dot{I}HRACAT_{t-i} + \sum_{i=0}^q \mu_i \Delta ARGE_{t-i} + \gamma ECM_{t-1} + \varepsilon_t \quad (2)$$

Yukarıdaki Eşitlik 2’de; α_i ve μ_i notasyonları serileri uzun dönem patikasına geri döndüren dinamik katsayılarını, ECM kısaltması modelin hata düzeltme terimini, γ notasyonu kısa dönemde oluşan şoklar karşısında serileri uzun dönem patikasına geri döndürme hızını temsil etmektedir. γ katsayısının istatistiksel olarak anlamlı negatif işaret alması gerekmektedir.

4. TAHMİN SONUÇLARI

Eş-bütünleşme testi için ARDL sınır testi kullanılacağından dolayı çalışmada öncelikle değişkenlerin durağanlık durumları ADF birim kök testi ile sınanmıştır. Elde edilen birim kök test sonuçları İHRACAT değişkeni için Tablo 1’de ve ARGE değişkeni için Tablo 2’de raporlanmıştır.

Tablo 1 ve 2’deki sonuçlar her iki değişkeninde düzeylerde durağan olmadığını fakat birinci farklarında durağan olduklarını göstermektedir.

Tablo 1: İHRACAT Değişkeni için ADF Birim Kök Testi

Değişken: İHRACAT / Düzeyde		
		t-istatistik
		P-değeri
ADF test istatistik ==>		-1.7938
Test kritik değerleri:	1%	-3.7115
	5%	-2.9810
	10%	-2.6299
Değişken: İHRACAT / 1. Farklarda		
ADF test istatistik ==>		-5.7335
Test kritik değerleri:	1%	-3.7241
	5%	-2.9862
	10%	-2.6326

Tablo 2: ARGE Değişkeni için ADF Birim Kök Testi

Değişken: ARGE / Düzeyde		
	t-istatistik	P-değeri
ADF test istatistik ==>	-0.5125	0.8723
Test kritik değerleri:		
1%	-3.7379	
5%	-2.9919	
10%	-2.6355	
Değişken: ARGE / 1. Farklarda		
ADF test istatistik ==>	-7.6304	0.0000
Test kritik değerleri:		
1%	-3.7529	
5%	-2.9981	
10%	-2.6388	

Eş-bütünleşme testime geçmeden önce optimal gecikmeli ARDL modelini tespit etmek için BIC (Bayesian-Schwarz Information Criteria) kullanılmıştır ve sonuçlar Tablo 3’de verilmiştir. Tablo 3’ten anlaşılacağı üzere en uygun ARDL modelinin ARDL(1,1) modeli olduğu tespit edilmiş ve analizler bu model üzerinden yürütülmüştür.

Tablo 3: ARDL Model Seçimi

Model	LogL	AIC	BIC*	HQ	Adj. R-sq	Spesifikasyon
11	28.447154	-2.2225	-2.0241	-2.1757	0.964475	ARDL(1, 1)
12	26.672602	-2.1521	-2.0033	-2.1170	0.960453	ARDL(1, 0)
10	28.950255	-2.1773	-1.9293	-2.1189	0.964067	ARDL(1, 2)
4	28.675970	-2.1524	-1.9044	-2.0939	0.963160	ARDL(3, 0)
8	27.072677	-2.0975	-1.8991	-2.0508	0.959747	ARDL(2, 0)
7	28.467999	-2.1335	-1.8855	-2.0750	0.962457	ARDL(2, 1)
9	29.798162	-2.1635	-1.8659	-2.0934	0.964654	ARDL(1, 3)
3	29.469586	-2.1336	-1.8360	-2.0635	0.963582	ARDL(3, 1)
1	32.265580	-2.2060	-1.8092	-2.1125	0.967721	ARDL(3, 3)
6	28.955068	-2.0868	-1.7893	-2.0167	0.961838	ARDL(2, 2)
5	30.067981	-2.0971	-1.7499	-2.0153	0.963211	ARDL(2, 3)
2	29.903976	-2.0822	-1.7350	-2.0004	0.962658	ARDL(3, 2)

Yapılan birim kök testleri sonrasında değişkenlerin her birinin ARDL eş-bütünleşme testinin şartı olan düzeylerde veya birinci farklarda durağan olma şartını sağladığı görüldüğünden dolayı ARDL sınır testi yardımıyla eş-bütünleşme testi uygulanmıştır. ARDL sınır testinden elde edilen eş-bütünleşme test sonuçların Tablo 4’te raporlanmıştır. ARDL sınır testine ait F-istatistik değeri tüm anlamlılık düzeyleri için üst sınır kritik değerinden büyük olduğu için Türkiye’de 1996-2020 yıllarını kapsayan dönemde ARGE harcamaları ile ihracat arasındaki eş-bütünleşme (uzun dönem) ilişkisinin var olduğu tespit edilmiştir.

Tablo 4: ARDL Sınır Testi

	Anlamlılık Düzeyi	Alt sın. krit. Değer	Üst sın. krit. Değer
		Asimtotik: n=1000	
F-istatistik: 7.847174	10%	3.02	3.51
k: 1	5%	3.62	4.16
	2.5%	4.18	4.79
	1%	4.94	5.58
Gerçek Örneklem: n=24		Sonlu örneklem: n=35	
	10%	3.223	3.757
	5%	3.957	4.53
	1%	5.763	6.48
Gerçek Örneklem: n=24		Sonlu örneklem: n=30	

10%	3.303	3.797
5%	4.09	4.663
1%	6.027	6.76

Tablo 5’de ARDL(1,1) modeli kullanılarak yapılan tahminler sonrasında elde edilen uzun döneme ait katsayılar raporlanmıştır. ARGE harcamaları için elde edilen uzun dönem katsayısı pozitif (1.0443) ve %1 anlamlılık düzeyinde istatistiksel olarak anlamlıdır. Yani ilgili periyot aralığında uzun dönemde Türkiye’de ARGE harcamalarında meydana gelecek %1’lik bir artışın ihracatını %1.0443 arttırdığına işaret etmektedir.

Tablo 5: ARDL(1,1) Modeli için Uzun Dönem Katsayıları

Değişken	Katsayı	Std. Sapma	t-istatistik	P-değeri
ARGE	1.0443	0.2907	3.5924	0.0018
Sabit Terim	26.3375	0.1563	168.4549	0.0000

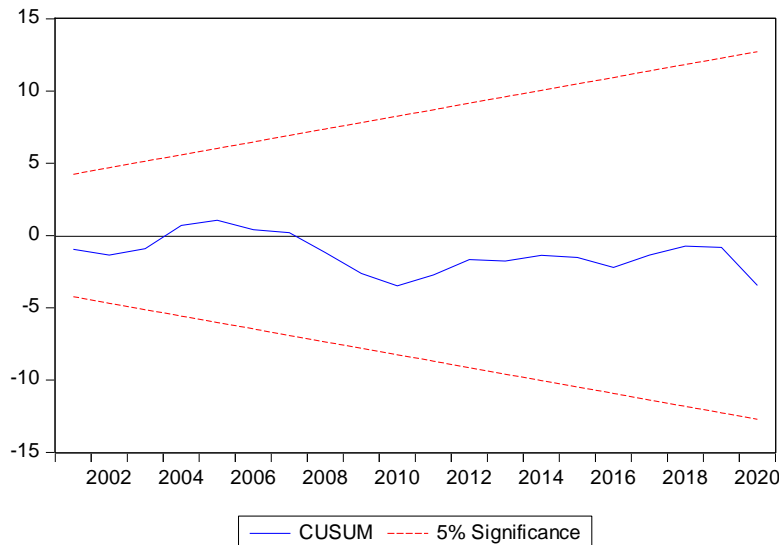
Tablo 6 ARDL(1,1) modeli için elde edilen kısa dönem katsayıları ve modele ilişkin tanı testleri sonuçları görülmektedir. ARGE harcamalarına ait kısa dönem katsayısı istatistiksel olarak anlamlı değildir. Diğer taraftan hata düzeltme terimine ait katsayı beklenen negatif işareti almakta ve %1’de istatistiksel olarak anlamlıdır. Jerque-Bera normallik testinin sonucu modelin hata terimlerinin normal dağıldığını, Breusch-Godfrey otokorelasyon testinin sonucu modelin hata terimlerinin otokorelasyon sorunu içermediğini, Harvey değişen varyans testinin sonucu modelin hata terimlerinin sabit varyanslı olduğunu, Ramsy RESET testinin sonucu modelin herhangi bir model kurulum hatası içermediğini göstermektedir.

Tablo 6: ARDL(1,1) Modeli için Kısa Dönem Katsayıları

Değişken	Katsayı	Std. Sapma	t-istatistik	P-değeri
D(ARGE)	-0.0747	0.1271	-0.5875	0.5634
ECM(t-1)	-0.2093	0.0411	-5.0888	0.0001
EC = İHRACAT - (1.0443*ARGE + 26.3375)				
Tanı Testleri				
	Test-istatistik	P-değeri		
Jerque-Bera Normallik Testi	4.0576	0.1315		
Breusch-Godfrey Otokorelasyon Testi	0.9442	0.4074		
Harvey Değişen Varyans Testi	1.3270	0.2936		
Ramsey RESET Testi	0.9605	0.3394		

Cusum testi yardımıyla elde edilen parametre stabil ite testi sonuçları Grafik 1’de verilmektedir. Grafik 1’den görüldüğü üzere ARDL(1,1) modelinin parametreleri stabildir.

Grafik 1: CUSUM Testi



Son olarak nedenselliği irdelemek için Granger causality/block exogeneity Wald testi uygulanmıştır. Söz konusu test için optimal gecikmeli kısıtsız VAR modeli Schwarz kriteri kullanılarak tespit edilmiş ve Schwarz kriterine göre optimal VAR modelinin VAR(1,1) modeli olduğu görülmüştür. Kısıtsız VAR(1,1) modeli kullanılarak icra edilen Granger causality/block exogeneity Wald testinin sonuçları Tablo 7’de raporlanmıştır. Nedensellik testi sonuçlarına göre, ARGE harcamalarından ihracata doğru %10 anlamlılık düzeyinde nedensellik ilişkisi olduğu ve ihracattan ARGE harcamaların doğru da %1 anlamlılık düzeyinde nedensellik ilişkisi olduğu görülmüştür. Yani ARGE harcamaları ile ihracat arasında çift-yönlü nedensellik ilişkisi olduğu tespit edilmiştir.

Tablo 7: Nedensellik Testi

Bağımlı Değişken: İHRACAT		
	Test-istatistik	P-değeri
ARGE	3.829051	0.0504
Bağımlı Değişken: ARGE		
İHRACAT	10.81521	0.0010

5. SONUÇ

Bu çalışma, ARGE harcamalarının gerek mevcut üretim tekniklerinin verimliliğini arttırmak suretiyle gerekse de yeni buluşların önünü açmak suretiyle üretimi arttırarak ihracatı arttırabileceği motivasyonuna dayanarak Türkiye’de ARGE harcamalarının uzun dönemde ihracatı arttırabileceği savını ARDL yöntemi ile 1996-2020 periyodu için analiz etmektedir. İlk olarak değişkenlerin durağanlık düzeylerini tespit etmek için ADF birim kök testi uygulanmış ve ADF birim kök testleri sonrasında ARGE harcamaları değişkeni ile ihracat değişkeninin birinci farklarda durağan olduğu tespit edilmiştir. ARGE harcamaları değişkeni ve ihracat değişkeni ARDL eş-bütünleşme testinin şartı olan düzeylerde veya birinci farklarda durağan olma şartını sağladığı görüldüğünden dolayı ARDL eş-bütünleşme testi yapılmıştır. ARDL eş-bütünleşme testi sonuçları ARGE harcamaları ile ihracat değişkeni arasında eş-bütünleşme (uzun dönem) ilişkisi olduğunu ortaya koymaktadır. Diğer bir ifadeyle, Türkiye’de 1996-2020 yılları arasında, ARGE harcamaları ile ihracat uzun dönemde birlikte hareket etmektedir. Uzun döneme ilişkin tahmin edilen ARDL(1,1) modelinden elde edilen uzun dönem katsayı tahmin sonuçları Türkiye’de ARGE harcamalarının ihracatı istatistiksel olarak anlamlı bir biçimde arttırdığını göstermektedir. Daha spesifik olarak, 1996-2020 periyot aralığında uzun dönemde Türkiye’de ARGE harcamalarında meydana gelecek %1’lik bir artışın ihracatı %1.0443 arttırdığını ortaya koymaktadır. Son olarak yapılan nedensellik testi sonuçları ARGE harcamaları ile ihracat arasında çift-yönlü nedensellik ilişkisi olduğunu göstermektedir.

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Sağlık Turizmi ve Vergilendirme Rejimi: Türkiye Uygulamaları Hakkında Bir Değerlendirme

Öğr.Gör.Dr. Derya Dinçer Gültekin¹

Doç.Dr. Raşit Gültekin²

¹Trakya Üniversitesi Uzunköprü Meslek Yüksekokulu, Yönetim ve Organizasyon Bölümü,
deryadincer@trakya.edu.tr ORCID: <https://orcid.org/0000-0001-9648-7244>

² Trakya Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, Maliye Bölümü, rasitgultekin@trakya.edu.tr, ORCID:
<https://orcid.org/0000-0001-8390-327X>

Özet: Sağlık bireylerin bedenlen, ruhen ve sosyal yönden tam bir iyilik hali içinde bulunması anlamına gelmektedir. Bireylerin çeşitli nedenlere bozulan sağlığının tedavi edilmesi bulundukları yerlerdeki ya da yabancı ülkelerdeki sağlık işletmelerinden kaliteli, düşük maliyetli ve hızlı sağlık hizmeti almalarını gerektirebilmektedir. Bu açıdan tedavi, rehabilitasyon veya sağlıklı yaşam amaçlarıyla yapılabilen sağlık turizmi kısaca tedavi amaçlı seyahat anlamı taşımaktadır. Sağlık turizmi hem amacı hem de bireysel, ekonomik ve sosyal sonuçları bakımından sıkı regülasyonlara ve gelir getirici bir ticari faaliyet olarak da vergi bağışıklıkları ve teşvikleri içeren bir vergilendirme rejimine tabi olabilmektedir. Bu bağlamda çalışma kapsamında Türkiye’de sağlık turizminin mevcut ve potansiyel durumu ile genel görünümü ve vergilendirme rejimi incelenmiştir. Çalışma kapsamında değerlendirmelerde yararlanılacak bulgulara ulaşmak amacıyla literatür taraması yapılmış ve Türkiye İstatistik Kurumu verilerinden yararlanılmıştır. Çalışma neticesinde Türkiye’nin sağlık turizmi bakımından insan gücü, tesis-altyapı ve vergilendirme rejimi bakımından önemli avantajlara sahip olduğu ve bunun da uluslararası alanda rekabet gücüne olumlu yansıdığı görülmüştür.

Anahtar Kelimeler: Sağlık, Sağlık Ekonomisi, Sağlık Turizmi.

Health Tourism and Taxation Regime: An Evaluation of Türkiye Applications

Abstract: Health means that individuals are in a state of complete physical, mental and physical well-being. Treating individuals' health deterioration due to various reasons may require them to receive quality, low-cost and fast health services from health institutions in their country or foreign countries. In this respect, health tourism, which can be done for treatment, rehabilitation or healthy living purposes, briefly means travel for treatment purposes. Health tourism may be subject to strict regulations in terms of both its purpose and individual, economic and social consequences, and as an income-generating commercial activity, it may be subject to a taxation regime that includes tax exemptions and incentives. In this context, the current and potential situation, general view and taxation regime of health tourism in Turkey were examined within the scope of the study. In order to reach the findings to be used in the evaluations within the scope of the study, a literature review was conducted and Turkish Statistical Institute data was used. As a result of the study, it was seen that Turkey has significant advantages in terms of manpower, facility-infrastructure and taxation regime in terms of health tourism, and this has a positive impact on its competitiveness in the international arena.

Key Words: Health, Health Economics, Health Tourism.

Not: Yazar Katkıları: Tasarım-DDG,RG; Literatür Taraması-DDG,RG; Analiz/Yorumlama-DDG,RG; Taslak/Yazım-DDG,RG; Eleştirel İnceleme-DDG,RG ve Onay/Sorumluluk- DDG,RG.

1. GİRİŞ

Sağlık turizmi kısaca kişilerin tedavi amacıyla bulundukları yerlerden ülke içindeki ya da dışındaki başka yerlere seyahat etmeleridir. Sağlık turizmi alanı sağlık, turizm ve ekonomi/maliye disiplini ve uygulama alanlarının birbiriyle ilişkili olduğu bütünü ifade etmektedir. Sağlık turizmi sağlık ve turizm işletmeleri ile seyahat, taşımacılık finans ve sigorta şirketleri ve oteller gibi çok aktörlü bir uygulama alanıdır. Sağlık turizminin uluslararası yönü ise katma değeri yüksek olan sağlık hizmeti ve ilişkili diğer hizmetlerin ihracatını kapsamı ve döviz geliri kazandırması nedeniyle önem arz etmekte ve bu nedenle çeşitli hukuki düzenlemelere konu olmaktadır. Ayrıca sağlık turizmi her geçen gün artan önemi bağlamında mali teşvik ve destek uygulamalarının da odağında yer almaktadır.

Türkiye’de sağlık turizminin ve ilişkili vergi uygulamalarının genel bir değerlendirmesini ortaya konulmasının amaçlandığı bu çalışma literatür/belge taraması yöntemiyle içeriği oluşturulmuş üç bölümden oluşmaktadır. Birinci bölümde sağlık turizminin kavramsal çerçevesi, türleri ve yapılış yöntemleri üzerinde durulacaktır. İkinci bölümde sağlık turizminin sağlık ekonomisi kapsamındaki yeri, kapsamına giren temel konular ve sağlık turizminin nedenleri, sağlık turizmi yoluyla elde edilen gelirin önemi ve sağlık turizminin ekonomik eleştirisi

açıklanacaktır. Çalışmanın son bölümünde ise Türkiye’de sağlık turizminin durumu ve sağlık turizmine yönelik vergi uygulamaları incelenecektir.

Sağlık turizmi konusu disiplinler arası bir inceleme alanı oluşturmaktadır. Zira sağlık turizmi turizm, tıp, ekonomi/maliye disiplinleri ve tabi olduğu kamu hukuku kuralları ve evrensel değerler bağlamında hukuk disiplinini ilgilendiren bir içeriğe sahiptir. Bu bağlamda çalışmanın ilgili alanlarda sağlık turizmi alanında teorik ve uygulamalı çalışmalar yapan bilim insanlarının araştırmalarına katkı sağlayacağı öngörülmektedir.

2. SAĞLIK TURİZMİNİN KAVRAMSAL ÇERÇEVESİ VE KAPSAMI

Sağlık turizmi sağlık, turizm ve ekonomi disiplini ve uygulama alanlarına ilişkin anlama ve kapsama işaret eden bir çerçeve kavram niteliği taşımaktadır. Bu başlık altında sağlık turizmi kavramı ile bu kavramla ilişkili diğer kavramlar ile sağlık turizmi kapsamına giren temel konular incelenecektir.

2.1. Sağlık Turizmi Kavramı ve İlişkili Kavramlar

Gerçek kişiler dinlenme, eğlenme, ticaret, bilimsel veya kültürel etkinlik ya da sağlık/tedavi amaçlarından biri veya birkaçı çerçevesinde ülke içinde ya da ülkeler arasında seyahat edebilmektedirler. Kişilerin söz konusu kısa süreli seyahatleri turizm ve turizmin alt türlerine ilişkin kavramlarla tanımlanmaktadır. Bu noktada sağlık turizmiyle ilgili kavramlar hizmet ve sağlık sektörüyle ilişkili olduğundan bu alanlardaki değişim dinamiklerinden etkilenmektedirler (Yılmaz, 2013: 472).

Turizm kavramı “...yerli ve yabancı ziyaretçileri çekmeye ve onların taleplerini ve isteklerini gidermek amacıyla yapılan firma faaliyetleri...”(Harsell, 1994: 7), “...yerli ve yabancı turistlerin sosyal ve iş yaşamlarından uzak başka yerde sürekli olmayan aktiviteleri ve bu alanlarda kaldıkları zaman dilimi boyunca isteklerinin sağlanması için yapılan aktiviteler...”(Mathieson and Wall, 1992: 1) ve “...bireylerin düzenli olarak yaşamlarını idame ettirdikleri yerden uzaklaşarak süresi bir yılı geçmemek üzere her türlü amaçlarını giderdiği faaliyetler...”(UNWTO, 1994: 5) şeklinde tanımlanmaktadır (Sevgel ve Mısırlıoğlu, 2023: 72).

Birleşmiş Milletler Dünya Turizm Örgütü (World Tourism Organization/UNWTO) turizmi “...iç turizm/kendi ülkeleri içerisinde seyahat eden turistler ve onları ağırlayan endüstri ve destek sistemleri...”, “...dış turizm/ülkeye farklı ülkelerden turistlerin seyahat etmeleri ve konaklamaları...” ve “...pasif turizm/deniz, güneş ve kum destinasyonlarını tercih eden turistlerin ayrıca kaplıca ve sağlık merkezlerine yönelik aktiviteleri...” şeklinde üç türe ayırmaktadır (UNWTO, 1994: 5; Sevgel ve Mısırlıoğlu, 2023: 72). Ayrıca turizmin; gidilen yer, turistlerin geliş amacı, sayısı ve yaşı gibi ölçütler çerçevesinde “...aile turizmi, akıllı turizm, alternatif turizm, dağ turizmi, deniz turizmi, e-turizm, eko turizm, engelli turizmi, etkinlik turizmi, film turizmi, futbol turizmi, gastronomi turizmi, inanç turizmi, kırsal turizm, kongre turizmi, kültür turizmi, macera turizmi, medikal turizm, sağlık turizmi, sosyal turizm, spor turizmi, sürdürülebilir turizm, şarap turizmi, şehir turizmi, termal turizm, uzay turizmi, üçüncü yaş turizmi, yaban hayatı turizmi...” gibi birçok türü bulunmaktadır (Demirer ve Hatırnaz, 2023: 37-38).

Uygulaması insanlığın ilk çağlarına kadar gitmekle birlikte sağlık turizmi kavramı 1973’te “...her hangi bir devletin doğal kaynak suyunu, iklimini ve çevre koşullarını kullanan sağlık tesislerini ziyaret edenlerin yaptıkları gezileri...” ifade etmek üzere kullanılmıştır (Yiğit ve Açıkgöz, 2023: 177). Sağlık turizmi kavramı önceleri sadece tıp (medikal) turizmi kapsayan kullanım alanına varken artık SPA (Selus Per Aqua/Sudan Gelen Sağlık), SPA&Wellness (suyun tedavi edici gücünden gelen sağlık), termal turizm, geriatri (ileri yaş) turizmi gibi çeşitli turizm türlerini ilişkili olarak kullanılmaya başlamıştır (Dalahmetoğlu ve Oktay, 2021). Diğer taraftan Dünya Ticaret Örgütüne göre sağlık turizmi mesleki hizmet kategorisinde yer almaktadır (Batbaylı, 2022: 367).

Günümüzde sağlık turizmi “...ruh ve beden sağlığının korunması, güçlendirilmesi, iyileştirilmesi, geri kazanılması ile birlikte bütün bu kazanımların sürdürülebilir hale getirilmesi ve seyahat edilen bölgede en az 24 saat kalarak sağlık ve turizm imkanlarından yararlanılması amacıyla ikamet edilen yerden başka bir yere seyahat edilmesi...” anlamını taşımaktadır (Aslan ve Papatya, 2022: 1382). Diğer bir ifadeyle sağlık turizmi kavramı “...kişilerin yaşadıkları yerlerin dışarısında teşhis, tedavi ve rehabilitasyon hizmeti almak için uluslararası seyahat ederek sağlık hizmeti almalarına yönelik faaliyetlerini...” tanımlamaktadır (Yiğit ve Açıkgöz, 2023: 176). Ekonomik bakış açısıyla sağlık turizmi kavramı ise “...insanların, kendi ülkelerinde yüksek tedavi masrafları nedeniyle düşük ücretlerle tedavi yapan ülkelere giderek tedavi ve operasyonları bu ülkelerde gerçekleştirmeleri ile ortaya çıkan turizm hareketlerine...” işaret etmektedir (Okutmuş vd., 2015: 69). Sağlık turizmine ilişkin yapılan tanımlar birlikte değerlendirildiğinde esasında sadece tedavi amaçlı yabancı ülke ziyaretlerinin sağlık turizmi kavramıyla ifade edildiği görülmektedir (Ceti and Unluonen, 2020: 100).

Sağlık mevzuatı bağlamında Uluslararası Sağlık Turizmi ve Turistin Sağlığı Hakkında Yönetmelikte (MBS, 2023a) sağlık turizmi kavramı ve bu kavramla ilişkili diğer kavramların ifade ettiği anlam belirtilmiştir. Buna göre **uluslararası sağlık turizmi** kavramı “...sağlık amaçlı yurtdışından ülkemize geçici bir süreliğine gelen, Türkiye Cumhuriyeti vatandaşı olmayan veya Türkiye Cumhuriyeti vatandaşı olmakla birlikte yurtdışında ikamet eden gerçek kişilerin aldıkları her türlü sağlık hizmeti ile bunlarla ilgili destek hizmetlerini...”, **uluslararası sağlık turisti** kavramı “...uluslararası sağlık turizmi ve turistin sağlığı kapsamında sağlık hizmeti alan hastayı...”, **uluslararası sağlık turizmi aracı kuruluşu** kavramı “...uluslararası sağlık turisti ile beraberindeki refakatçi ve diğer yakınlarına konaklama, ulaşım ve transfer hizmetlerinin sağlanması faaliyetlerini yürütmek üzere yetkilendirilen...işletme belgesi alan A grubu seyahat acentelerini...”, **uluslararası sağlık turizmi sağlık tesisi** kavramı “...sağlık tesisi ruhsatına sahip olan ve Bakanlıkça uluslararası sağlık turizmi yetki belgesi verilen kamu, üniversite ve özel sağlık kurum ve kuruluşunu...”, **yabancı** kavramı “...Türkiye Cumhuriyeti Devleti ile vatandaşlık bağı bulunmayan kişiyi...” ve **yetki belgesi** kavramı “...uluslararası sağlık turizmi yetki belgesini...”(m.4) ifade etmektedir.

Ayrıca Hizmet İhracatının Tanımlanması, Sınıflandırılması ve Desteklenmesi hakkında Cumhurbaşkanlığı Kararına (MBS, 2023b) göre **döviz kazandırıcı hizmet veya faaliyet** kavramı “...Birleşmiş Milletler Genişletilmiş Ödemeler Dengesi Hizmetler Sınıflama çerçevesinde oluşturulan ve ana başlıklar halinde ... [Kararın 1 Nolu ekinde] ...yer alan sektörler ile bu sektörlerdeki faaliyetleri...”, **hizmet ihracatçısı** kavramı “...hizmet ihracatı gerçekleştiren Türkiye’de yerleşik kişileri veya kuruluşları...” ve **hizmet ihracatı** kavramı “...yurt dışında yerleşik kişi veya kuruluşlara yönelik olarak yurt içinde ya da yurt dışında gerçekleştirilen, yurt içinde ya da yurt dışında faydalanan ve [Kararın 1 Nolu ekinde] ...yer alan döviz kazandırıcı hizmet veya faaliyetlerin sunumlarını...”(m.3) ifade etmektedir. Yine Karara göre **konaklama tesisi** kavramı “...ilgili kamu kurumunun izin ve denetiminde faaliyet gösteren konaklama tesislerini...”, **sağlık kuruluşu** kavramı “...ilgili kamu kurumunun izin ve denetiminde sağlık, termal ve/veya bakım alanlarında faaliyet gösteren özel veya kamu sektörü kuruluşunu ya da üniversite sağlık/bakım kuruluşlarını...”, **poliklinik** kavramı “...Ayakta Teşhis ve Tedavi Yapılan Özel Sağlık Kuruluşları Hakkında Yönetmelik uyarınca faaliyet gösteren, ağız ve dış sağlığı polikliniği haricindeki diğer poliklinikleri...”, **sağlık turizmi aracı kuruluşu** kavramı “...yurt dışından gelen hastalara rehberlik, danışmanlık ve organizasyon hizmetleri sunan şirketi...” ve **yararlanıcı** kavramı “...Türkiye’de yerleşik kişi olup sağlık turizmi sektöründe faaliyet gösteren şirketler ve sağlık turizmi aracı kuruluşları ile spor turizmi sektöründe faaliyet gösteren şirketler ile diğer kurum ve kuruluşları...” (m.86) ifade etmektedir.

2.2. Sağlık Turizmi Türleri

Sağlık turizminin literatürde farklı sayıda türlerine yer verilse de genel olarak “*medikal (tedavi amaçlı) turizm/tıp turizmi*”, “*sağlıklı yaşam turizmi*” ve “*termal turizm*” olmak üzere üç tür uygulaması bulunmaktadır.

Teşhis ve rehabilitasyon sürecini birlikte içeren **medikal turizm**, tanım olarak, “...kanıta dayalı tıbbi iyileştirme kaynaklarının ve hizmetlerinin (hem invaziv/cerrahi hem de non-invazif/cerrahi işlem gerektirmeyen) kullanımını içeren bir turizm faaliyeti...” ifade etmektedir (Pirhan ve Eter, 2022: 139). Hastaların kaliteli bir sağlık hizmeti alabilmek ve tedavi sürecinde stres yaşamamak için ulaşım, konaklama ve tedavi olanaklarını birlikte içeren sağlık paketlerini tercih etme eğiliminin sonucu olan medikal turizm, tatilin ve sağlık sorunlarının tedavisine yönelik tedavi yöntemlerinin aynı zamanda ve uygun bir bütçeyle birlikte sunulduğu turizm türü oluşturmaktadır (İçöz, 2009: 2261). Sağlık turizmi ile medikal turizm aynı anlama gelecek şekilde kullanılsa da medikal turizm kavramı tüketicilerin yalnızca bazı tıbbi tedavilerden yararlanmak amacıyla uluslararası sınırları aşacak şekilde seyahatine işaret ederken sağlık turizmi kavramı doğrudan hastalıkların tedavisi amacı yanında estetik kaygılarla da yapılan aktiviteleri de kapsayan geniş bir anlama sahiptir (Uygun ve Ekiz, 2016: 20).

Sağlıklı yaşam turizmi kavramı “...yaşlı ve engelli bireyler için klinik otellerin, rekreasyon alanlarının ve çeşitli konularda faaliyette bulunan bakım evlerinin sunduğu ya da SPA/wellness kapsamında su ve çeşitli aromatik kürlerin kullanılarak çeşitli sağlık sorunlarının tedavisi amacıyla profesyonel ekipler gözetiminde bir otelde, gemide ya da hastanede yapılan masaj, su egzersizi, sauna ve çamur banyosu gibi etkinlikleri içeren turizm türü...” anlamını taşımaktadır (Toprak vd., 2014: 41).

Termal turizm kavramı ise “termomineral su banyosu, içme, inhalasyon, çamur banyosu gibi çeşitli termal tedavi yöntemleri ile birlikte iklim kürü, fizik tedavi, rehabilitasyon, egzersiz, diyet gibi destek tedavilerinin birleşimi ile yapılan kür uygulamalarının yanında termal suların eğlence ve rekreasyon amaçlı kullanıldığı faaliyetleri içeren turizm türü” olarak tanımlanmaktadır (Özkan, 2019: 53).

2.3. Sağlık Turizminin Yapılış Yöntemleri

Sağlık hizmetleri genel olarak **mod** kavramıyla ifade edilen dört farklı şekilde sunulmaktadır. **Birinci mod**; sağlık hizmetinin, hizmeti sunan kişi ile bu hizmetten yararlanan kişinin ülkeler arasında yer değiştirmeden sunulmasıdır. Örneğin MR ya da röntgen sonuçları hakkında uzman görüşüne başvurulması için data transferi, diğer bir ifadeyle sadece sağlık hizmetinin sınır aşması birinci mod olarak değerlendirilmektedir. **İkinci mod**; sağlık hizmetinin bir tarafın toprağında diğer tarafın tüketicisine sunulmasıdır. Örneğin turist hastaların sağlık hizmeti almak amacıyla başka bir ülkeyi ziyaret etmesi bu kapsamdadır. Sağlık turizmi ağırlıklı olarak (%80 civarında bir payla) ikinci modla ilişkili olarak değerlendirilmektedir. **Üçüncü mod**; bir ülkede yerleşik sağlık hizmeti sunucusunun hizmet sunacağı karşı ülkede ticari varlık (şirket, işletme, hastane, klinik, şube, ofis vs.) kurarak sağlık hizmeti arz/ihraç etmesidir. **Dördüncü mod** ise sağlık hizmetinin, hizmetin sunulduğu topraklarda geçici olarak bulunan kişiler tarafından sunulmasıdır. Örneğin bir doktorun bir hastasını tedavi etmek amacıyla kısa süreliğine yurt dışına çıkarak sağlık hizmeti vermesi ve sonrasında ülkesine geri dönmesi bu kapsamdadır (TİM, 2018: 9-11; Batbaylı, 2022: 368).

Hizmet ihracatının Tanımlanması, Sınıflandırılması ve Desteklenmesi hakkında Cumhurbaşkanlığı Kararında **hizmet ihracatı yöntemleri** ise **sınır ötesi hizmet ihracatı yöntemi** “...yurt dışında yerleşik kişi veya kuruluşlara yönelik olarak yurt içinde sağlanan ve yurt dışında faydalanan hizmet sunumu...”(m.4), **yurt içi hizmet ihracatı yöntemi** “...yurt dışında yerleşik kişi veya kuruluşlara yurt içinde sağlanan ve yurt içinde faydalanan hizmet sunumu...”(m.5), **yurt dışında ticari varlık oluşturulması yoluyla hizmet ihracatı yöntemi** “...hizmet ihracatçıları tarafından yurt dışında ticari varlık kurulması suretiyle sağlanan hizmet sunumu...”(m.6) ve **gerçek kişiler tarafından gerçekleştirilen hizmet ihracatı yöntemi** “... yurt içinde yerleşik kişi veya kuruluşlar adına ya da bağımsız olarak gerçek kişiler tarafından yurt dışında sağlanan hizmet sunumu...”(m.7) başlıkları altında düzenlenmiştir.

3. SAĞLIK TURİZMİNİN EKONOMİK BOYUTU VE ELEŞTİRİSİ

Ülkelerin sağlık turizmine yönelmesinin temel nedeni esasında ekonomik sonuçlarından yararlanma isteğidir. Bu açıdan sürdürülebilir sağlık turizmi ülkeler için iyi bir gelir kaynağı oluşturmaktadır. Bu başlık altında sağlık ekonomisi bağlamında sağlık turizmi ve sağlık turizmi yoluyla elde edilen gelirin ekonomik yönü incelenecektir.

3.1. Sağlık Ekonomisi Kapsamında Sağlık Turizmi

Genel olarak sağlık ekonomisi, sağlık sektörünün kaynaklar üzerindeki baskının artması ve ülke kaynaklarının önemli bir bölümünün bu sektörde kullanılması nedeniyle, genel ekonomi disiplinine ilişkin tekniklerin sağlık sektörüne uygulanması neticesinde ortaya çıkan uygulamalı bir alt disiplin niteliği taşımaktadır. Nitekim sağlık harcamalarının sürekli artış eğilimi göstermesinin önemli bir ekonomik problem oluşturması nedeniyle kaynak kullanımının öncelik, kullanım şekli ve sonuçları bakımından analizini öne çıkarmıştır. Bu bağlamda sağlık ekonomisi; “...sağlık alanındaki yasal düzenlemeler, birey ve toplum sağlığını ilgilendiren düzenlemelerin iktisadi sonuçları, sağlık politikalarının oluşturulması ve sonuçlarının değerlendirilmesi, sağlık hizmetlerinde kaynakların etkin kullanımının sağlanması, sunulan hizmette yaygınlığın ve sürekliliğin oluşturulması, hizmet alanların elde ettiği faydaların artırılması amacıyla sağlık hizmetlerinin finansmanı, arz ve talebinin; yönetim, organizasyon ve insan gücü boyutuyla yeniden yapılandırılması ve geliştirilmesi faaliyetlerinin tamamını kapsayan...” bir inceleme alanıdır (Çalışkan, 2008: 32; Çoban, 2009: 6; Tıraş, 2013: 131). Sağlık ekonomisi “...ekonomi biliminin teori, kavram ve yönteminin sağlık ve sağlık alanı ile ilgili tüm faaliyetlere ve kurumlara uygulanması...” olarak ifade edilmektedir. (Ulutürk, 2015: 52-53). Sağlık ekonomisi bir uygulama alanı olarak insanın/toplumun refah seviyesini yükseltme amacını taşımaktadır (Işık, 1997: 8).

Sağlık hizmetlerinin sunumu ve tüketilmesi bağlamında bu hizmetlere yönelik yatırımlar sağlık hizmeti üreten personel, araç-gereç, ilaç-malzeme ve tesislere yönelik olsa da ulaşım, bilişim, bankacılık ve sigortacılık gibi pek çok sektörü doğrudan ve dolaylı olarak etkilenmektedir. Söz konusu unsurlarla birlikte sağlık harcamaları ve sağlık hizmetlerinin finansmanı bir bütün olarak sağlık piyasasını oluşturmaktadır. Bu bağlamda sağlık talebi (**hastalar-sağlık hizmeti tüketenler**) ile sağlık arzı (**sağlık hizmeti sunan personel, alt-yapı ve diğer unsurlar**) mikro düzeyde; sağlık harcamaları, sağlık çalışanlarının istihdamı, nüfusun sağlıklı yaşam beklentisine ilişkin büyüklükler ise makro düzeyde sağlık ekonomisinin birleşenleridir (Işık, 1997: 8; Batbaylı, 2021: 10).

Sağlık ekonomisinin ilişkili olduğu konuların sayısı oldukça fazla olmakla birlikte sağlık hizmetleri açısından sağlık arzı ve sağlık talebi iki önemli birleşeni oluşturmaktadır. Sağlık hizmeti arzı “...sağlık ekonomisinin üretim yönünü...” oluşturmaktadır ve kapsamına “...sağlığa ayrılan kaynaklar, üretim maliyetleri, alternatif üretim

teknikleri, piyasanın yapısı, kar amacı gütmeyen faaliyet gösteren sağlık kurumlarının varlığı, sağlık hizmetlerinin finansman biçimi vb etkenler...” girmektedir (Dağlı, 2006:15; Tıraş, 2013: 131).

Sağlık hizmeti talebi ise “...sağlık ekonomisinin tüketim tarafını oluşturmaktadır...” ve kapsamına “...bireylerin gelir düzeyi, sağlık hizmetlerine yönelik bakış ve davranış biçimi, sağlık hizmetleri talebini etkileyen piyasa şartları vb etkenler...” girmektedir ve sağlık hizmeti arz/talebi dışında olmakla birlikte “...çevre koşulları, tüketim beslenme alışkanlıkları, mesleki hastalık riskleri, sağlığı kötü etkileyen maddelerin kullanılması da (alkollü içecekler, sigara ve uyuşturucu maddelerin alınması)...” dolaylı olarak sağlık ekonomisi kapsamına girmektedir (Tıraş, 2013: 131).

Sağlık ekonomisi alanında yapılan çalışmalarda genellikle sağlık harcamaları, büyümeyle olan ilişki ve sağlık turizmi konuları incelenmektedir (Şeker ve Yalçınkaya, 2020: 166). Bu bağlamda sağlık turizmi sağlık ekonomisi kapsamında hem sağlık hizmeti arzı hem de sağlık hizmeti talebi kapsamına giren bir inceleme konusu niteliği taşımaktadır. Zira sağlık turizmi esasında **farklı ihtiyaçları karşılamak amacıyla oluşan talebe ve bu talebi karşılamaya yönelik oluşan arza göre içerik kazanan turizm faaliyetlerini** kapsamaktadır.

Sağlık hizmeti talebinin kaynağını olan turistler “yalnızca turistler/geldikleri ülkede sağlık hizmeti almayanlar”, “tatilde tedavi edilenler/tatilleri sırasında ortaya çıkan kaza ve hastalık nedeniyle sağlık hizmeti alanlar”, “tatil ve tedavi amaçlı gelenler/tam olarak tıbbi nedenlerle bir ülkeye gitmemekle birlikte gittikleri ülkede bazı rahatsızlıklarının tedavi için tedavi olanaklarının da olmasını tercih edenler”, “tatil yapan hastalar/asıl amaç tedavi olmak-sağlık hizmeti almak olsa da tedavi sonrası gittikleri ülkede tatil de yapanlar” ve “yalnızca hastalar/bir ülkeye yalnızca sağlık hizmeti almak-tedavi olmak amacıyla gidenler” olmak üzere beş kategoride toplanmaktadır (Cohen, 2006; İçöz, 2009: 2261). Sağlık turizminin ana hedefi son kategori oluşturmakla birlikte turizmin bir şekilde sağlıkla birlikte değerlendirildiği bütün konuların sağlık turizmi kapsamında değerlendirilmesi uygun bir seçenek oluşturmaktadır.

Genel olarak sağlık turizmini etkileyen olumlu veya olumsuz nitelik taşıyan faktörler arasında “...tedavi/bekleme süresi, gizlilik ve mahremiyet, sağlık turistindeki kalite kaygısı/güven algısı, sağlık hizmeti çeşitliliği hakkında bilgi edinme imkanı, sağlık hizmetlerinin maliyeti (hizmet ihracı yapan ülkede düşük fakat hizmet ithali yapılan ülkede yüksek maliyetli oluşu), çalışanların ve sigorta şirketlerinin onayı, ihtiyaç duyulan sağlık hizmetlerine ulaşmada karşılaşılan sorunlar, seyahat acentelerine/aracılarına ulaşılabilirlik, gelişmiş ülkelerde hızla artan yaşlı nüfusu, bireylerin bulundukları ülkede bazı sağlık harcamalarını karşılayamamaları, kişisel ve ahlaki sebepler, kişilerin tedavi sonrası tatil ve eğlenme istekleri, küreselleşme, teknoloji, bilgi ve iletişim teknolojilerindeki ilerleme, ülkelerin sağlık ve sosyal güvenlik sistemlerinde yaşanan sorunlar, kişisel tercihler ve bilinçlenme, sağlık sektöründeki yeni açılımlar ve pazar arayışı, sağlık hizmetlerini çeşitlendirme arayışı...” yer almaktadır (Jadhav, 2014: 111-112; Altın et al., 2012: 1005; Yiğit ve Açıkgöz, 2023: 183). Diğer bir ifadeyle sağlık turizmi “...ekonomik maliyet, zamanlama, ticari davranış, ticari olmayan davranış boyutu ve ulaşılmazlık...” başlıkları altında gruplandırılan beş temel boyutu bulunmaktadır (Hall, 2011; Kılavuz, 2018: 46).

Medikal turizm özelinde sağlık turizminin talep boyutu temelde düşük maliyete göre şekillenmektedir. Diğer bir ifadeyle sağlık hizmeti talebinin esasında temel nedeni kişilerin ihtiyaç duyduğu sağlık hizmetini ülkelere ya da bulundukları yere göre daha düşük maliyetle sunan ülkelere karşılama isteğidir. Zira ülkelere göre değişmekle birlikte gidilen ülkedeki tedavi maliyetinin gelineen ülkeye göre ortalama %50-70’i oranında düşük olduğu bilinmektedir. Bu nedenle sağlık turizminin temel nedeni kaliteli ve yüksek teknoloji standartları olan sağlık hizmetinin sağlık turistlerine sağladığı fiyat avantajıdır (Okutmuş vd., 2015: 69). Bu noktada medikal turizm özelinde sağlık piyasası arz ve talebe göre şekillenmektedir ve hizmet alan ve verenlerin sayıca fazla olması nedeniyle rekabetçi piyasa niteliği taşımakta ve fiyatlar esnek oluşmaktadır (Dilber ve Yalçınkaya, 2020: 194). Ayrıca sağlık hizmeti talebinde genel olarak gelirin etkisi fiyatın etkisine göre yüksek olması sebebiyle gelirde meydana gelen artış sağlık hizmetleri tüketimini belirli bir noktaya kadar arttırdığı (Mutlu ve Işık, 2012: 75) hususunun sağlık turizmi talebinde de göz önünde bulundurulması gerekmektedir. Maliyet farklılıkları dışında ulaşım teknolojisinin sunduğu kolaylıklar, akrabalık ilişkileri ve tatil alışkanlıkları, alternatif turizm imkanlarının varlığı gibi nedenler de sağlık turizmi talebini ve dolayısıyla tüketici konumundaki turistlerin tercihini etkileyen unsurlar arasında yer almaktadır. Bu noktada özellikle belirtilmelidir ki sağlık turizmine yönelik talep sadece zorunlu tedavi ihtiyaçlarıyla ilişkili olmayıp örneğin kişilerin daha iyi görünüme sahip olma beklentilerine en iyi şekilde hitap eden estetik operasyonlar konusunda gelineen noktadan da kaynaklanabilmektedir (Pekşen, 2021: 205).

Turizmi arz ile talebi birbiri içine girmiş konulardan oluşmaktadır. Bazı hallerde sağlık hizmeti arzı kendi talebini doğurduğundan arz ve talep birleşenlerini kesin sınırlarla ayırmak mümkün olmayabilmektedir. Bununla birlikte sağlık turizmi kapsamında sağlık hizmeti arzı sağlık işletmeleri, ileri yaşlılara yönelik bakım merkezleri ve sağlık

hizmeti veren konaklama tesisleri şeklinde ana aktörler ile bunlarla ilişkili unsurlardan oluşmaktadır. Ayrıca sağlık turizmi arzında ulaşım sektörü, turizm sektörü, iletişim/bilişim sektörü, seyahat sektörü, finans/sigorta sektörü, inşaat sektörü ve aracı kurumlar şeklinde paydaşlar da bulunmaktadır (Somel, 2020: 206; Tontuş, 2023a). Dolayısıyla sağlık turizminin arz boyutu, dar anlamda sağlıkla ilişkili işletmeler olmakla birlikte, geniş anlamda birçok sektörü kapsamına alan ekonomik birimlerin sunduğu hizmetleri kapsamaktadır.

Sağlık turizminde sağlık hizmeti arz edenler temelde özel sektörden olmakla beraber kamu kurumları ve küçük ölçekli işletmeler ya da oldukça büyük sağlık tesisleri olabilmektedir. Dinamik niteliğe sahip olan sağlık turizmi piyasası ekonomik iklim, döviz kuru, siyasi istikrar, seyahat kısıtlamaları, reklam uygulamaları, yenilikçi ve öncü tedavi biçimleri gibi çeşitli faktörlerden ve otel, ulaşım, iletişim ve pazarlama gibi birçok sektörle bütünleşik olması sebebiyle bu sektörlerdeki değişikliklerden etkilenmektedir. Ayrıca sağlık turizmini geliştirmek isteyen ülkelerde çok uluslu büyük ortaklıklarla işbirliği yapılabilmektedir (Yılmaztürk, 2023).

3.2. Sağlık Turizminden Elde Edilen Gelirler ve Ekonomik Katkısı

Sağlık turizmine ilişkin verilerin güvenilirliği ve sağlık turizmi kapsamına giren bileşenlerinin değişen tanımları sağlık turizminin ekonomik ve pazar boyutunu ve büyümesini tahmin ve tespit edilmesini zorlaştırmakla birlikte sağlık turizminin dünyada yaklaşık 100 milyar ABD doları düzeyinde bir pazar büyüklüğünün olduğu tahmin edilmektedir. Türkiye'nin de içinde olduğu çoğu ülke, sağlık turizmini döviz kazandırıcı bir faaliyet olarak görmekte bu kaynaktan elde edilecek gelirin ödemeler dengesine yapacağı olumlu etkiden yararlanmak istemektedir (Pirhan ve Eter, 2022: 140).

Sağlık hizmeti ihracatı veya ithalatı, sağlık turistlerinin kendi ülkeleri ile gittikleri ülkeler arasında gelir akımına da yol açmaktadır. Bir ülkede yerleşik sağlık hizmeti sunan işletmelerden yabancı hastalar/turistlere tıbbi hizmet vermesi halinde o ülke sağlık hizmeti ihraç etmiş; tersine bir ülkenin vatandaşları yurt dışında yerleşik sağlık hizmeti sunan işletmelerden tıbbi hizmet alması halinde sağlık hizmeti ithal edilmiş sayılmaktadır (Lautier, 2008: 102; Batbaylı, 2021: 40). Sağlık turizmi ülkeler için yeni ve iyi bir gelir kaynağı oluşturmaktadır (Pekşen, 2021: 205). Sağlık turizmi ülkeler için iyi bir döviz girdisi kaynağı görünümüne sahiptir. Zira yapılan akademik çalışmalar (Ceti and Unluonen, 2020: 107) da göstermektedir ki sağlık turistlerinin ortalama harcama tutarları normal turistlere kıyasla daha yüksektir. Çoğu gelişmekte olan ülke için turizm halen önemli bir gelir kaynağı ve en önemli hizmet ihracatı kalemi oluşturmaktadır. Sağlık turizminin ekonomiye olan katkısı Hindistan, Malezya, Singapur ve Türkiye gibi ülkelerde oldukça belirgindir (Kılavuz, 2018: 47).

Genel olarak turizm sektörü istihdam, Gayrisafi Yurtiçi Hasıla (GSYİH) ve ödemeler dengesi ile taşımacılık, iletişim, inşaat, tarım, tüketim gibi ilişkili sektörlerle yönelik etkisi nedeniyle ülkelerin ekonomik kalkınma ve gelişme sürecine olumlu katkısı bağlamında önemlidir. Ayrıca sağlık turizmi dönemselliği kaldırarak turizm gelirlerini yıllara yayması ve turizm faaliyetlerini çeşitlendirerek sürdürülebilirliğe katkı sağlaması bağlamında ayrıca önemlidir (Kılavuz, 2018: 43-44). Sağlık turizmi ve özellikle de medikal turizm, tıp sektörü ile turizm sektörünü birbirine bağlayan önemli bir ekonomik etkinlik niteliğine sahiptir (Yiğit ve Açıkgöz, 2023: 185).

Sağlık hizmeti sektörü, genel olarak katma değeri ve döviz girdisi yüksek hizmetlerin sunumu ile istihdama ve ekonomik büyümeye katkı sağlama potansiyeline sahiptir (Kılavuz ve Erkekoğlu, 2019: 56; Batbaylı, 2021: 31). Birçok ülke, döviz gelirlerini artırmak için sağlık turistlerine sağlık hizmeti sunmaktadır. Bu amaçla ülkeler sağlık hizmetleri alanında yatırımların artması ve ihracatın gelişmesi için teşvik, destek ve sübvansiyon sistemlerinden yararlanmaktadır. Zira sağlık hizmeti ihracatı, ülkelerin milli gelirine katkısı dikkate alındığında, etkili bir ihracat perspektifi olarak kabul edilmektedir (Leonard:2012; Batbaylı, 2021: 30; Yılmaztürk, 2023).

3.3. Sağlık Turizmi Ekonomisinin Eleştirisi

Sağlık turizminin ekonomik boyutuna yönelik olumlu yaklaşımlar yanında eleştirisinin de olduğunu belirtmekte fayda bulunmaktadır. Eleştirilerin odağında ise sağlık hizmetlerine ulaşılmasında vatandaşlar ve yabancılar arasında oluşan eşitsizlik/dezavantaj, sağlığın ticarileşmesi ve tekelleşmesi konuları yer almaktadır.

Bu bağlamda ilk olarak sağlık turizminin sağlık hizmetlerinde kaliteyi artırdığı varsayılrsa da mevcut veriler bu argümanı tartışmalı hale getirmektedir. İkincisi sağlık hizmetlerinden yararlanma noktasında sağlık turizmi vatandaş ile vatandaş olmayan kişiler arasında eşitliliği bozma potansiyeli içermektedir. Üçüncüsü sağlık turizmi en temel hak olan sağlıklı yaşamaya yönelik hizmetleri ticarileştirmektedir. Sağlık turizmi yoluyla elde edilen gelirin kamu sağlık hizmetlerinin finansmanı için kullanıldığı yönünde argümanlar olsa da Hindistan'a ilişkin veriler ülkedeki sağlık işletmelerinin kar amacı gütmeyen vakıf hastaneleri pozisyonundan kar amaçlı işletmeler

haline dönüştüğünü göstermektedir. Son olarak kurumsallaşma/bürokratikleşme ile sağlık hizmeti sunan büyük aktörlerin konsolidasyonu tekelleşme, sağlığın metalaşması, tıp etiği dışında kalması ve kamusal sağlığının evrensel müktesebatından uzaklaşması tehlikesi içermektedir (Somel, 2020: 226-228).

4. TÜRKİYE’DE SAĞLIK TURİZMİNİN GENEL GÖRÜNÜMÜ VE VERGİLENDİRME REJİMİ

Türkiye’de sağlık turizmine atfedilen önemin her geçen gün artması konuyu hem uygulayıcılar hem de akademik çevreler tarafından bütün yönleriyle ele alınmasını ve özellikle Türkiye için sağlık turizminin genel görünümü, sağlık turizmine ihtiyaç duyulmasının nedenleri, Türkiye için avantaj/avantaj oluşturan durumlar ve sağlık turizmi açısından yapılanlar ve yapılması gerekenler hakkında değerlendirmeler içeren literatürün oluşmasına katkı sağlamıştır. Bu başlık altında ana hatlarıyla Türkiye’de sağlık turizminin genel görünümü ve sağlık turizmiyle ilişkili yatırım ve hizmet ifalarına ilişkin teşvik ve vergileendirme rejimi incelenenektir.

4.1. Türkiye’de Sağlık Turizminin Genel Görünümü

Türkiye’de sağlık turizmi konusu geçmişi daha eski dönemlere uzanmakla birlikte özellikle son yıllarda politika, mevzuat ve kurumsallaştırma çalışmalarının odağında olmuştur. Sağlık turizminin ulaştığı noktada 24 Ocak 1980 Kararlarının önemli etkileri olmuştur. Zira söz konusu kararların alınmasıyla birlikte Türkiye ekonomisi korumacı/yasaklayıcı ticaret ve kambiyo politikalarını ve bu kapsamda ithal ikameci ekonomi politikalarını terk ederek ihraç yönlü büyüme stratejilerini takip etmeye başlamıştır. Bu kararlar ülke ekonomisinde ciddi bir dönüşüm süreci başlatırken öngörüldüğü şekilde dış ticaret hacminde artış eğilimi gözlenmeye başlanmıştır. Bu süreçte mal ticareti yanında Türkiye ekonomisinde önemli bir yeri olan hizmet sektörü ve hizmet ticareti üzerinde de durulmuştur. Zira sadece 2021 yılı verileri dikkate alındığında bile sektörün GSYİH büyüklüğü içerisindeki payının %61,5 düzeyinde ve sektördeki istihdam payının %55,3 civarında olduğu görülmektedir (Özer and Yıldırım, 2022: 91). Sağlık turizmi açısından konu değerlendirildiğinde Türkiye’de sağlık turizmi politikalarının 2010 yılından itibaren belirginleşmeye başladığı ve kalkınma planlarında sağlık turizmiyle ilgili politikalarla yer verildiği görülmektedir. Yapısal ekonomik sorunların en önemli göstergelerinden birinin cari açık olduğundan Türkiye’de sağlık turizminin çıkış ve desteklenme nedenlerinden biri de cari açığın kapatılmak istenmesidir. Sağlık turizminin 2015 ve sonrasında Orta Vadeli Programlarda ödemeler dengesiyle ilgili politikalar kapsamında işlenmesi de temelde bu gerekçeye dayanmaktadır (Somel, 2020: 212-213).

Sağlık turizmiyle ilişkili ilk kamu girişimleri ise Sağlık Bakanlığı bünyesinde Sağlık Turizmi Koordinasyon Kurulu (SATURK) kurulmasıyla ve Uluslararası Sağlık Turizmi ve Turist Sağlığı Yönetmeliğinin yürürlüğe girmesiyle gerçekleşmiştir (Yılmaztürk, 2023). Sağlık alanında kamu yanında özel sektör sağlık işletmelerinin sayısındaki artış sağlık turizmiyle ilişkili mevzuat çalışmalarını hızlandırmıştır. Ayrıca 2018 yılında Sağlık Bakanlığı bünyesinde sağlık turizminin tanıtılması ve pazarlamasına yönelik çalışmaların ve yetkilendirme sürecinin yürütülmesinden sorumlu olacak Uluslararası Sağlık Hizmetleri Anonim Şirketi (USHAŞ) kurulmuştur. Belirtilmelidir ki USHAŞ’ın kuruluşu, öncesinde gelişen ekonomik krizlerden kaynaklanan kırılganlık ve cari açık yükünün hafifletilmesi ihtiyacını karşılamak amacıyla dönük olarak da değerlendirilmektedir (Somel, 2020: 213).

Türkiye’de belirli bir süre sağlık turizmi amacıyla yapılan yatırımlara rağmen yurt dışı tanıtım faaliyetlerinin yeterli olmaması ve etkili satış/pazarlama ağının kurulamamış olması nedeniyle sağlık hizmetlerine olan talep yeterli ve istenen düzeyde değildi (İçöz, 2009: 2271). Bununla birlikte son dönemlerde sağlık yatırımları, gelişmiş tıbbi cihaz teknolojilerine sahip sağlık işletmeleri, sağlık hizmetleri sunumunda çeşitlilik, nitelikli ve eğitilmiş insan gücü ve teknik alt yapısı ve regülasyonların getirdiği kolaylaştırmalar sayesinde Türkiye sağlık turizminde dünyada öne çıkarak tercih edilen ülke konumuna gelmiştir (Aydemir ve Kılıç, 2017: 9; Bulut ve Şengül, 2019: 57; Kabacık, 2021: 472-473). Ayrıca sağlık standartlarının geliştirilmesi, Türkiye’nin sağlık hizmeti sunumunda uluslararası rekabet edebilirliğinin artırması ve teşvikler neticesinde sağlık hizmetlerine ulaşmanın kolaylaşmış olması da (Pekşen, 2021: 2004) bu sonuca ulaşılmasında etkili olmuştur. Genel olarak Türkiye sağlık turizmi ve özellikle medikal turizm alanında sağlık turizmi hizmeti sunan ülkelere göre karşılaştırmalı üstünlüğe sahip bir ülke konumundadır. Zamana ve ülkelere göre değişebilmekle birlikte Türkiye’nin karşılaştırmalı üstünlüğünün akreditasyon, afilyasyon, fiyat farkı, bekleme süresi, tıbbi teknoloji, sağlık personelinin ihtisas yeterliliği, akrabalık/soydaşlık/diaspora durumu, sigorta kapsamı, tedavi seçenekleri, sosyo-kültürel benzerlik ve geleneksel turizm olanakları konularında olduğu gözlenmektedir (TONTUŞ, 2023a).

Uluslararası alanda zaman zaman yaşanan siyasi ve ekonomik krizler sağlık turizmi açısından da dezavantajlar oluşturabilmektedir. Ayrıca dil bilmeyen sağlık personelinin olması, sağlık turizmi zincirindeki zayıf bağlantılar, hastaların kabulü ve taşınması sırasında ortaya çıkan sıkıntılar, yetkisiz ve deneyimsiz kişilerin veya kurumların

kötü uygulamaları ülke imajına ve sağlık sektörüne zarar verebilmekte ve kötü deneyim oluşturmaktadır (Özer and Yıldırım, 2022: 100). Söz konusu durumlar sağlık turizmi kapsamında Türkiye'ye gelme potansiyeli olanların kararlarını/tercihlerini olumsuz yönde etkilemesi ihtimali bakımından oldukça önemlidir.

Turizmin çeşitlendirilmesi ana stratejisi içerisinde diğer turizm türleri ile birlikte sağlık turizminin geliştirilmesi hedefi yer almaktadır. Bu bağlamda pilot çalışmalar, teşvik uygulamaları ve vergi indirimleri yoluyla özellikle termal turizm merkezlerinin geliştirilmesi öngörülmektedir (Uygun ve Ekiz, 2016: 22). Dolayısıyla Türkiye'nin sağlık turizmine ilişkin yol haritası stratejik hedefler temelinde ortaya konulmaktadır. Bu hedefler *"...sağlık turizminin yurtdışı tanıtımlarında kullanılacak üst bir ülke markası ile hedef ülkelere dönük stratejik tanıtım ve pazarlama faaliyetlerinin gerçekleştirilmesi, hedef ülkelerde sağlık turizmi koordinasyon ofisleri, ileri tanı merkezleri ve hastaneler açılması, yabancı devlet kurumları ve sigorta şirketleri ile anlaşmalar yapılması, ... Sağlık Turizmi Web Portalının ... tanıtımı ve profesyonelce işletilmesi, şehir hastaneleri başta olmak üzere kamu hastaneleri için tanıtım ve aracılık modeli oluşturulması ve uygulanması, sağlık turizmi alanında hizmet sunum ve standartlarının regüle edilmesi, sağlık turizmine ilişkin teşvik, yetkilendirme, denetim, şikayet, kayıt ve istatistik bilgilerinin tek bir otorite tarafından koordine edilmesi, sağlık turisti olarak gelen hastalar için ve şikayet ve memnuniyetin izlenebildiği bilişim altyapısı oluşturulması, geriatri alanında yaşlı bakım köyleri ve kür merkezleri kurulması amacıyla ortak projeler yürütülmesi ve bu kapsamda pilot projelerin hayata geçirilmesi, sağlık termal turizmi işletme sayısının artırılması ve bu kapsamda pilot projelerin hayata geçirilmesi..."* şeklinde belirlenmiştir. Sağlık turizmi konusunda tek otoriteyi USHAŞ ve hedef ülkeleri *"İngiltere, Almanya, Bosna Hersek, Bulgaristan, Sırbistan, Kosova, Romanya, Rusya, Ukrayna, Azerbaycan, Gürcistan, Kazakistan, Kırgızistan, Türkmenistan, Özbekistan, Afganistan, Pakistan, Irak, Katar, Kuveyt, Bahreyn, Cezayir, Fas, Cibuti, Somali, Sudan, Senegal, Moritanya, Nijerya"* oluşturmaktadır (USHAŞ, 2023b).

Özellikle son yıllarda hem kamu hem de özel kesim sağlık turizmi yatırımları sayesinde artan rekabet gücüne bağlı olarak sağlık işletmelerinde ve sağlık hizmetlerinde kalitenin artması ve uygun sağlık hizmetlerinin verilebiliyor olması nedeniyle Türkiye'ye birçok ülkeden sağlık turisti gelmektedir. Ayrıca altyapısı güçlü ve akredite edilmiş sağlık kurumlarının varlığı, eğitilmiş ve tecrübeli sağlık personelinin görev yapması, zengin doğal kaynaklarının olması, termal turizmde ilk sıralarda yer alması ve sağlık turizminin diğer turizm türleriyle ilişkisi Türkiye'deki sağlık turizmi açısından olumlu kabul edilmektedir. Ancak farklı sağlık hizmeti sunucularının bulunduğu ülkeler arasındaki farklı hukuki şartlar dezavantaj oluşturmaktadır (Yazgan vd., 2017: 202-204).

Tablo 1: Sağlık Turizmi Kapsamında Türkiye'ye Gelen Turist Sayıları (2013-2022)*

Yıl	Toplam Turist Sayısı (1)	Vatandaş Turist Sayısı (2)	Toplam Sağlık Nedenli Turist Sayısı (3)	Vatandaş Sağlık Nedenli Turist Sayısı (4)	(3)/(1) (%)	(4)/(1) (%)	(4)/(2) (%)	(4)/(3) (%)
2013	39.226.226	5.398.752	300.102	90.579	0,77	0,23	1,68	30,18
2014	41.415.070	5.564.784	473.896	94.456	1,14	0,23	1,70	19,93
2015	41.617.530	6.025.370	395.019	104.904	0,95	0,25	1,74	26,56
2016	31.365.330	6.099.924	400.699	132.671	1,28	0,42	2,17	33,11
2017	38.620.346	6.540.819	467.302	115.196	1,21	0,30	1,76	24,65
2018	45.628.673	6.676.771	594.851	124.513	1,30	0,27	1,86	20,93
2019	51.860.042	7.147.072	701.046	106.558	1,35	0,21	1,49	15,20
2020	15.826.266	3.118.001	407.423	56.640	2,57	0,36	1,82	13,90
2021	29.357.463	5.417.442	670.730	120.346	2,28	0,41	2,22	17,94
2022	51.369.026	7.027.504	1.258.382	160.642	2,45	0,31	2,29	12,77

Kaynak: TÜİK (2023a). *: Çıkış yapan ziyaretçiler anketi verileri olup, bir yıldan kısa kalış süreli sağlık nedenli ziyaretleri kapsamaktadır. Koronavirüs pandemisi nedeniyle sınır kapılarında anket yapılamadığından 2020 yılı 2. çeyreğe ilişkin verileri içermemektedir.

Tablo 1'de yer alan verilere göre sağlık turizmi kapsamında gelene ziyaretçi sayısı 2015 ve 2020 yılları haricinde artış eğilimi gösterirken toplam sağlık nedenli ziyaretçi sayısı içerisindeki vatandaş sağlık nedenli ziyaretçi azalış eğilimi içerisindedir. 2020 yılı toplam ziyaretçi sayısı içerisinde sağlık nedenli ziyaretçinin en fazla paya sahip olduğu yıl olmuştur. 2022 yılında ise sağlık nedenli ziyaretçi sayısı bir milyonu aşmıştır. Genel olarak sağlık turistlerine ilişkin veriler, turizm amaçlı ziyaretçi sayısına nazaran konaklama tesisleri kadar kaliteli hizmet sunan sağlık işletmelerine başvuru sayısının düşüklüğü nedeniyle, sağlık turisti sayısının artırılması üzerinde dikkatle durulması gerektiğine işaret etmektedir (Tontuş, 2023a).

Türkiye'ye gelen sağlık turistlerinin büyük çoğunluğu SPA ve termal tesisleri ziyaret etme amacını taşımaktadırlar. Medikal turizm ise saç ekimi, estetik, cerrahi tedavi, göz tedavisi, IVF (tüp bebek) tedavisi, psikolojik tedavi ve kan hastalıklarının tedavisi gibi amaçlarla gerçekleşmektedir (Uygun ve Ekiz, 2016: 19).

Medikal turizm kapsamında gelenlerin tercih ettiği klinik branşlar ise kadın hastalıkları, iç hastalıkları, göz hastalıkları, tıbbi biyokimya, genel cerrahi, diş hekimliği, ortopedi ve travmatoloji, enfeksiyon hastalıkları ve kulak-burun-boğaz şeklindedir (USHAŞ, 2023a; Yılmaztürk, 2023).

Sağlık turizmi sebep olduğu parasal harcama/gelir akımı bakımından önemli bir ekonomik etkiye sahiptir. Söz konusu parasal büyüklük çoğu ülkenin sağlık turizmi alanına yatırım yapmasının da temel nedenidir (Yazgan vd., 2017: 205). Türkiye'nin sağlık turizminde ulaştığı nokta sağlık turisti sayısındaki artışla birlikte gelirinin arttığını ve ekonomik yönden büyümesine olumlu katkı sağladığı görülmektedir (Batbaylı, 2022: 378-379). Ayrıca bakım ve rehabilitasyon hizmetlerini kapsayan sağlık turizmi kalış süresi uzunluğu ve yüksek harcamalar nedeniyle Türkiye için kazançlı bir turizm türü oluşturmaktadır (Bulut ve Şengül, 2019: 57; Aydemir ve Kılıç, 2017: 9).

Tablo 2: Sağlık Turistlerin Harcamaları/Türkiye'nin Sağlık Turizmi Geliri (2013-2022) (Bin ABD Doları)**

Yıl	Toplam Turizm Geliri (1)	Vatandaş Turizm Geliri (2)	Toplam Sağlık Turizmi Geliri (3)	Vatandaş Sağlık Turizmi Geliri (4)	(3)/(1) (%)	(4)/(1) (%)	(4)/(2) (%)	(4)/(3) (%)
2013	33.073.502	6.776.776	772.901	237.400	0,72	0,72	3,50	30,72
2014	35.137.949	6.301.489	837.796	243.764	0,69	0,69	3,87	29,10
2015	32.492.212	6.052.415	638.622	197.074	0,61	0,61	3,26	30,86
2016	22.839.468	6.184.432	715.438	286.185	1,25	1,25	4,63	40,00
2017	27.044.542	6.076.804	827.331	234.552	0,87	0,87	3,86	28,35
2018	30.545.924	5.511.261	863.307	172.336	0,56	0,56	3,13	19,96
2019	38.930.474	5.896.124	1.492.438	196.157	0,50	0,50	3,33	13,14
2020	14.817.273	2.965.813	1.164.779	105.575	0,71	0,71	3,56	9,06
2021	30.173.587	5.830.953	1.726.973	247.608	0,82	0,82	4,25	14,34
2022	46.477.871	7.067.152	2.119.059	300.226	0,65	0,65	4,25	14,17

Kaynak: TÜİK (2023b). **: Bankalararası Kart Merkezi ile çıkış yapan ziyaretçiler anketi verileri olup, koronavirüs pandemisi nedeniyle sınır kapılarında anket yapılamadığından 2020 yılı 2. çeyreğe ilişkin veriler sadece Bankalararası Kart Merkezi verilerini içermektedir.

Tablo 2'de yer alan verilere göre Türkiye'nin turizm gelirleri dalgalı seyir izlemektedir. Özellikle Covid-19 pandemisinin etkili olduğu 2020 yılında toplam turizm gelirlerindeki azalış oldukça belirgindir. Bununla birlikte sağlık turizmi gelirleri 2015 ve 2020 yılları haricinde artış eğilimi göstermiştir. Sağlık turizmi gelirleri ile vatandaş turizm gelirlerinin toplam turizm gelirleri içerisindeki payının ve vatandaş sağlık turizmi gelirinin vatandaş turizm gelirleri ile sağlık turizmi gelirleri içerisindeki payının en yüksek olduğu yıl 2016 olmuştur. Veriler vatandaş olmayanların yaptığı harcamaların Türkiye'nin sağlık turizmi içindeki payının arttığını göstermektedir. Genel olarak Türkiye'de sağlık turizmi kapsamında sunulan faaliyetler ABD ve Avrupa ülkelerine nazaran daha düşük maliyetlidir (Altın, et al., 2012: 1007). Bununla birlikte 2020 yılında Türkiye, sağlık turizmi yoluyla en çok gelir elde eden ülkeler arasında Tayland'ın arkasından ikinci sıralarda yer almıştır (Batbaylı, 2022: 369).

Doğa turizmi, kültür turizmi, inanç turizmi çok çeşitli turizm alanlarının olması nedeniyle tedavi süreciyle birlikte iyi bir tatil yapma imkanı sunduğundan, Türkiye'de sağlık turizminin esasında turistlerin tercihini olumlu yönde etkileyeceği açıktır. Bununla birlikte Türkiye'nin sağlık turizmi sektöründe lider ülke olabilmesi ve bunun sürdürülebilirliği sadece medikal turizm alanında değil diğer sağlık turizmi alanlarında çalışmalar yapılmasının gerekli olduğunu göstermektedir. Ayrıca sağlık turizminin ana aktörleri ile paydaşları arasında koordinasyonun ve entegrasyonun sağlayacak ve sorunlara çözüm üretecek sistemlere ve toplantılara/çalıştaylara ihtiyacı vardır (Özer and Yıldırım, 2022: 100; Tontuş, 2023b).

4.2. Sağlık Turizmine Yönelik Vergilendirme Rejimi: Teşvikler Uygulamaları

Coğrafi konumu ve doğal kaynakları sayesinde Türkiye sağlık turizmi açısından dünyada merkezi bir konumda yer almaktadır. Bu durum birçok turistin sağlık turizmi kapsamında faaliyete bulunan ve sayıları hızla artan sağlık tesisi, klinik muayenehane ve ileri yaşlılara yönelik bakım merkezi şeklindeki sağlık işletmelerinden hizmet almak için Türkiye'yi tercih etmesini sağlamaktadır. Ancak sağlık alanında yapılan yatırımlar oldukça maliyetli olması sağlık turizmi açısından zorunlu yatırımları bile olumsuz etkileyebilmektedir (Yazgan vd., 2017: 202). Bu noktada sistemin mali yükünü hafifletecek ve karlı ve rekabet edilebilir ortam yaratacak teşvik ve mali yardımlar gündeme gelmektedir.

Sağlık turizmi alanında Türkiye'ye avantaj sağlayacak uygulamaların artırılması doğal olarak uluslararası pazardan daha fazla pay alınmasıyla sonuçlanacaktır. Bu bağlamda teşviklerin artırılması, sağlık turizminin

hukuki çerçevesinin belirlenmesi ve sağlık altyapı ve teknolojisine yönelik yatırımların artırılması söz konusu uygulama seçenekleri arasında yer almaktadır (Batbaylı, 2022: 378).

Türk vergi sisteminin bütünlüğü içerisinde sağlık turizmi hizmeti sunan işletmeler açısından teşvik içeren veya mali yükümlülük doğuran çeşitli düzenlemeler bulunmaktadır. Söz konusu teşvikler veya mali yükümlülükler sağlık turizmi yatırımlarının yapıldığı veya hizmetin ifa edildi sırada uygulama alanı bulmaktadır. Türkiye’de sağlık sektöründe faaliyet gösteren sağlık kuruluşları ile sağlık turizmi aracı kuruluşları, döviz kazandırıcı hizmet gelirlerinin artırılması ve sağlık turizmi sektörünün uluslararası rekabet gücünün artırılması amacıyla, gerçekleştirdikleri faaliyetlere ilişkin harcamalar kapsamında geri ödemesiz/hibe niteliğinde mali desteklerden de yararlanmaktadırlar (Tengilimoğlu, 2021: 6; Sancar, 2023: 78). Türkiye’de farklı bölgelerde yerleşik Kalkınma Ajansları oluşturdukları hibe programları çerçevesinde sağlık turizmine katılan işletmelere mali destekler sağlamaktadır (Somel, 2020: 206).

Sağlık turizmi alanındaki mali düzenlemeler sektöre yön vermesi bakımından önemli görülmektedir. Zira Türkiye, dünya turizm gelirlerinden en çok pay alan ülkeler arasında yer alsa da turizm gelirlerini arttırma potansiyeli olması sebebiyle, akılcı teşvik sistemi uygulanarak turizm yatırımlarının geliştirilmesi, dış ticaret açığının kapatılması ve istihdamın artırılması mümkündür (Şakar, 2011: 1).

Teşvikler, genel olarak devlet tarafından belirlenen şartlar altında ilgili işletmelerin yatırım finansman ihtiyacının karşılanması veya maliyetinin düşürülmesi, mükelleflerin vergi yükünün hafifletilmesi, belirli bölgelere/alanlara yatırım yapılmasını sağlayarak bölgesel farklılıkların giderilmesi ve işletmelere uluslararası alanda rekabet gücü kazandırılması amaçlarıyla uygulanan ekonomik ve mali nitelikli araçlardır (Karataş ve Tetik, 2018: 2). Sağlık turizmi alanı da talebin artan eğilimi ve elde edilen gelirin büyüklüğü nedeniyle birçok ülke tarafından teşvik sistemi kapsamında değerlendirilmektedir (Kördeve, 2016: 52; Pekşen, 2021: 204).

Türkiye’de sağlık turizmine ilişkin uygulanan teşviklerin ve vergilendirme rejiminin tam olarak ortaya konulabilmesi kapsamlı ve dağınık bir mevzuat yığını içerisinde turizm, sağlık ve döviz kazandırıcı faaliyet/ihracat alt birleşenleri üzerinde durulmasını gerektirmektedir. Bu nedenle konunun bütün yönleri yerine sağlık turizmi bakımından özellik ve önem arz eden yönleriyle sınırlandırılması ve değerlendirilmesi daha uygun olacaktır.

Belirtilmelidir ki turizm amaçlı kurulan bütün işletmelerin Turizmi Teşvik Kanunu (MBS, 2023c) uyarınca “...*bu Kanun ve diğer mevzuatta yer alan teşvik tedbirleri ile istisna, muafiyet ve haklardan yararlanabilmek için Bakanlıktan, turizm yatırımı belgesi veya turizm işletmesi belgesi alınması zorunludur...*” (m.5a). Benzer şekilde Uluslararası Sağlık Turizmi ve Turistin Sağlığı Hakkında Yönetmelik uyarınca “...*uluslararası sağlık turizmi kapsamında faaliyette bulunabilmek için; sağlık tesisinin ve aracı kuruluşun uluslararası sağlık turizmi yetki belgesi alması zorunludur...*” (m.5/1) denilmek suretiyle sağlık turizmiyle ilgili faaliyetlerin ancak izinle yapılabileceği vurgulanmıştır. Bu bakımdan sağlık turizmi kapsamına giren teşviklerden yararlanılabilmesi için ilgililerin öncelikle izin ve belgelendirme sürecine ilişkin genel şartları yerine getirmesi zorunludur.

Sağlık turizmine ilişkin Türkiye’de uygulanan teşvikler bağlamında ilk olarak turizm sektörünün teşviki amacıyla yürürlüğe giren Turizmi Teşvik Kanunu dikkat çekmektedir. Zira Kanunun “Teşvikle İlgili Esaslar ve Hükümler” başlıklı bölümünde turizm kredileri (m.14), orman fonuna katkının taksitlendirilmesi (m.15), elektrik, havagazı ve su ücretleri (m.16), haberleşme kolaylıkları (m.17) ve personel çalıştırılması (m.18) konularında çeşitli teşvik düzenlemelerine yer verilmiştir. Ayrıca sağlık turizmi ve termal turizmle ilgili tesisler belirli hallerde taşınmaz malların turizm amaçlı kullanılması kapsamında değerlendirilebilmektedir (m.8).

Sağlık turizmiyle ilişkili bir diğer mali yükümlülük Emlak Vergisi Kanunu (MBS, 2023ç) uyarınca yerel yönetimler tarafından tahsil edilen emlak vergisidir. Emlak Vergisi Kanunu uyarınca “...*Turizm Endüstrisini Teşvik Kanunu [Turizmi Teşvik Kanunu] hükümleri dairesinde turizm müessesesi belgesi almış olan gelir veya kurumlar vergisi mükelleflerinin adı geçen kanunda yazılı maksatlara tahsis ettikleri ve işletmelerine dahil binaları, inşaatlarının sona erdiği veya mevcut binaların bu maksada tahsisi halinde turizm müessesesi belgesinin alındığı yılı takibeden bütçe yılından itibaren 5 yıl süre ile geçici muafiyetten faydalandırılır...*” (m.5/b). Emlak vergisinde yer alan söz konusu muafiyet şartlı ve geçici süreli bir uygulama özelliği taşımaktadır.

Sağlık turizmiyle ilişkili bir diğer mali yükümlülük Kurumlar Vergisi Kanunu (MBS, 2023d) uyarınca tahsil edilen kurumlar vergisidir. Kurumlar Vergisi Kanunu sağlık turizmi kapsamında kurum kazancının vergilendirilmesine ve sağlık turizmi yatırımlarının teşvikine ilişkin düzenlemeler içermektedir. İlk olarak Kurumlar Vergisi Kanunu uyarınca sağlık turizmi kapsamında kurum kazancı vergilendirilirken vergi matrahının tespiti sırasında “...*Türkiye’de yerleşmiş olmayan kişilerle, işyeri, kanuni ve iş merkezi yurt dışında bulunanlara Türkiye’de verilen ve ... ilgili bakanlığın izni ve denetimine tabi olarak ...sağlık alanında faaliyet gösteren ve Türkiye’de yerleşmiş*

olmayan kişilere hizmet veren işletmelerin münhasıran bu faaliyetlerinden elde ettikleri kazancın %50'si...” diğer indirimler kapsamında indirim konusu yapılabilmektedir (m.10/1.ğ). İkinci olarak Kurumlar Vergisi Kanunu uyarınca, yine belirli şartlar altında ve yatırımlarda devlet yardımı kapsamında, indirimli kurumlar vergisi oranı uygulanabilmektedir (m.32/A).

Gelir Vergisi Kanununda (MSB, 2023e) da gelir vergisi uygulaması bakımından istisna ve teşvik düzenlemeleri yer almaktadır. Zira Gelir Vergisi Kanununda da gelir vergisi matrahının tespitinde “... Türkiye’de yerleşmiş olmayan kişilerle, işyeri, kanuni ve iş merkezi yurt dışında bulunanlara Türkiye’de verilen ... ilgili bakanlığın izni ve denetimine tabi olarak ... sağlık alanında faaliyet gösteren ve Türkiye’de yerleşmiş olmayan kişilere hizmet veren işletmelerin münhasıran bu faaliyetlerinden elde ettikleri kazancın %50’si...”(m.89/13) gelir vergisinden istisna olduğu ve Kurumlar Vergisi Kanununda indirimli vergisi oranı uygulamasının “...gelir vergisi mükellefleri hakkında da uygulanacağı...”(m.32/A.9) ifade edilmiştir.

Bu noktada gelir vergisi ve kurumlar vergisi uygulaması bağlamında sağlık turizmine yönelik istisnaların temelde hizmet ihracında Türkiye’nin uluslararası rekabet gücünün, yeni ihracat alanlarının ve dolayısıyla istihdamın artırılması ve nitelikli işgücünün Türkiye’de kalmasını sağlayarak sağlık turizmi alanında sürdürülebilirliğin desteklenmesini sağlamaya dönük amaçlar taşıdığı görülmektedir.

Sağlık turizminin teşviki bağlamında yatırımların teşviki ve hizmetlerin vergi dışı bırakılmasıyla ilişkili olarak Katma Değer Vergisi Kanununda (MBS, 2023f) ise katma değer vergisine ilişkin istisnalar düzenlenmektedir. Katma değer vergisi uygulamasında genel olarak eşya ihracatı ve hizmet ihracatı istisna kapsamındadır. Bu bağlamda Türkiye’de Sağlık Bakanlığından izin/belge alan sağlık işletmeleri tarafından Türkiye’de yerleşik olmayan kişilere/yabancılar/turist hastalara verilen sağlık hizmetleri katma değer vergisinden istisnasıdır. Nitekim Katma Değer Vergisi Kanununa göre “...Sağlık Bakanlığınca izin verilen gerçek veya tüzel kişiler tarafından, Türkiye’de yerleşmiş olmayan yabancı uyruklu gerçek kişilere, münhasıran sağlık kurum ve kuruluşlarının bünyesinde verilen koruyucu hekimlik, teşhis, tedavi ve rehabilitasyon hizmetleri (**Türkiye’de yerleşmiş olmayan yabancı uyruklu gerçek kişilere söz konusu hizmetlerle birlikte sağlanan diğer teslim ve hizmetler istisnanın kapsamına dahil değildir**)...”(m.13/l) şeklinde istisna ifade edilmiştir. Madde hükmünde katma değer vergisi istisnasının şartları ve istisna kapsamına giren sağlık hizmeti türleri hakkında belirleme yapılmıştır. Bu bağlamda cilt bakımı, saç ekimi, kırışık tedavisi gibi estetik işlemler ile sağlık hizmetleriyle ilişkili olarak verilen ulaşım, yemek ve konaklama gibi hizmetler istisna kapsamına girmektedir. Ayrıca vergi istisnası Türkiye Cumhuriyeti Devleti ile vatandaşlık bağı bulunmayan, Türkiye’de ikametgahı bulunmayan ve bir takvim yılı içinde Türkiye’de devamlı olarak altı aydan fazla oturmeyen kişileri kapsamaktadır. İstisnanın beyanı ise “*istisnalar-diğer iade hakkı doğuran işlemler-tam istisna kapsamına giren işlemler-yabancılar verilen sağlık hizmetlerinde istisna*” şeklindedir ve indirim konusu yapılmayan verginin belirli hallerde nakden veya mahsuben iade alınması mümkündür (Pekşen, 2021: 207-208). Yine yatırım teşvik belgesi olan mükelleflere hem genel teşvikler hem de sağlık turizminin teşviki bağlamında değerlendirilebilecek şekilde Katma Değer Vergisi Kanunu uyarınca belge kapsamındaki makine ve teçhizat teslimleri katma değer vergisinden istisna edilmiştir (m.13/d).

Sağlık turizmi kapsamında katma değer vergisi uygulaması geniş bir yükümlü grubunu ilgilendirmektedir. Bu bağlamda “...kamu/özel/üniversite hastaneleri, tıp merkezleri, poliklinikler, aile ve toplum sağlığı merkezleri, muayenehaneler, laboratuvarlar, ağız ve diş sağlığı hizmeti sunan özel sağlık kuruluşları, ambulans hizmetleri sunan kuruluşlar, diyaliz merkezleri, fizik tedavi ve rehabilitasyon merkezleri, genetik hastalıklar tanı merkezleri, hiperbarik oksijen tedavisi uygulanan özel sağlık kuruluşları, hemoglobinopati tanı merkezleri, madde bağımlılığı tedavi merkezleri, üremeye yardımcı tedavi merkezleri, terapötikaferez merkezleri, geleneksel ve tamamlayıcı tıp uygulama merkezleri, kordon kanı bankaları kaplıcalar...” tarafından Türkiye’de yerleşmiş olmayan yabancı uyruklu gerçek kişilere verilen koruyucu hekimlik, teşhis, tedavi ve rehabilitasyon hizmetleri katma değer vergisi istisnası kapsamındadır (Canpolat, 2022).

Damga Vergisi Kanununda (MBS, 2023g) yatırım teşvik belgeli işlemlere ilişkin istisna düzenlemelerine rastlamak mümkündür. Sağlık turizmi kapsamında da yararlanılabileceği düşünülen hükme göre “...Vergi, Resim, Harç İstisnası Belgesine bağlanan ... diğer döviz kazandırıcı faaliyetlere ilişkin işlemler nedeniyle, belgenin geçerlilik süresi içerisinde belgede yer alan tutarla sınırlı olmak kaydıyla, düzenlenen kağıtlar damga vergisinden müstesnadır...ğ) Yabancı uyruklulara (diplomatik temsilcilikler ve mensupları dahil), turistlere veya yurt dışında çalışan Türk vatandaşlarına ülkemizde bulundukları sürede, döviz karşılığı verilecek sağlık hizmetleri...Turizm müesseseleri ile seyahat acentelerinin yurt içindeki ve yurt dışındaki turizm faaliyetleri sırasında yaptıkları döviz karşılığı hizmet satışları...” (Ek.m.2/2) damga vergisi istisnası söz konusudur.

Benzer şekilde Harçlar Kanunu (MBS, 2023h) uyarınca özel kanunlarda şayet harçlara ilişkin istisna ve muafiyet düzenlemeleri varsa harç kapsamına giren kağıtlarla ilgili işlemlerden harç tahsili yapılmayacaktır. Söz konusu

düzenlemelere yatırım teşvik belgesi kapsamında yapılan işlemler ile ihracat veya döviz kazandırıcı işlemler de dahildir (m.123; geçici m.2). Ayrıca Harçlar Kanununda “...yabancı uyruklulara (diplomatik temsilcilikler ve mensupları dahil), turistlere veya yurt dışında çalışan Türk vatandaşlarına ülkemizde bulundukları sürede, döviz karşılığı verilecek sağlık hizmetleri...”(Ek m.1/ğ) ile “...turizm müesseseleri ile seyahat acentelerinin yurt içindeki ve yurt dışındaki turizm faaliyetleri sırasında yaptıkları döviz karşılığı hizmet satışları...”(Ek m.1/h) istisna kapsamında değerlendirilmiştir.

Yine Kaynak Kullanımını Destekleme Fonu Hakkında Karar (RG, 2023) uyarınca tahsili öngörülen fon yükü bağlamında sağlık hizmetinin sunumuyla ilgili yatırım malı ithalatının ödeme şekli vadeli ya da kredili (vadeli akreditif, kabul kredili ya da mal mukabili) olsa da “yatırım teşvik belgeli ithalat ve süresi iki yılı aşan krediler”(m.514) istisna kapsamına alınmıştır.

Sağlık turizmi kapsamında hizmet ihracı yapan işletmelerin yararlandığı hibe niteliindeki mali destekler Hizmet İhracatının Tanımlanması, Sınıflandırılması ve Desteklenmesi hakkında Cumhurbaşkanlığı Kararında ve benzer içerikte 2012/4 sayılı Döviz Kazandırıcı Hizmet Ticaretinin Desteklenmesi Hakkında Tebliğde (MBS, 2023ı) ayrıntılı olarak düzenlenmiştir. Söz konusu destekler tescil ve koruma desteği, pazara giriş belgeleri desteği, sertifikasyon desteği, acente komisyon desteği, komplikasyon ve seyahat sağlık sigortası desteği, istihdam desteği, yabancı dil ve sağlık turizmi eğitimi desteği, hasta yolu desteği, reklam, tanıtım ve pazarlama desteği, yurtdışı birim desteği, ulusal ve uluslararası etkinlik katılım desteği, yurt içi tanıtım ve eğitim desteği, ürün yerleştirme desteği, sektörel alım heyeti ve sektörel ticaret heyeti desteği, hizmet sektörü rekabet gücünün artırılması projesi (HİSER) desteği, sanal fuar organizasyon desteği, sağlık ve spor turizmi sektörlerinin geliştirilmesi ve tanıtılması desteği, yarışma ve etkinlik desteği şeklinde uygulanmaktadır. Bu desteklerin kapsamı, mali içeriği ve yararlanma şartları değişmektedir (Sancar, 2023: 77-78).

Yukarıda belirtildiği üzere sağlık turizmi kapsamında faaliyette bulunacak işletmeler “...tasarrufların katma değeri yüksek yatırımlara yönlendirilmesi, arz güvenliğinin sağlanması, çevrenin korunması, dışa bağımlılığın azalması, teknoloji dönüşümün sağlanması, yenilikçi, Ar-Ge yoğun ve yüksek katma değerli yatırımları desteklenmesi, üretim ve istihdamın artırılması, bölgesel gelişmişlik farklılıklarının azaltılması ve uluslararası rekabet gücünün artması...” gibi amaçlarla yatırımlara sağlanan devlet yardımlar/teşvikler kapsamında da çeşitli avantajlardan yararlanabilmektedirler. Yatırımlara yönelik devlet yardımlarının hukuki zeminini Yatırımlarda Devlet Yardımları Hakkında Karar (STB, 2023a) ve Yatırımlara Proje Bazlı Devlet Yardımı Verilmesine İlişkin Karar (STB, 2023b) oluşturmaktadır.

Yatırımlarda Devlet Yardımları Hakkında Karar kapsamında uygulanması öngörülen teşvik sistemi genel, bölgesel ve stratejik yatırımların teşviki uygulamalarından oluşmaktadır ve söz konusu teşvik sistemi içeriği desteklerin uygulanması açısından iller, sosyoekonomik gelişmişlik seviyeleri dikkate alınarak altı bölgeye ayrılmıştır (m2-4). Buna göre genel teşvik uygulamaları gümrük vergisi muafiyeti, katma değer Vergisi istisnası, gelir vergisi stopajı desteği ve sigorta primi işveren hissesi desteği (tersanelerin gemi inşaa yatırımları için) şeklindedir. Bölgesel teşvik uygulamaları belirli sektörler ve iller kategorileri ve bölgeler özelinde gümrük vergisi muafiyeti, katma değer vergisi istisnası, vergi indirimi (kurumlar vergisi, sigorta primi işveren hissesi desteği, yatırım yeri tahsis, faiz veya kar payı desteği, gelir vergisi stopajı desteği ve sigorta primi desteği şeklindedir. Stratejik yatırımlar bağlamında verilen destekler ise gümrük vergisi muafiyeti, katma değer vergisi istisnası ve iadesi, vergi indirimi, sigorta primi işveren hissesi desteği, yatırım yeri tahsis, faiz veya kar payı desteği, gelir vergisi stopajı desteği ve sigorta primi desteği şeklindedir.

Yatırımlara Proje Bazlı Devlet Yardımı Verilmesine İlişkin Kararda öngörülen proje bazlı destekler ise gümrük vergisi muafiyeti, katma değer vergisi istisnası ve iadesi, vergi indirimi veya istisnası, sigorta primi işveren hissesi desteği, gelir vergisi stopajı desteği, nitelikli personel desteği, faiz veya kar payı desteği, sermaye katkısı, enerji desteği, kamu alım garantisi, yatırım yeri tahsis, altyapı desteği, kanunlarla getirilen izin, tahsis, ruhsat, lisans ve tesciller ile diğer yasal ve idari süreçlerde kolaylaştırıcı düzenleme yapılması ve hibe şeklindedir (m.3).

4.3. Konaklama Vergisi ve Turizm Payı Yükümlülükleri

Sağlık turizmini kolaylaştıran ve maliyet avantajı sağlayan vergi uygulamaları yanında bu alanda faaliyette bulunan işletmelerin katlanmak zorunda olduğu yükümlülükler de bulunmaktadır. Bunlardan ilki Gider Vergileri Kanununun (MBS, 2023i) 5.12.2019 tarihli ve 7194 sayılı Kanunun 9 uncu maddesiyle yeniden düzenlenen 34 üncü maddesiyle yürürlüğe konulan konaklama vergisidir. Konaklama Vergisi Uygulama Genel Tebliğine (MBS, 2023j) göre konaklama tesisleri bakımından bir ayırım söz konusu olmaması sebebiyle tesisin; türü, sınıfı, niteliği, tanımı ve turizm işletmesi belgesi olup olmadığına bakılmaksızın, konaklama hizmeti sunan sağlık

tesisleri kapsamında düzenlenen sağlıklı yaşam tesisleri ile bünyesinde konaklama tesisi bulunan termal tesisler de dahil olmak üzere bütün tesislerde verilen hizmetler konaklama vergisine tabidir. İkinci mali yükümlülük ise turizm payıdır. Türkiye Turizm Tanıtım ve Geliştirme Ajansı Hakkında Kanunda (MBS, 2023k) söz konusu Ajansın faaliyetlerin finansmanı amacıyla turizm payı tahsilatı öngörülmüş ve kış, termal, sağlık, kırsal ve nitelikli spor turizmi gibi teşvik edilmesi uygun görülen turizm türlerinde faaliyet gösteren tesisler için yüzde elli indirimli oran uygulanacağı belirtilmiştir(m.6). Bu bakımdan sağlık turizmi kapsamında hizmet sunan işletmeler niteliğine uygun düşen söz konusu mali yükümlülükler katlanmak durumundadır.

5. SONUÇ

Yabancıların kısa süreli tedavi, sağlıklı yaşam veya termal aktiviteler kapsamında başka bir ülkeden hizmet almaları olarak tanımlana sağlık turizmi, döviz girdisi sağlaması ve sağlık yatırımlarında nitelik ve nicelik yönüyle artış sağlaması bağlamında genel ekonomik; sağlık turistlerinin kaliteli, hızlı ve kimi zaman da düşük maliyetle sağlık hizmeti alarak iyileşmelerine katkısı bağlamında bireysel yönde olumlu etkisi bulunmaktadır. Bununla birlikte sağlık turizminin geniş kapsamlı bir uygulama alanına işaret etmesi nedeniyle sağlık turizmi kavramının alt türlerini ifade eden kavramlarla karıştırılması olasılığı yüksektir.

Bütün ülkelerde olduğu gibi Türkiye’de sağlık turizmine yapılan yatırımlar bu yolla elde edilen gelirden alınan payın ve neticede ülke refahının artırılması amacıyla yöneliktir. Ancak sağlık turizminin gerekliliklerine göre hareket edilirken sosyal devlet olmanın gerekleri de gözeticilerle dahilinde bu hizmetlerden yararlanacak olan vatandaşların da etkili ve kaliteli hizmet almasına olanak sağlanması, vatandaşlar ile yabancı arasındaki hassas dengenin korunması ve sağlığın tekelleşmesinin ve ticari emtia olmasını engelleyecek politikaların hayata geçirilmesi zorunludur.

Diğer taraftan yatırımlarda devlet yardımları çerçevesinde hizmet sektörü kapsamında genel olarak turizm ve termal turizm, laboratuvarlar, yaşlı/engelli bakım merkezleri ve wellness yatırımları öncelikli yatırım alanları kapsamında; hastane ve huzurevi yatırımları ise bölgesel teşvik sistemi kapsamında değerlendirilmektedir. Sağlık yatırımlarındaki artışın sağlık turizmi kapsamında faaliyette bulunan işletmelerin sunduğu hizmetlerin çeşitlenmesine, kalitesinin artmasına, bu hizmetlere kolay erişilmesine ve neticede marka değer yaratılmasına diğer taraftan da gelirdeki artışla orantılı olarak ülke ekonomisine ve istihdama olumlu katkı sağlayacağı açıktır. Bununla birlikte yürürlükteki yatırım mali mevzuat ve ilgili teşvik/destek mevzuatı basit, sistematik ve düzenli olmaktan uzak; aksine dağınık ve karmaşık bir görünüme sahiptir. Söz konusu mevzuatın yığınının belirli bir sistem çerçevesinde belirlenleştirilmesi ve basitleştirilmesi yerinde olacaktır.

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Girişimcilerin Sürdürülebilirlik ile İlgili Bilgi Düzeylerinin KOBİ'lerin Sürdürülebilir Girişimcilik Uygulamalarına Etkisi¹

Öğrenci Duygu DÖNMEZ¹

Öğr. Gör. Dr. İbrahim TÜRKMEN²

¹Uşak Üniversitesi / Sağlık Hizmetleri Meslek Yüksekokulu, Yönetim ve Organizasyon Bölümü,
duygudonmez177@gmail.com, ORCID: 0009-0006-2505-2319

²Uşak Üniversitesi / Sağlık Hizmetleri Meslek Yüksekokulu, Yönetim ve Organizasyon Bölümü,
ibrahim.turkmen@usak.edu.tr, ORCID: 0000-0002-1558-0736

Özet: İşletmelerin çevreye ve topluma yönelik zararlı etkileri üzerine yoğunlaşan tartışmalar bulunmaktadır. Dünyanın kıt kaynakların gelecek nesillere aktarılmasına yönelik işletme faaliyetlerinin düzenlenmesi çağrıları artmaktadır. Bu bağlamda araştırmanın amacı, girişimcilerin sürdürülebilirlik ile ilgili bilgi düzeylerinin KOBİ'lerin sürdürülebilir girişimcilik uygulamaları üzerindeki etkisinin tespit edilmesidir. Araştırma nicel araştırma olarak tasarlanmış ve veriler anket formu ile yüz yüze toplanmıştır. Anket formunda girişimcileri ve KOBİ'leri tanımlayıcı sorular, sürdürülebilirlik bilgisi ve sürdürülebilir girişimcilik uygulamaları ölçekleri yer almaktadır. Sürdürülebilirlik bilgisi ve sürdürülebilir girişimcilik uygulamaları ölçekleri araştırmacılar tarafından Türkçe'ye uyarlanmıştır. Araştırmanın evreni Uşak il merkezinde bulunan girişimciler oluşturmaktadır. Araştırma verileri kolayda örnekleme yöntemi ile gönüllü katılım sağlayan 375 girişimciden elde edilmiştir. Araştırma verilerinin analizinde SPSS 26 programı kullanılarak frekans analizi, faktör analizi, güvenilirlik analizi, korelasyon ve regresyon analizleri yapılmıştır. Araştırmada tek boyuttan oluşan sürdürülebilirlik bilgisi ve dört boyuttan oluşan sürdürülebilir girişimcilik uygulamaları ölçeklerinin Türkçe geçerli ve güvenilir olduğu tespit edilmiştir. Araştırmada girişimcilerin sürdürülebilirlik ile ilgili bilgi düzeylerinin KOBİ'lerin sürdürülebilir girişimcilik uygulamaları üzerinde istatistiksel olarak anlamlı ve pozitif yönde bir etkisinin olduğu sonucuna ulaşılmıştır. Sürdürülebilirlik bilgisine sahip girişimcilerin sosyal açıdan çalışan dostu ve toplumsal dayanışma uygulamalarını, çevresel açıdan ise enerji tasarrufu ve çevre dostu uygulamaları benimsedikleri tespit edilmiştir. Girişimcilerin sürdürülebilirlik ile ilgili bilgi düzeylerinin artırılması KOBİ'lerin sürdürülebilirlik ile ilgili girişimcilik uygulamalarının benimsenmesine katkı sağlayacaktır. Bu bağlamda girişimcilerin sürdürülebilirlik ile ilgili bilgilendirilmelerine yönelik eğitim programları düzenlenmelidir. Ayrıca girişimcilik eğitimi programlarına sürdürülebilirlik konuları dahil edilmelidir.

Anahtar Kelimeler: Girişimcilik, Sürdürülebilirlik, Sürdürülebilir Girişimcilik, KOBİ'ler

The Effect of Entrepreneurs' Knowledge of Sustainability on the Sustainable Entrepreneurship Practices of SMEs

Abstract: There are discussions focusing on the harmful effects of businesses on the environment and society. The calls for the regulation of business activities for the transfer of scarce resources of the world to future generations are increasing. In this context, the aim of the research is to determine the effect of entrepreneurs' knowledge about sustainability on the sustainable entrepreneurial practices of SMEs. The research was designed as a quantitative research and the data were collected face to face with a questionnaire. The questionnaire form includes questions describing entrepreneurs and SMEs, sustainability knowledge and sustainable entrepreneurial practices scales. The scales of sustainability knowledge and sustainable entrepreneurial practices were adapted into Turkish by the researchers. The universe of the research consists of entrepreneurs located in the city center of Uşak. The research data were obtained from 375 entrepreneurs who participated voluntarily with the convenience sampling method. In the analysis of the research data, frequency analysis, factor analysis, reliability analysis, correlation, and regression analyses were performed using the SPSS 26 program. In the research, it has been determined that the scales of sustainability knowledge consisting of one dimension and sustainable entrepreneurship practices consisting of four dimensions are valid and reliable in Turkish. In the research, it was concluded that the knowledge level of entrepreneurs about sustainability has a statistically significant and positive effect on the sustainable entrepreneurship practices of SMEs. It has been determined that entrepreneurs with sustainability knowledge adopt employee-friendly and social solidarity practices from a social perspective, and energy-saving and environmentally friendly practices from an environmental perspective. Increasing the knowledge level of entrepreneurs on sustainability will contribute to the adoption of entrepreneurial practices related to sustainability by SMEs. In this context, training programs should be organized to inform entrepreneurs about sustainability. In addition, sustainability issues should be included in entrepreneurship education programs.

Key Words: Entrepreneurship, Sustainability, Sustainable Entrepreneurship, SMEs

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1. GİRİŞ

İşletmelerin üretim süreçleri genellikle çevresel bozulmaya neden olan en büyük unsurlardan biridir. İşletmelerin çevreye vermiş olduğu zararlar nedeniyle politika yapımcılardan ve kamuoyundan baskı görmektedir. Bir çok işletme, ister gönüllü isterse zorunlu olarak çevreye olumsuz etkisini en aza indirmeye çabalamaktadır. İşletmelerin amaçlarına ulaşmaya çabalarırken aynı zamanda sosyal ve çevresel koşulları iyileştirmesini sağlayan sürdürülebilir bir girişimcilik modelini temel almaları gerekmektedir. Çünkü sürdürülebilir girişimcilik, çevresel bozulmayı yavaşlatma ve hatta ekosistemi kademeli olarak iyileştirme potansiyeline sahiptir (Cohen ve Winn, 2007). Ancak yıllık sürdürülebilirlik raporları incelendiğinde sadece büyük şirketler tarafından yayınlandığı görülmektedir. Bu, tüm işletmelerin %90'ını oluşturan küçük ve orta ölçekli işletmelerin (KOBİ) gerçekten sürdürülebilir girişimci olmayı göze alıp alamayacağı sorusunu gündeme getirmektedir (Crals ve Vereeck, 2005). KOBİ'lerin toplumsal ve çevresel sorunlara yönelik faaliyetleri henüz yeterli düzeyde değildir (Koe, Omar ve Majid, 2014). Bu bağlamda sosyal ve çevresel gündemleri temel faaliyetlerine dahil eden KOBİ'ler, giderek artan bir akademik ilgi toplamaktadır (Argade, Salignac ve Barkemeyer, 2021).

Sürdürülebilir kalkınma veya sürdürülebilirlik vizyon ve hedeflerine ulaşılması, toplumları ekonomi ve ekoloji paradigmalarının uyumlu hale getirilmesi için girişimciler başta olmak üzere tüm bireylerin yenilikçi düşünme ve hareket etme yollarına sahip olmasını gerektirmektedir. Bu süreç; özel ve toplumsal çıkarların, kısa ve uzun vadeli perspektiflerin, insanlık ve doğaya ilişkin farklı dünya görüşlerinin arasındaki bitmek bilmeyen bir tartışmadır. Ekonomik paradigma, insan doğasının yoksulluktan kurtulma arzusuna ve ekonomik zenginliğe yönelik doğal arzusuna dayanmaktadır. Son zamanlarda ise birçok çevre beyanı ve çok taraflı çevre anlaşmaları imzalanmış ve insan faaliyetlerinden kaynaklanan çevresel zararların artması nedeniyle ekolojik paradigma çok hızlı bir şekilde toplumumuzun en önemli değer sistemlerinden biri olarak ortaya çıkmıştır. Ekolojik paradigma işletmelerin veya bireylerin genellikle kişisel çıkarlarını değil hem topluma hem de gelecek nesillere karşı sosyal sorumluluklarını yerine getirmesini önceliklendirmektedir. Hem ekonomik hem de ekolojik paradigmanın yapılandırılmış bir bileşimi sürdürülebilir kalkınma fikrini ortaya çıkarmıştır. Sürdürülebilir kalkınma amaç ve hedeflerine ulaşmaya yönelik ortaya çıkan fırsatları kullanma ve sorumlulukları yerine getirme sürdürülebilir girişimcilik kavramı ile ifade edilmiştir (Shin vd., 2008).

Sürdürülebilirliğin işletmelerin uzun vadeli başarısı için önemli olduğunu düşünenler, sürdürülebilirlik hakkında daha fazla bilgi edinmek istemektedirler. Aynı zamanda sürdürülebilirlikle ilgili bilgi düzeyi yüksek olanların sürdürülebilirlik uygulamalarına yönelik farkındalığı ve katılımı daha yüksektir (Craig ve Allen, 2013). Sürdürülebilir girişimcilik ile ilgili araştırmalar son yıllarda artmakla birlikte işletmelerin sürdürülebilir girişimciliğe yönelik karakteristik tutumlarını belirlemede hala bir araştırma boşluğu bulunmaktadır. Girişimcilik, uzun süredir sosyal değişimi kolaylaştıran ve hatta belirleyen bir faktör olarak kabul edilmektedir. Ancak işletmelerin sürdürülebilir girişimciliği ne kadar anladıkları, hedef ve faaliyetlerine ne kadar yansıtıklarına yönelik yeterli araştırma sonucu bulunmamaktadır (Bajdor, Pawełszek ve Fidlerova, 2021). Literatürdeki sürdürülebilir girişimcilik tanımları incelendiğinde, genellikle sürdürülebilir girişimciliği sosyal ve çevresel boyutlarına odaklanıldığı görülmektedir. Ancak sürdürülebilir kalkınmanın sosyal ve çevresel yönleri ayrılmaz bir şekilde bağlantılı olsa da sürdürülebilir girişimcilik üzerine akademik literatürün büyük bir kısmı ikisinden biri ile ilgilenmektedir (Hockerts ve Wüstenhagen, 2010). Bu nedenle araştırmada KOBİ'lerin sürdürülebilir girişimcilik ile ilgili sosyal ve çevresel uygulamaları üzerine odaklanılmıştır.

2. GİRİŞİMCİLİK VE SÜRDÜRÜLEBİLİRLİK

Geleneksel olarak girişimcilik, "girişimcilerin piyasa ekonomisinde yeni mal ve hizmetlerin yaratılması için fırsatları keşfetmeye, yaratmaya ve kullanmaya odaklanan bir süreç" anlamına gelmektedir. Girişimciler kar elde etme güdüsüyle hareket ederken yeni pazarlar, endüstriler, teknolojiler, kurumsal biçimler, işler ve ürünler geliştirerek toplumsal zenginliği artırır. Özel servet arama ve sosyal servet yaratma arasındaki bu bağlantı, girişimcilik alanı için ayırt edici ve meşru bir alan oluşturmaktadır (Venkataraman, 1997).

İşletmeler, birçok kişi tarafından çevresel ve sosyal problemler yaratan ve toplumdaki sürdürülebilirlik eksikliğinin kaynağı olarak görülmektedir. Bu algıdan hareketle, hükümet ve sivil toplum kuruluşları, işletmeler için sıkı bir düzenleyici çerçeve oluşturmaktadır. Sonuç olarak, işletmeler, düzenlemelere ve gerekliliklere uymak ve istenmeyen, olumsuz etkileri kontrol altında tutmakla yükümlüdür (Schaltegger ve Wagner, 2011). Girişimcilik, ekonomik faydalar yaratmak için bir mekanizma olarak kabul edilmekle birlikte sürdürülebilir kalkınma kavramının ortaya çıkmasından itibaren girişimciliğin sadece servet üretmeye dayanmaması gerektiğine dikkat çekilmektedir. Bu durum, son yıllarda sürdürülebilir girişimcilik anlayışının ortaya çıkmasına neden olmuştur (Terán-Yépez vd., 2020). Bu bağlamda sürdürülebilir girişimcilik, "sürdürülebilir kalkınma" ve

“girişimcilik” terimlerini birbirine bağlamakta ve sosyal, çevresel ve ekonomik fayda elde etme amacını bütünleştirmektedir. Sürdürülebilir girişimler üretken, rekabetçi, sosyal içerme ve insana yakışır işler yaratarak sürdürülebilir kalkınma hedeflerinin gerçekleştirilmesine önemli ölçüde katkıda bulunabilir. (Bajdor, Pawełoszek ve Fidlerova, 2021).

Dünya Çevre ve Kalkınma Komisyonu tarafından sürdürülebilirlik, “bugünün ihtiyaçlarını, gelecek nesillerin kendi ihtiyaçlarını karşılama yeteneğinden ödün vermeden karşılayabilme” yeteneği olarak tanımlanmaktadır (WCED, 1987). Günümüzde girişimcilik yalnızca ekonomik olarak değil, aynı zamanda çevresel ve sosyal olarak da sürdürülebilir bir topluma katkıda bulunmak zorundadır (Cohen ve Winn, 2007). Diğer bir deyişle girişimlerin sadece finansal performansının değil, aynı zamanda ekonomik, sosyal ve çevresel etkilerinin de dikkate alınması gerekmektedir (Crnogaj, Rebernik ve Hojnik, 2014). Bu bağlamda “karşılanmamış sosyal ve çevresel ihtiyaçları ele alarak hem kişisel çıkarlara hem de toplumsal çıkarlara hizmet edecek bir iş kuran girişimcilere” sürdürülebilir girişimciler denilmektedir (Hoogendoorn, van der Zwan ve Thurik, 2019).

Çevresel ve sosyal sorunlara çözüm bulan, çevreye olan etkilerini önemli ölçüde azaltan ve yaşam kalitesini artıran yeni ürünler, hizmetler, teknikler ve organizasyon biçimleri üreten girişimciler ve işletmeler sürdürülebilir girişimciler olarak adlandırılmakta ve ekonominin ve toplumun sürdürülebilir kalkınmasına en önemli katkısı sağlamaktadırlar (Schaltegger ve Wagner, 2011). Sürdürülebilir girişimciliğin ve sürdürülebilir girişimin ortak unsuru, ticari başarıya sahip olması, çevreye ve topluma dost ürünler sunmasıdır (Bajdor, Pawełoszek ve Fidlerova, 2021). Sürdürülebilir girişimcilik, “fırsatları keşfederek, değerlendirerek, yararlanarak, ekonomik refah, sosyal uyum ve çevre koruma üreten değer oluşturarak sürdürülebilir kalkınmaya ulaşmayı amaçlayan teleolojik süreç” olarak tanımlanmaktadır (Katsikis ve Kyrgidou, 2007). Sürdürülebilir girişimcilik “kazanç için gelecekteki ürünleri, süreçleri ve hizmetleri hayata geçirmek için algılanan fırsatların peşinde doğayı, yaşamı ve toplumu korumaya odaklanmaktadır (Shepherd ve Patzelt, 2011). Sürdürülebilir girişimcilik, sürdürülebilir kalkınma hedefleriyle tutarlı olan gelecekteki mal ve hizmetleri üretmek için fırsatların keşfedilmesi, değerlendirilmesi ve kullanılmasıdır (Pacheco, Dean ve Payne, 2010).

Bir girişimci faaliyetin sürdürülebilir olarak kabul edilebilmesi için “insan, gezegen ve kâr” (3P= People, Planet, Profit) olmak üzere sürdürülebilir kalkınmanın üç yönünü karşılaması gerekir. Sürdürülebilir girişimciliğin “insan” yönü işletmelerin çalışanlarına sosyal ve etik konularda nasıl davrandığı ve çalışan haklarına ne kadar saygılı olduğu ile ilgilidir. Sürdürülebilir girişimciliğin “gezegen” yönü işletmelerin çevreye yönelik uygulamalarını içermektedir. Sürdürülebilir girişimciliğin “kâr” yönü ise işletmelerin ekonomik sürdürülebilirliği ile ilgilidir (Crals ve Vereeck, 2005). Girişimcilik ve sürdürülebilir kalkınma arasındaki ilişki, ekogirişimcilik, sosyal girişimcilik, sürdürülebilir girişimcilik ve dolaylı olarak kurumsal girişimcilik gibi çeşitli düşünce ve literatür akımları tarafından ele alınmıştır (Bajdor, Pawełoszek ve Fidlerova, 2021). Bu çalışmada ise girişimcilerin sürdürülebilirlik uygulamalarına odaklanılmış ve Uşak ilinde faaliyet gösteren KOBİ’lerin sürdürülebilirlik bağlamında sosyal ve çevresel hedefleri uygulama düzeylerinin araştırılması amaçlanmaktadır.

3. YÖNTEM

Bu araştırmanın amacı, girişimcilerin sürdürülebilirlik ile ilgili bilgi düzeylerinin KOBİ’lerin sürdürülebilir girişimcilik uygulamaları üzerindeki etkisinin tespit edilmesidir. Araştırmanın amacı bağlamında aşağıdaki hipotezler oluşturulmuştur:

H1: Girişimcilerin sürdürülebilirlik bilgisi KOBİ’lerin sürdürülebilir girişimcilik uygulamalarını istatistiksel olarak anlamlı ve pozitif yönde etkilemektedir.

H1a: Girişimcilerin sürdürülebilirlik bilgisi KOBİ’lerin çalışan dostu uygulamalarını istatistiksel olarak anlamlı ve pozitif yönde etkilemektedir.

H1b: Girişimcilerin sürdürülebilirlik bilgisi KOBİ’lerin enerji tasarrufu uygulamalarını istatistiksel olarak anlamlı ve pozitif yönde etkilemektedir.

H1c: Girişimcilerin sürdürülebilirlik bilgisi KOBİ’lerin çevre dostu uygulamalarını istatistiksel olarak anlamlı ve pozitif yönde etkilemektedir.

H1d: Girişimcilerin sürdürülebilirlik bilgisi KOBİ’lerin toplumsal dayanışma uygulamalarını istatistiksel olarak anlamlı ve pozitif yönde etkilemektedir.

Araştırma nicel araştırma olup veriler anket formu ile yüz yüze toplanmıştır. Anket formunda girişimcileri ve KOBİ’leri tanımlayıcı sorular, Sürdürülebilirlik Bilgisi ve Sürdürülebilir Girişimcilik Uygulamaları Ölçekleri yer almaktadır. Katılımcıların sosyo-demografik özellikleri ile ilgili cinsiyet, yaş, medeni durumu, eğitim durumu ve KOBİ’lerin sektörü, çalışan sayısı, kaç yıldır faaliyette bulunduğu olmak üzere yedi soru yer almaktadır.

Girişimcilerin sürdürülebilirlik ile ilgili bilgisi Muñoz ve Dimov, (2015) tarafından geliştirilen ve 5 maddeden oluşan ölçek kullanılarak ölçülmüştür. Ölçek 5'li Likert (Kesinlikle katılmıyorum-Kesinlikle katılıyorum) tipindedir. Sürdürülebilir girişimcilik uygulamaları ölçeği, Bajdor, Pawełoszek ve Fidlerova (2021) tarafından geliştirilmiştir. Ölçek, çevresel uygulamalar (15) ve sosyal uygulamalar (14) olmak üzere iki alt boyut ve 29 ifadeden oluşmaktadır. Ölçek 6'lı Likert tipindedir (6: kesinlikle evet, 5: evet, 4: oldukça evet, 3: oldukça hayır, 2: hayır, 1: kesinlikle hayır).

Araştırmanın evreni, SGK İşyeri İstatistiklerine göre Uşak ilinde faaliyet gösteren 9.939 KOBİ'nin sahibi veya ortağı olan girişimcilerden oluşturmaktadır (SGK, 2020). Sekaran ve Bougie (2016) evren büyüklüğünün 10.000 kişi olduğunda, örneklem büyüklüğünün 370 katılımcının yeterli olduğunu belirtmiştir. Araştırmada 383 katılımcıya ulaşılmıştır. Yapılan inceleme sonrasında beş katılımcının ölçekte yer alan maddelerin tamamına aynı yanıt verdiği ve üç katılımcının ise bir çok maddeye yanıt vermediği için toplam sekiz katılımcının verileri analiz dışı bırakılmıştır. Dolayısıyla araştırmada, 375 girişimciden elde edilen veriler SPSS 26 programı kullanılarak analiz edilmiştir.

Araştırma için etik kurul onayı, Uşak Üniversitesi Sosyal ve Beşerî Bilimler Bilimsel Araştırma ve Yayın Etik Kurulu'ndan alınmıştır (Tarih: 15.12.2022 ve karar no: 2022/176). Katılımcılara araştırma hakkında bilgi verilerek onamları alınmıştır. Araştırmada kapsamında uygulanan ölçeklere yönelik izinler ölçekleri geliştiren araştırmacılar tarafından e-posta aracılığıyla alınmıştır. Uşak il merkezinde bulunan KOBİ'lerden veri toplanması araştırma bulgularının genellenebilirliği açısından sınırlılık oluşturmaktadır

4. BULGULAR

4.1. Girişimcilerin ve KOBİ'lerin Özellikleri

Araştırmaya katılan girişimcilerin ve KOBİ'lerin özellikleri Tablo 1' de özet halinde verilmiştir. Araştırmaya katılan girişimcilerin %69,9'u erkek, %33,1'i 30-39 yaş aralığında, %68,8'i evli ve %44,8'i lise düzeyinde eğitime sahiptir. Araştırmaya katılan en genç girişimci 21 yaşında iken en yaşlı girişimci 59 yaşındadır.

Tablo 1: Girişimcilerin Özellikleri

Değişken	Frekans	%	Değişken	Frekans	%
Cinsiyet			Medeni Durum		
Kadın	113	30,1	Evli	258	68,8
Erkek	262	69,9	Bekâr	117	31,2
Yaş (min=21; max=59; ort=37,71 ± 6,44)			Eğitim Durumu		
20-29	78	20,8	İlköğretim	111	29,6
30-39	124	33,1	Lise	168	44,8
40-49	115	30,7	Üniversite	96	25,6
50 ve üzeri	58	15,4	Toplam	375	100

Araştırmaya katılan KOBİ'lerin özellikleri Tablo 2' de özet halinde verilmiştir. Araştırmaya katılan girişimcilerin sahibi oldukları KOBİ'lerin %48,5'i ticaret işletmesi, %89,6'sında 1-9 çalışan bulunmakta ve %34,7'si 1-9 yıl, %35,5'i 10-19 yıl arasında faaliyet göstermektedir. Araştırmaya katılan KOBİ'lerde en az 1 en fazla 48 çalışan olmakla birlikte ortalama 5 çalışan bulunmaktadır. Araştırmaya katılan KOBİ'lerin faaliyet süresi incelendiğinde en düşük 1 en uzun 45 yıldır faaliyette olmasıyla birlikte ortalama 14,42 ± 10,13 yıldır faaliyettedir.

Tablo 2: KOBİ'lerin Özellikleri

Değişken	Frekans	%	Değişken	Frekans	%
Sektör			Faaliyet Süresi (Yıl)		
Üretim İşletmesi	52	13,9	(min=1; max=45; ort=14,42 ± 10,13)		
Hizmet İşletmesi	141	37,6	1-9	130	34,7
Ticaret İşletmesi	182	48,5	10-19	133	35,5
Çalışan Sayısı (min=1; max=48; ort=4,94 ± 7,41)			20-29	71	18,9
1-9	336	89,6	30 ve üzeri	41	10,9
10-49	39	10,4	Toplam	375	100

4.2. Ölçeklere İlişkin Geçerlik Analizleri

Araştırmada kullanılan ölçeklerin geçerliliğinin tespit edilmesine yönelik açıklayıcı faktör analizi (AFA) yapılmıştır. AFA sonuçları Tablo 3'te verilmiştir.

Tablo 3: Ölçeklerin Açıklayıcı Faktör Analizi Sonuçları

Sürdürülebilirlik Bilgisi Ölçeği	Faktör Yükleri
Toplum olarak karşı karşıya olduğumuz sosyal sorunları anlayabiliyorum.	,869
Toplum olarak karşı karşıya olduğumuz çevre sorunlarını anlayabiliyorum.	,850
Toplum olarak karşı karşıya olduğumuz ekonomik sorunları anlayabiliyorum.	,835
Gelecek nesillerin karşılaştacağı sorunları anlayabiliyorum.	,745
Dünyanın güncel sorunlarını ve bu sorunların birbiriyle ilişkisini anlayabiliyorum.	,636
Özdeğer= 3,134; Açıklanan toplam varyans oranı=62,684; KMO= ,785; Bartlett's Test of Sphericity= 874,021; df=10; p=0,000.	
Sürdürülebilir Girişimcilik Uygulamaları Ölçeği	Faktör Yükleri
Çalışan Dostu Uygulamalar (Özdeğer= 9,806; Açıklana varyans oranı=36,320)	
Çalışanlar arasında eşitliği sağlamak.	,765
İşyerinde güvenlik için özen göstermek.	,762
İş Kanunu'ndan kaynaklanan düzenlemelere uymak.	,747
İşyerinde samimi bir ortam yaratmaya çalışmak.	,718
İş sözleşmelerine dayalı personel istihdamı sağlamak.	,685
Maaşların, vergi ve harçların zamanında ödenmesini sağlamak.	,684
En yakın sosyal çevreden insanlara iş teklif etmek.	,656
Kariyer yolu şeffaflığını sağlamak.	,650
İşle ilgili kabul edilmiş etik standartların geliştirilmesi ve uygulanmasını sağlamak.	,646
Çalışanların şirket karar alma süreçlerine katılımını sağlamak.	,620
Enerji Tasarrufu Uygulamaları (Özdeğer= 2,756; Açıklana varyans oranı=10,208)	
Enerji tasarruflu cihazları kullanmak.	,799
Bina yalıtımı (ısı yalıtımı, yalıtımlı pencereler) yaptırmak.	,738
Etkili ısıtma sistemleri kullanmak ve ısınmaya bağlı kirliliği azaltmak.	,729
Elektronik cihazların çalışma süresinin azaltmak.	,725
Yenilenebilir enerji kaynaklarının kullanmak	,694
Elektronik ekipman kullanımıyla ilişkili radyasyon, uğultu ve gürültüyü azaltmak.	,676
Çevre Dostu Uygulamalar (Özdeğer2,255; Açıklana varyans oranı=8,351)	
Geri dönüşümü mümkün olmayan ambalajlardan vazgeçmek.	,747
Gereksiz cihazların ve aydınlatmanın otomatik kapanmasını sağlamak.	,745
Çalışanların atıkları ayırmalarını sağlamak.	,723
Çevre dostu ürünler üretmek ve satmak.	,690
Müşterileri çevre dostu davranışa yönlendirmek.	,610
Su tüketimini düzenleyen cihazlar kullanmak (zamanlayıcı, fotoseller vb.).	,572
Doğal gün ışığından maksimum yararlanmak.	,510
Toplumsal Dayanışma Uygulamaları (Özdeğer= 1,710; Açıklana varyans oranı=6,332)	
Yerel kültürün geliştirilmesine yönelik faaliyetlerde bulunmak.	,873
Yardım faaliyetlerine katılmak.	,847
Sosyal aktivite imkanı sunmak.	,843
Yerel topluluğun yararına faaliyetler yürütmek (Örneğin kültürel etkinliklere yardım veya sponsorlukta bulunmak)	,783
Açıklanan toplam varyans oranı=61,211; KMO= ,910; Bartlett's Test of Sphericity= 5978,831; df=351; p=0,000.	

AFA sonucunda sürdürülebilirlik bilgisi ölçeği beş ifadeden oluşan tek faktörlü bir yapıya sahip olduğu tespit edilmiştir. Ölçek toplam varyansın %62,684'ünü açıklamıştır (KMO= 0,785, $\chi^2= 874,021$, $df= 10$, $p=0,000$). Ölçekteki maddelerin faktör yükleri; 0,869 ile 0,636 arasında değiştiği görülmektedir. Sürdürülebilir girişimcilik uygulamaları ölçeğine yönelik yapılan AFA sonuçlarına göre ölçeğin orijinalinden farklı olarak 27 ifadeden oluşan dört boyutlu bir yapı elde edilmiştir. Orijinal ölçekteki sosyal ve çevresel faaliyetler boyutları kendi içerisinde iki alt boyutlara ayrılmıştır. Araştırmacılar tarafından yapılan değerlendirmeler sonucunda ölçeğin alt boyutları "çalışan dostu uygulamalar, enerji tasarrufu uygulamaları, çevre dostu uygulamalar ve toplumsal dayanışma uygulamaları" olarak adlandırılmıştır. Orijinal ölçekte yer alan sosyal faaliyetler boyutu ""çalışan

dostu uygulamalar ve toplumsal dayanışma uygulamaları” olarak iki alt boyuta ayrılırken çevresel faaliyetler boyutu da “enerji tasarrufu uygulamaları ve çevre dostu uygulamaları” olmak üzere iki alt boyuta ayrılmıştır. Ölçeğin dört faktörlü yapısı toplam varyansın %61,211’ini açıklamaktadır (KMO= 0,910, $\chi^2= 5978,831$, df= 351, p= 0,000). Ölçekte yer alan ifadelerin faktör yükleri; 0,873 ile 0,510 aralığında değişmektedir (Tablo 3).

4.3. Ölçeklerin Tanımlayıcı İstatistikleri ve Güvenilirlik Analizleri

Araştırmada kullanılan ölçeklerin tanımlayıcı istatistikleri min-max, ortalama ve standart sapma, değişkenlerin normal dağılımı skewness ve kurtosis değerleri ile ve ölçeklerin güvenilirlikleri C α Katsayısı ile değerlendirilmiştir (Tablo 4). Ölçeklerin güvenilirliği için Nunnally ve Bernstein (1994) tarafından önerilen C α >0.70 kriteri kabul edilmiştir.

Tablo 4. Ölçeklere İlişkin Tanımlayıcı İstatistikler (n=375)

Ölçekler/Boyutlar	İfade Sayısı	Min Max	Mean	SD	Skewness	Kurtosis	C α
Sürdürülebilirlik Bilgisi	5	1,20-5	4,11	,91	-1,045	,343	,846
Sürdürülebilir Girişimcilik Uygulamaları	27	2,48-6	4,92	,77	-,664	-,195	,930
<i>Çalışan Dostu Uygulamalar</i>	10	1-6	5,10	,86	-1,425	1,052	,905
<i>Enerji Tasarrufu Uygulamaları</i>	6	1-6	4,71	1,06	-,893	,269	,876
<i>Çevre Dostu Uygulamalar</i>	7	1-6	4,87	1,01	-1,051	,864	,851
<i>Toplumsal Dayanışma Uygulamaları</i>	4	1-6	4,80	1,17	-1,076	,365	,912

Araştırmaya katılan girişimcilerin araştırma değişkenlerine verdikleri puanların ortalaması; sürdürülebilirlik bilgisi 4,11 \pm 0,91, sürdürülebilir girişimcilik uygulamaları genel ortalaması 4,92 \pm 0,77 ve alt boyutlarından çalışan dostu uygulamalar 5,10 \pm 0,86, enerji tasarrufu uygulamaları 4,71 \pm 1,06, çevre dostu uygulamalar 4,87 \pm 1,01 ve toplumsal dayanışma uygulamaları 4,80 \pm 1,17’dir. Çarpıklık (Skewness) değerleri -1,425 ile -0,664 ve Basıklık (Kurtosis) değerleri -0,195 ile 1,052 aralığında olduğu için ($< \pm 1,500$) verilerinin normal dağıldığı kabul edilmiştir (Tabachnick ve Fidell, 2013). Araştırma değişkenlerinin güvenilirliklerine yönelik yapılan analiz sonucunda C α katsayıları; sürdürülebilirlik bilgisi 0,846, sürdürülebilir girişimcilik uygulamaları 0,930 ve alt boyutlarından çalışan dostu uygulamalar 0,905, enerji tasarrufu uygulamaları 0,876, çevre dostu uygulamalar 0,851 ve toplumsal dayanışma uygulamaları 0,912’dir. Ölçekler (C α >0.70) yüksek güvenilirliğe sahiptir (Nunnally ve Bernstein, 1994).

4.4. Korelasyon Analizi

Sürdürülebilirlik bilgisi ile sürdürülebilir girişimcilik uygulamaları ve alt boyutları arasındaki ilişki korelasyon analizi ile incelenmiş ve sonuçlar Tablo 5’te verilmiştir.

Tablo 5: Sürdürülebilirlik Bilgisi ile Sürdürülebilir Girişimcilik Uygulamaları Değişkenlerine İlişkin Korelasyon Analizi

Değişkenler	1	2	3	4	5	6
1 Sürdürülebilirlik Bilgisi	1					
2 Sürdürülebilir Girişimcilik Uygulamaları	,290**	1				
3 <i>Çalışan Dostu Uygulamalar</i>	,240**	,821**	1			
4 <i>Enerji Tasarrufu Uygulamaları</i>	,230**	,774**	,440**	1		
5 <i>Çevre Dostu Uygulamalar</i>	,189**	,802**	,494**	,570**	1	
6 <i>Toplumsal Dayanışma Uygulamaları</i>	,248**	,665**	,458**	,407**	,370**	1

**p<0,01, *p<0,05

Korelasyon analizinin sonucuna göre; sürdürülebilirlik bilgisi ile sürdürülebilir girişimcilik uygulamaları (r = ,290, p<0,01) arasında istatistiksel olarak anlamlı ve pozitif yönlü ilişki olduğu tespit edilmiştir. Sürdürülebilirlik bilgisi ile sürdürülebilir girişimcilik uygulamalarının alt boyutlarından çalışan dostu uygulamalar (r = ,240, p<0,01), enerji tasarrufu uygulamaları (r = ,230, p<0,01), çevre dostu uygulamalar (r = ,1890, p<0,01) ve toplumsal dayanışma uygulamaları (r = ,248, p<0,01) arasında istatistiksel olarak anlamlı ve pozitif yönlü ilişki olduğu tespit edilmiştir (Tablo 5).

4.5. Regresyon Analizi

Sürdürülebilirlik bilgisi ile sürdürülebilir girişimcilik uygulamaları ve alt boyutları üzerine olan etkisini belirlemek için basit doğrusal regresyon analizi yapılmıştır. Analiz sonuçları Tablo 6’da verilmiştir.

Tablo 6: Regresyon Analizleri

Bağımsız Değişken	Bağımlı Değişkenler				
Sürdürülebilirlik Bilgisi	Sürdürülebilir Girişimcilik Uygulamaları	Çalışan Dostu Uygulamalar	Enerji Tasarrufu Uygulamaları	Çevre Dostu Uygulamalar	Toplumsal Dayanışma Uygulamaları
Constant	3,905	4,163	3,619	,4,014	3,496
β	,244	,227	,266	,208	,317
P	,000	,000	,000	,000	,000
Model F	34,290	22,862	20,834	13,803	24,434
R ²	,084	,058	,053	,036	,061

Sürdürülebilirlik bilgisinin sürdürülebilir girişimcilik uygulamaları üzerine etkisine yönelik kurulan basit doğrusal regresyon modeli, istatistiksel olarak anlamlı bulunmuştur ($F=34,290$, $p<0,01$). Regresyon analizine göre, sürdürülebilirlik bilgisinin sürdürülebilir girişimcilik uygulamaları üzerinde pozitif yönde anlamlı bir etkisi bulunmaktadır ($\beta=0,244$, $p<0,01$). Bu sonuç H1 hipotezini desteklemektedir. Sürdürülebilirlik bilgisinin +1 birim artmasının sürdürülebilir girişimcilik uygulamalarını 0,244 birim artıracağı anlaşılmaktadır. Sürdürülebilirlik bilgisi, sürdürülebilir girişimcilik uygulamalarındaki değişimin %8,4’ünü ($R^2= 0,084$) açıklayabilmektedir.

Sürdürülebilirlik bilgisinin sürdürülebilir girişimcilik uygulamalarının alt boyutları üzerine etkisi basit doğrusal regresyon modelleri ile incelenmiştir. Regresyon analizine göre, sürdürülebilirlik bilgisinin çalışan dostu uygulamalar ($\beta=0,227$, $p<0,01$), enerji tasarrufu uygulamaları ($\beta=0,266$, $p<0,01$), çevre dostu uygulamalar ($\beta=0,208$, $p<0,01$) ve toplumsal dayanışma uygulamaları ($\beta=0,317$, $p<0,01$) üzerinde pozitif yönde anlamlı bir etkisi bulunmaktadır. Bu sonuçlar H1a, H1b, H1c ve H1d hipotezlerini desteklemektedir. Girişimcilerin sürdürülebilirlik bilgisi, çalışan dostu uygulamalarındaki değişimin %5,8’ini ($R^2= 0,058$), enerji tasarrufu uygulamalarındaki değişimin %5,3’ünü ($R^2= 0,053$), çevre dostu uygulamalarındaki değişimin %3,6’sını ($R^2= 0,036$) ve toplumsal dayanışma uygulamalarındaki değişimin %6,1’ini ($R^2= 0,061$) açıklayabilmektedir.

5. SONUÇ VE ÖNERİLER

Günümüz modern toplumunun üretim yöntemleri ve tüketim alışkanları hali hazırda kıt olan kaynakların azalmasına ve gelecek nesiller için doğal kaynakların tükenmesine neden olmaktadır. Çevreye zarar veren ve doğal kaynakları hızla tüketen üretim anlayışı ve tüketim çılgınlığı sürdürülebilir değildir. Doğal kaynakların gelecek nesillere miras olarak bırakılması gereken ve bir emanet anlayışı ile yaklaşılması sürdürülebilirliğin temelini oluşturmaktadır. Bu nedenle girişimcilerin sürdürülebilirlikle ilgili bilgilerini artırmaları ve işletmelerin sürdürülebilir girişimcilik uygulamalarını benimsemeleri önem arz etmektedir. Bu bağlamda araştırmada girişimcilerin sürdürülebilirlikle ilgili bilgi düzeylerinin KOBİ’lerin sürdürülebilir girişimcilik uygulamaları üzerine etkisinin tespit edilmesi amaçlanmıştır.

Araştırmada öncelikle Muñoz ve Dimov, (2015) tarafından geliştirilen sürdürülebilirlik bilgisi ölçeği Türkçe’ye uyarlanarak geçerlilik ve güvenilirliği kanıtlanmıştır. Araştırmada kullanılan Bajdor ve diğerleri (2021) tarafından geliştirilen sürdürülebilir girişimcilik uygulamaları ölçeği Türkçe’ye uyarlanarak geçerlilik ve güvenilirliği kanıtlanmıştır. Ancak orijinalinde sosyal ve çevresel uygulamalar olarak iki boyutlu olan ölçek orijinalinden farklı olarak dört boyutlu olarak Türkçe’ye uyarlanmıştır. Orijinal ölçekte yer alan sosyal uygulamalar boyutu ““çalışan dostu uygulamalar ve toplumsal dayanışma uygulamaları” olarak iki alt boyuta ayrılırken çevresel faaliyetler boyutu da “enerji tasarrufu uygulamaları ve çevre dostu uygulamaları” olmak üzere iki alt boyuta ayrıldığı tespit edilmiştir.

Araştırmada girişimcilerin sürdürülebilirlikle ilgili bilgi düzeylerinin KOBİ’lerin sürdürülebilir girişimcilik uygulamaları üzerinde istatistiksel olarak anlamlı ve pozitif yönde bir etkisinin olduğu sonucuna ulaşılmıştır. Araştırma bulgularına göre girişimcilerin sürdürülebilirlikle ilgili bilgi düzeylerinin artırılması KOBİ’lerin sosyal olarak çalışanlara ve topluma yönelik sürdürülebilirlik uygulamalarını benimsemesine neden olmaktadır. Aynı zamanda sürdürülebilirlik bilgisine sahip girişimcilerin çevresel olarak enerji tasarrufu ve çevre dostu uygulamaları benimsedikleri ve sergilemeye çalıştıkları sonucuna ulaşılmıştır. Birou, Green ve Inman (2019)

tarafından yapılan araştırmada sürdürülebilirlik eğitimi ve bilgisinin, sürdürülebilirlik ile ilgili uygulamaları desteklediği sonucuna ulaşılmıştır. Koe ve diğerleri (2014) tarafından yapılan araştırmada KOBİ'lerin sürdürülebilirlik yönetimine dahil olmasında KOBİ sahipleri ve yöneticilerinin sürdürülebilirlik konusunda olumlu tutumuna sahip olmalarının, sürdürülebilirlik ile ilgili sosyal baskılardan endişe duymalarının, sürdürülebilir girişimciliği çekici bulmalarının ve kendilerini sürdürülebilir girişimcilik için yeterli yeteneğe ve bilgiye sahip olarak algılamalarının önemli olduğu sonucuna ulaşmışlardır.

Sürdürülebilir davranışların önündeki en büyük engellerden birisi de sürdürülemez davranışların toplumsal maliyetlerine ilişkin bilgi eksikliği olduğu kabul edilmektedir (Heeren vd., 2016). Bu bilgi eksikliğinin eğitim yoluyla giderilebileceği düşünülmektedir. Eğitim genellikle davranışları değiştirmenin anahtarı olarak görülmektedir. Bu nedenle, eğer sürdürülebilirlikle ilgili bilgi eksikliği eğitim yoluyla giderilirse, daha iyi bilgilendirilmiş bireylerin sürdürülemez davranışlarını düzeltereği ve sürdürülebilirlik ile ilgili uygulamalara destek vereceği varsayılmaktadır (Schultz, 2002). Araştırma sonuçları bağlamında hem mevcut girişimcilere yönelik hem de potansiyel girişimcilere yönelik sürdürülebilirlikle ilgili eğitim programları düzenlenerek girişimcilerin sürdürülebilirlik ile ilgili bilgi düzeyi ve farkındalığı artırılmalıdır.

Hoogendoorn ve arkadaşları (2019) tarafından yapılan araştırmada sürdürülebilir girişimcilerin, iş kurma aşamasında finansal, idari ve bilgi açısından destek eksikliği yaşadıkları tespit edilmiştir. Ballı (2019) ise Türkiye özelinde sürdürülebilir girişimciliğin yeterince gelişmemesinde teşvik mekanizmalarının olmaması, finansal olanakların yetersizliği, tüketicilerin sürdürülebilir tüketime ilgi göstermemesi ve sürdürülebilirlikle ilgili bilgi yetersizliği gibi engellerin etkili olduğunu öne sürmektedir. Bu nedenle KOBİ'lerin sürdürülebilir girişimcilik uygulamalarını benimsemesine yönelik teşvik mekanizmaları geliştirilmeli ve tüketicilerin sürdürülebilir tüketime yönelik farkındalığı artırılmalıdır.

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TFRS 9 Finansal Araçlar Standardı'nın Değer İlgililiği Üzerindeki Etkisi: Türkiye Bankacılık Sektöründe Bir Uygulama

Yüksek Lisans Öğrencisi. Ece Özkelebekoğlu¹

Dr. Öğr. Üyesi. Mehpere Karahan Gökmen²

¹Ondokuz Mayıs Üniversitesi, Lisansüstü Eğitim Enstitüsü, İşletme, 20281939@stu.omu.edu.tr, ORCID: 0009-0001-2063-7426

²Ondokuz Mayıs Üniversitesi, İ.İ.B.F., Uluslararası Ticaret ve Lojistik, mehpere.karahan@omu.edu.tr, ORCID: 0000-0002-0317-0924

Özet: Küresel düzeyde yaşanan ekonomik ve teknolojik gelişmeler muhasebe standartlarında da değişmeyi ve ilerlemeyi tetiklemektedir. Zamanla gereksinimleri karşılamak noktasında yetersiz kaldığı gözlemlenen standartlarda değişiklikler yapılmaktadır. Bu bağlamda Uluslararası Muhasebe Standardı (UMS) 39: Finansal Araçlar standardı Uluslararası Finansal Raporlama Standardı (UFRS) 9: Finansal Araçlar standardı ile değiştirilmiştir. Türkiye’de adı geçen standart grubu Türkiye Finansal Raporlama Standartları (TFRS) olarak sermaye piyasası araçları borsada işlem gören şirketler, bankalar, sigorta, reasürans ve emeklilik şirketleri tarafından zorunlu olarak uygulanmaktadır. Dolayısıyla değişikliklerden Türkiye’de faaliyet gösteren bazı şirketler de etkilenmektedir. Çalışmamız bu değişimin etkilerini incelemeyi amaçlamaktadır. Araştırma TFRS 9 Finansal Araçlar standardının daha fazla etkilediği düşünülen bankacılık sektörü üzerinde yapılmıştır ve TFRS 9 öncesi ve sonrası dönemde muhasebe bilgisinin değer ilgilliliği karşılaştırılmıştır. Araştırmanın bulgularına göre hisse başına defter değeri ve hisse başına piyasa değeri arasında anlamlı bir ilişki bulunamazken; hisse başına kazanç ve hisse başına piyasa değeri arasında anlamlı ve pozitif bir ilişki tespit edilmiştir. Ancak bu ilişkinin etkisinin TFRS 9 sonrası dönemde azaldığı bulunmuştur. Çalışmanın bulguları TFRS 9’un sadece kazançların değer ilgilliliği üzerinde etkisi olduğuna ve değer ilgilliliğinin standardın uygulanmaya başlandığı dönemden sonra azaldığına işaret etmektedir.

Anahtar Kelimeler: Türkiye Finansal Raporlama Standartları, Değer İlgililiği, Banka

Abstract: Global economic and technological developments trigger the change and improvement in accounting standards. Standards that fall short of fulfilling requirements needs to be changed. In this context IAS 39: Financial Instruments standard is replaced with IFRS 9: Financial Instruments. Aforementioned group of standards (translated as Turkish Financial Reporting Standards) are being applied by companies that are listed on stock exchange, banks, insurance companies, reinsurance and pension companies mandatorily in Turkey. Hence changes are affecting companies that are operating in Turkey. Our study aims to analyze the effects of this change. Research is conducted on banking sector that is assumed to be most affected by TFRS 9 and value relevance of accounting information for the periods before and after application of TFRS 9 are compared. While no significant relationship is found between book value per share and market value per share, it is found that there is a significant and positive relationship between earnings per share and market value per share. However the impact of this relation diminished after the application of TFRS 9. Findings points out that only earnings have impact on value relevance and value relevance declined after application of the standard.

Keywords: Turkish Financial Reporting Standards, Value Relevance, Bank

1.GİRİŞ

Piyasaların küreselleşmesi ve teknolojik ilerlemelerle sermaye hareketleri artmış, hızlanmış ve kolaylaşmıştır. Bu gelişmeler, finansal araçların muhasebeleştirilmesi ve ölçümü için muhasebe prensiplerinin ortaya koyulmasını gerekli hale getirmiştir. 1998 yılında finansal araçlarla ilgili olan bir standart olan Uluslararası Muhasebe Standardı (UMS) 39 Finansal Araçlar: Muhasebeleştirme ve Ölçme yayımlanmıştır. Fakat 2008 küresel krizi sonrasında UMS 39 standardı ağır eleştiriler almıştır. Eleştirilerin başında kredi zararlarının geç muhasebeleştirilmesi ve içerdiği kuralların karışık bir yapıya sahip olması yer almaktadır. Bu sorunları iyileştirmek amacıyla, Uluslararası Muhasebe Standartları Kurulu tarafından Uluslararası Finansal Raporlama Standardı (UFRS) 9: Finansal Araçlar standardı hazırlanmıştır. 2014 tarihinde sonuçlandırılan bu standart, 1 Ocak 2018 itibarıyla yürürlüğe girmesine karar verilmiştir. Türkiye’de de Kamu Gözetimi, Muhasebe ve Denetim Standartları Kurumu (KGK), “Türkiye Finansal Raporlama Standardı (TFRS) 9: Finansal Araçlar” standardını yayınlayarak, 1 Ocak 2018 tarihiyle zorunlu olarak uygulanacağını belirtmiştir.

UFRS 9’un oluşturulması ile birlikte bu yeni standarda ait destekleyici ve eleştirel görüşler ortaya çıkmıştır. Bir taraf UFRS 9’un farklı işletmeler arasında şeffaflığı ve karşılaştırılabilirliği arttırdığını bunun yanında bilgi asimetrisini azaltıp sermaye maliyetini düşürdüğünü, diğer taraf ise yeni standardın daha kafa karıştırıcı ve daha az karşılaştırılabilir olduğunu aynı zamanda daha subjektif bilgiler içerdiğini savunmuşlardır. Bu durum ise UFRS 9 ‘un piyasalara gerçekten daha yararlı bilgiler sağlayıp sağlamadığı konusundaki soruyu gündeme

getirmiştir. Literatürde bunu test etmek için değer ilgiliği çalışmaları yapılmaktadır. Değer ilgiliği, bir işletmenin finansal tablolarında açıklanan muhasebe bilgileri ile piyasa değeri arasındaki ilişkiyi ortaya koyar. Muhasebe bilgileri ile piyasa değeri arasında doğru orantı varsa bu işletmenin muhasebe verilerinin değer ilgili olduğu kabul edilir (Morsulu, 2022). Değer ilgiliği arttıkça yatırımcılar finansal tablolardaki bilgileri etkin bir şekilde kullanabilir (Gökten ve Atalay, 2019). Başka bir deyişle değer ilgiliği, muhasebe verilerinin kalitesinin ölçülebilmesini sağlar. Kaliteli muhasebe bilgisi yatırımcılar için daha iyi bilgiler sunar ve sermaye piyasasının gelişimine katkıda bulunur. (Ulusan ve Ata, 2014).

Bu çalışmanın amacı da UFRS 9'un kullanıma sunulmasından sonra muhasebe bilgileri ile değer ilişkisinin artıp artmadığını Türkiye'deki bankalar üzerinde incelemektir.

2.TFRS 9 VE MUHASEBE BİLGİLERİNİN DEĞER İLGİLİLİĞİ

2008 yılındaki küresel finansal krizin ardından bankacılık sektörü çok büyük kredi zararına uğramıştır. Uluslararası Muhasebe Standartları 39 (UMS 39), bu zararların banka bilançolarına geç ve düşük miktarda yansması nedeniyle ağır eleştirilere maruz kalmış ve standartta değişiklik yapılmasına karar verilmiştir. 2009 yılında, finansal varlıkların sınıflandırılması ve ölçümüne dair kurallar içeren Uluslararası Finansal Raporlama Standardı 9 (IFRS 9) yayınlanmıştır. Sınıflandırılma kapsamında olan finansal yükümlülükler ve bunlara ait kurallar da 2010 yılında standarda eklenerek düzenleme genişletilmiştir. 2014 yılında değer düşüklüğüne dair hükümler de dahil edilerek IFRS 9 tamamlanmış ve 1 Ocak 2018'de uygulamaya koyulmuştur (Yavuz vd., 2022). Türkiye'de de Kamu Gözetimi, Muhasebe ve Denetim Standartları Kurumu (KGK) tarafından "Türkiye Finansal Raporlama Standardı (TFRS) 9: Finansal Araçlar" standardı yayınlanmış ve aynı şekilde 1 Ocak 2018'de zorunlu olarak uygulanacağı belirtilmiştir.

Türkiye Finansal Raporlama Standardı (TFRS) 9: Finansal Araçlar standardı, ekonomide etkisi büyük olan bankalar için önemli konulardan biri olmuştur. Çünkü TFRS 9'daki bu yeni düzenlemeler, diğer sektörlerle kıyasla daha fazla finansal araca sahip olan bankaların, finansal raporlarında daha çok değişikliğe yol açmaktadır. Bu durum yatırımcılar, düzenleyiciler, analistler ve denetçiler gibi birçok paydaşı etkilemektedir (Birkan, 2019). Yeni standart, finansal varlık ve yükümlülüklerin nasıl sınıflandırılacağına, ölçüleceğine ve riskten korunma muhasebesine yol gösterici konumundadır. Eski standart TMS 39 ve yeni standart TFRS 9 arasındaki en büyük değişimlerinden biri finansal araçların sınıflandırılması ve finansal araçların daha sonraki ölçümleri üzerinedir (Gülhan ve Bozkurt, 2022). TMS 39' da sınıflandırma 4 kategoriye ayrılmaktadır. Bunlar; gerçeğe uygun değerlendirilen varlıklar ve borçlar, vadeye kadar elde tutulan varlıklar, kredi ve alacaklar, satılmaya hazır finansal varlıklardır. TFRS 9'da ise bu sınıflandırma itfa edilmiş maliyeti üzerinden ölçülen finansal varlıklar, gerçeğe uygun değer değişimi diğer kapsamlı gelire yansıtılarak ölçülen finansal varlıklar, gerçeğe uygun değer değişimi kar zarara yansıtılarak ölçülen finansal varlıklar olarak yapılmaktadır. Bu sınıflandırmada bankaların kullandıkları iş modeli ve varlıklara ait nakit akış özellikleri göz önünde bulundurulmaktadır. İş modelinde amaç edinilen finansal varlığın sözleşmeye bağlı nakit akışlarını tahsil etmekse ve nakit akışları sadece anapara ve faiz ödemelerini içeriyorsa itfa edilmiş maliyeti üzerinden ölçülen finansal varlıklarda sınıflandırılır. Varlığın sözleşmeye bağlı nakit akışlarını hem tahsil edip hem de varlığı satmayı amaçlayan bir iş modeli varsa ve nakit akışları sadece anapara ve faiz ödemelerinden oluşuyorsa gerçeğe uygun değer değişimi diğer kapsamlı gelire yansıtılarak ölçülen finansal varlıklar sınıfında yer alır. Bu iki gruba dahil olmayan varlıklarda gerçeğe uygun değer değişimi kâr zarara yansıtılarak ölçülen finansal varlıklarda sınıflandırılır (Birkan, 2019). Bir diğer önemli değişiklik ise değer düşüklüğü uygulaması üzerinedir. TMS 39'da değer düşüklüğü uygulaması gerçekleşen zarar modeline dayalı ve sabit oranlı iken, TFRS 9'da içsel derecelendirme modelini ve geleceğe ilişkin tahminleri de barındıran beklenen zarar karşılığı yaklaşımına göre yapılmaktadır. TMS 39'da kredi zararları objektif kanıt olduğu durumda muhasebe kaydına alınırken, yeni standartta böyle bir durum söz konusu değildir. TFRS 9'da daha değer düşüklüğü oluşmamış krediler içinde karşılık ayrılmaktadır. Finansal alacaklara kredi kalitesine göre 12 aylık veya ömür boyu beklenen kredi zararları için karşılık ayrılmaktadır. Bunların yanında, eski standartta kurallara dayalı bir yaklaşım benimsenirken yeni standart ilkelere dayalı bir yaklaşım içermektedir. Böylece belli şartlar meydana geldiğinde bankalar finansal riskten korunma hükümlerini uygulayabileceklerdir (Karaarslan ve Gülhan, 2020).

UFRS 9'la birlikte literatürde bu yeni standarda ait zıt görüşler ortaya çıkmıştır. Bir grup, UFRS 9'un sermaye piyasası üzerinde olumlu etkisi olduğunu savunurken karşıt görüştekiler yeni standardın olumsuz etkisi olduğunu savunmaktadır. Onali ve Ginesti (2014) UFRS 9'un farklı işletmeler arasında şeffaflığı ve karşılaştırılabilirliği arttırdığını belirtmektedir. Ayrıca bilgi asimetrisini azalttığı, likiditeyi arttırdığı ve sermaye maliyetini düşürdüğü yönünde görüşler yer almaktadır. Bunun yanında Dichev vd. (2013), yeni standardın daha kafa karıştırıcı ve daha az karşılaştırılabilir olduğunu ifade etmişlerdir. UFRS 9'da beklenen zarar modelinin

benimsenmesi ve buna göre gelecekteki nakit akış kayıplarının tahmini olarak yapılması eski standarda göre daha sübjektif bilgilerin oluşmasına neden olacağını belirtmişlerdir. Bu gibi durumlar, UFRS 9'un piyasalara daha yararlı bilgiler sağlayıp sağlamadığı sorusunu gündeme getirmektedir. Bunu test etmek için ise literatürde birçok değer ilgiliği çalışmaları yapılmaktadır.

Değer ilgiliği, finansal tablolar sayesinde sağlanan muhasebe bilgileri ile firma değeri arasındaki ilişkiyi gösterir. (Atalay, 2018). Bir firmanın muhasebe bilgileri ile hisse senedi fiyatı arasında doğrusal bir ilişki varsa bu firmanın muhasebe verilerinin değer ilgili olduğu söylenir. (Morsulu, 2022). Diğer bir ifadeyle, firmanın muhasebe bilgilerinin kaliteli olduğu ve bilgi kullanıcılarına faydalı bilgiler sağladığı kabul edilir.

Muhasebe verilerinin değer ilgiliği tespitinde tercih edilen iki model bulunmaktadır. Modellerden biri hisse senedinin getirisi ile muhasebe bilgisinin ilişkisine odaklanmakta, diğeri hisse senedi fiyatı ve muhasebe bilgisinin ilişkisi üzerinde durmaktadır. Hisse fiyatı üzerine kurulu model, Ohlson tarafından 1995 tarihinde ortaya atılmış ve literatürde Ohlson Modeli olarak yer almaktadır. Değer ilgiliği tespiti konusunda birçok çalışmada kullanılan Ohlson Modeli, işletmelerin net kazanç ve özkaynak defter değerleriyle firma değeri arasındaki ilişkiyi ortaya koyar (Morsulu, 2022).

3. LİTERATÜR

Türkiye Finansal Raporlama Standardı 9'a ilişkin literatür incelendiğinde Karaarslan (2019), bankalarda TMS 39'dan TFRS 9'a geçiş ve Borsa İstanbul'da işlem gören bankaların hisse senedi fiyatları ve finansal durum tablosu üzerindeki etkileri üzerine çalışma yapmıştır. Finansal tablolar üzerinde etki incelenirken bankaların bağımsız denetim raporlarından sağlanan bilgileri ile finansal tablo kalemleri ve sermaye yeterliliği oranı beklentileri karşılaştırılmıştır. Karşılaştırma sonucunda, toplam sermaye yeterliliği oranında azalma görülürken, çekirdek sermaye yeterliliği oranında artış yaşandığı ifade edilmiştir. Çalışmada hisse senedi fiyatlarına ait etkiyi incelemek için ise panel regresyon analizi kullanılmıştır. Analiz sonucunda, TFRS 9'un bankaların hisse fiyatları üzerinde anlamlı bir etkiye sahip olduğuna ulaşılmıştır.

Çetinoğlu ve Karaarslan (2020) tarafından TFRS 9'a geçişin Borsa İstanbul'da işlem gören bankaların hisse senedi fiyatlarına etkisi araştırılmıştır. 2016-2018 yılları arasında halka açık 10 banka ile yapılan testte TFRS 9'un bankaların hisse fiyatları üzerinde anlamlı bir etkisinin olduğu görülmüştür. Çalışmada TFRS 9 'un istatistiki açıdan hisse senedi fiyatları üzerinde pozitif etkiye sahip olduğu belirtilmiştir.

Saygılı vd. (2021) tarafından TFRS 9 standardının Türkiye'deki mevduat bankalarının beklenen kredi zararları üzerindeki etkileri ele alınmıştır. Araştırmada, 18 mevduat bankasının 2017 yıl sonu verileri ile 2018 yılındaki açılış verileri yatay analiz hareketli baz yıl yöntemi kullanılarak karşılaştırılmıştır. Analiz sonucunda TFRS 9 standardına ait yeni 3 aşamalı değer düşüklüğü modelinde 1. ve 3.aşama kredilerin negatif yönde bir etkiye sahip olduğu, 2. aşama kredilerin çoğunlukla pozitif etkiye sahip olduğu bulunmuştur. Çalışmada aynı zamanda TFRS 9'daki özel ve genel karşılıkların bankalarda nasıl bir etkiye sahip olduğu araştırılmıştır. Sonuç olarak özel karşılıkların (3.aşama) etkisinin daha çok negatif yönde olduğu, genel karşılıkların (1. ve 2. aşama) ise pozitif yönde olduğu belirtilmiştir.

Telci (2021) ise portföy yönetimi şirketlerinde TFRS 9 uygulamasının finansal tablolardaki etkisini muhasebenin önemlilik kavramı kapsamında incelemiştir. Çalışmadaki vaka sonucu, şirketin TFRS 9'daki kredi zarar karşılığının finansal raporlarına etkisinin önemlilik kavramı doğrultusunda önemszenmeyecek düzeyde olduğunu göstermiştir. Önemsizliğin sebebinin bu şirketlerin Sermaye Piyasası Kanunu ve ilişkili tebliğlerin düzenlemelerine uyum sağlamak zorunda olduğu belirtilmektedir.

Güngör (2022), katılım bankalarında kredilerden ayrılan karşılıkların TFRS 9'a göre muhasebeleştirilmesi üzerine çalışma yapmıştır. Çalışmada TFRS 9 öncesi ve sonrası dönem karşılaştırılmıştır. TFRS 9'da kullanılan beklenen kredi zarar modelinin ve değer düşüklüğü hesaplamalarının daha çok gerçeği yansıttığı belirtilmiştir.

Mengi vd. (2022) bankacılık sektöründe TFRS 9 standardının finansal varlıkların sınıflandırılması ve ölçümüne etkisi incelenmiştir. 18 mevduat bankasının 2017 yıl sonu verileri ile 2018 yılındaki açılış verileri yatay analiz hareketli baz yıl yöntemi kullanılarak karşılaştırılmıştır. Çalışmada analiz, TFRS 9 kapsamındaki üç sınıflandırmanın verilerine göre yapılmıştır. "Kar veya zararda gerçeğe uygun değer", "itfa edilmiş maliyet" ve "diğer kapsamlı gelir yoluyla gerçeğe uygun değer" olmak üzere bu üç sınıflandırmanın 18 bankaya ait yüzdesel değişimleri verilmiştir. Kar veya zararda gerçeğe uygun değer grubunda azalmaların daha küçük oranda, artışların ise daha büyük oranda değişim gösterdiği belirtilmiştir. Diğer kapsamlı gelir yoluyla gerçeğe uygun değer grubundaki değişimin pozitif yönde, itfa edilmiş maliyette ise negatif yönde olduğu tespit edilmiştir.

Gülhan ve Bozkurt (2022), Türk bankacılık sektöründe TFRS 9 uygulamasının karşılık ayırma düzeyine etkisini araştırmışlardır. TFRS 9 öncesi ve sonrasına ait zorunlu ve ihtiyati kredi karşılıklarının matematiksel olarak anlamlı bir değişim gösterip gösterilmediği incelenmiştir. Analizde 2017 ve 2108 yıllarında faaliyette olup takipte kredisi bulunan 25 bankanın verileri kullanılmıştır. Sonuç olarak özel ve ihtiyari karşılıklarda TFRS 9 sonrası artış yaşandığını belirlenmiştir.

Değer ilgiliği ile ilgili literatür taramasında ise Morais ve Curto (2008), UFRS 'nin finansal tablolardaki etkisini Portekiz Borsası'na kayıtlı 34 şirketin 1995-2008 yılları arasındaki verileri incelemişler. Araştırma sonucunda, değer ilişkisinin UFRS'nin uyum süreci sonrasında daha az olduğunu belirtmişlerdir

Chalmers vd. (2011) tarafından Avustralya Borsasında işlem gören 18.488 şirketin UFRS öncesi, UFRS'ye geçiş ve UFRS sonrası dönemlerine ait muhasebe verilerinin değer ilgiliği üzerine çalışma yapılmıştır. Araştırma sonucunda, net karın değer ilgiliğinin, UFRS'ye geçiş ve sonrasındaki dönemde arttığını, özsermaye defter değerinin değer ilgisinin UFRS sonrasında daha az olduğunu gözlemlemişlerdir.

Khanagha vd. (2011) ise Tarhan Borsasında işlem gören şirketlerin UFRS öncesi (1996-2000) ve UFRS sonrası dönemlerine (2001-2008) ait muhasebe verilerinin değer ilgiliğinde bir fark olup olmadığını test etmek için çalışma yapmışlardır. Yapılan analiz sonucunda defter değerinin değer ilgiliğinin karın değer ilgiliğinden daha az çıktığı gözlemlenmiştir. Bunun yanında UFRS öncesi dönemde muhasebe verilerinin değer ilgiliğinin daha fazla olduğu tespit etmişlerdir.

Uluslan ve Ata (2014), UFRS'ye göre hazırlanan muhasebe verilerinin değer ilgiliği ve şirkete özgü özelliklerin değer ilgiliği üzerinde bir farklılık oluşturup oluşturmadığına dair inceleme yapmışlardır. Araştırma, Borsa İstanbul Pay Piyasası'na kote olan şirketlerin 2009- 2011 yılları arasındaki verileri kullanılarak yapılmıştır. Sonuç olarak, kapsamlı kârın özkaynak defter değeri ve net kârın değer ilgili olduğunu gözlemlemişlerdir. Bunun yanında UFRS kapsamındaki muhasebe verilerinin değer ilgiliğinin firmanın büyüklüğü dışında, kapsamlı kâr raporlayıp raporlamama halka açılma düzeyi ve çokuluslu olup olmama gibi şirkete özgü özellikler bakımından bir farklılık oluşturduğunu tespit etmişlerdir.

Schaap (2019), UFRS öncesi ve sonrası dönemde muhasebe verilerinin değer ilgiliğini 2010- 2019 yılları arasında Avrupa Birliği bankaları üzerinde incelemiştir. Araştırma sonucunda değer ilgiliğinin UFRS sonrası dönemde azaldığını tespit etmiştir.

Kulah ve İbiş (2022) tarafından Borsa İstanbul'da kayıtlı olan 22 firmanın 2005-2020 yılları arasındaki verileri kullanarak UFRS 8 ve değer ilişkisi üzerinde araştırma yapılmıştır. Çalışma sonucunda hisse senedi fiyatı üzerinde, hisse başına özkaynak defter değeri ile hisse başına gelirin pozitif bir ilişkinin olduğunu gözlemlemişlerdir. Bunun yanında UFRS 8 standardını uygulayan firmalarda hisse başı gelir ile hisse başına özsermaye defter değeri arasında pozitif bir ilişki olduğunu ve bunun hisse senedi fiyatları üzerinde olumlu bir etki meydana getirdiğini tespit etmişlerdir.

4.METODOLOJİ

4.1. Veri seti ve Araştırma Yöntemi

Araştırmamanın amacı, TFRS 9 standardıyla hazırlanan finansal raporlardan sağlanan muhasebe bilgilerinin değer ilgiliğini / TFRS 9'un kullanıma sunulmasından sonra muhasebe bilgilerinin değer ilişkisinin artıp artmadığını Türkiye'deki bankalar üzerinde incelemektir. Bu çerçevede Borsa İstanbul'da işlem gören 12 bankanın 2010-2021 yılları arasındaki verileri kullanılmıştır. Bu çalışma için gerekli olan tüm veriler Refinitiv Eikon'dan alınmıştır. Analiz, Eviews programında En küçük kareler yöntemi kullanılarak yapılmıştır

4.2. Araştırma Hipotezi ve Modeli

TFRS 9: Finansal Araçlar standardının sunulması sonrasında bu standart hakkında birçok eleştiri yapılmıştır. Yeni standardın karmaşık bir yapıya sahip olduğu ve aynı zamanda şirketler arasındaki karşılaştırılabilirliği azalttığı yönünde olumsuz görüşler bulunmaktadır. Buna karşın TFRS 9 standardının daha fazla karşılaştırılabilirlik, daha az bilgi asimetrisi ve sermaye maliyeti oluşturduğu literatürde birçok kişi tarafından belirtilmektedir. (Schaap, 2020). Bu doğrultuda TFRS 9'un öncesi ve sonrası muhasebe bilgilerinin değer ilgiliğini ölçmek için aşağıdaki hipotez oluşturulmuştur.

H1: Muhasebe bilgilerinin değer ilgisi, TFRS 9 uygulaması sonrası artar.

Yeni muhasebe standartlarının muhasebe bilgilerinin değer ilişkisine etkisine yönelik yapılan daha önceki çalışmalarda Ohlson modelinden (1995) yararlanılmıştır. Bu çalışmada da TFRS 9 standardıyla hazırlanan

finansal raporlardan sağlanan muhasebe bilgilerinin, değer ilgililiğini test etmek için bu model kullanılacaktır. Araştırma da bağımlı değişken hisse senedi piyasa değeri (MVPS), bağımsız değişkenler ise hisse başına kazanç (EPS) ve hisse başına defter değeridir (BVPS).

$$MVPS_{i,t+1} = \alpha + \beta_1 EPS_{i,t} + \beta_2 BVPS_{i,t} + \beta_3 Dummy + \beta_4 EPS_{i,t} * Dummy + \beta_5 BVPS_{i,t} * Dummy + \epsilon_{i,t}$$

Burada $MVPS_{i,t}$, $t+1$ zamanında i firmasının hisse başına piyasa değerini temsil eder. Zaman t , mali dönem sonu olarak tanımlanır. Hisse başına piyasa değeri (MVPS), mali yılın kapanış tarihinden ($t+1$) sonraki 3 aylık tarihteki hisse fiyatı olarak tanımlanmaktadır. Örnekleme arttırmak için kukla değişkenler kullanılmıştır. Katsayı tahminleri için Sıradan En Küçük Kareler (OLS) temel alınarak yapılacaktır. TFRS 9: Finansal Araçlar'ın uygulanması sonucunda muhasebe bilgilerinin değişen değer ilişkisini tespit etmek için analiz sonucunda R^2 değerine bakılacaktır.

5. BULGULAR

Analiz, 12 bankanın 2010-2021 yıllarına ait verileri kullanılarak yapılmıştır. Bu çalışma için Ohlson modelinden (1995) yararlanılmıştır. Katsayıları tahmin etmek için ise sıradan en küçük kareler yöntemi tercih edilmiştir.

Tablo 1. Değişkenlere Ait Betimleyici İstatistikler

Değişkenler	Ortalama	Standart Sapma	En Büyük	En Küçük
DVPS	0.061	0.008	0.000	0.420
BVPS	5.350	0.497	0.483	27.061
EPS	0.675	0.064	-0.552	3.338
MVPS	3.554	0.285	0.390	17.670

Tablo 2. Korelasyon Analizi Sonuçları

	DVPS	BVPS	EPS	MVPS
DVPS	1			
BVPS	0.435	1		
EPS	0.555	0.864	1	
MVPS	0.735	0.660	0.793	1

Tablo 3: En Küçük Kareler Yöntemi Analiz Sonuçları

Değişkenler	Katsayılar	Standart Hata	t-İstatistik değeri	Olasılık Değeri
EPS	5.633	0.847	6.654	0.000
DUMMY_EPS	-3.866	0.953	-4.058	0.000
DUMMY_BVPS	0.027	0.148	0.179	0.859
DUMMY	1.160	0.389	2.984	0.004
BVPS	0.057	0.138	0.415	0.679
SABİT	0.276	0.247	1.121	0.265

Tablo 4: En Küçük Kareler Yöntemi Analiz Sonuçları Devamı

R^2	0.810
Düzeltilmiş R^2	0.802
F-İstatistik	97.115
Olasılık Değeri	0.000

Regresyon analizinin sonuçlarına göre uyum iyiliğini gösteren R^2 ve düzeltilmiş R^2 değerleri 1'e yakın sonuçlar vermiştir. Bu durum modelin tahmin gücünün yüksek olduğunu göstermektedir. Çalışma kapsamında incelenen her iki dönem arasında farklılıklara bakıldığında hisse başına defter değeri ile hisse başına piyasa değeri arasında anlamlı bir ilişki bulunamamıştır. Diğer taraftan hisse başına kazanç ve hisse başına piyasa değeri arasındaki ilişkinin anlamlı olduğu tespit edilmiştir. Dönemler arasındaki değişim değerlendirilecek olursa TFRS 9'un uygulanmadığı dönemde (2018 öncesi) uygulandığı döneme göre hisse başı kazancın hisse başına piyasa değeri üzerinde daha fazla etkisi olduğu söylenebilir.

6.SONUÇ

Muhasebe standartları ekonomik, teknolojik veya finansal çevrelerin etkisi ile zamanla beklenen faydayı sağlayamaz hale gelmektedirler ve değişime uğramaları da kaçınılmaz olmaktadır. UMS 39 Finansal Araçlar standardı için de benzer süreçlerin sonucunda yerini 2018 yılı itibari ile UFRS 9 Finansal Araçlar standardına bırakmıştır. Çalışmamız bu değişimin etkilerini gözlemleyebilmek amacıyla yürütülmüştür. UFRS 9 standardının ekonomik etkilerini ölçebilmek için uygulama öncesi ve sonrası dönemler için hazırlanan muhasebe verilerinin değer ilgiliği incelenmiştir.

UFRS 9 standardının daha fazla etkiye sahip olduğu düşünülen bankacılık sektöründe faaliyet gösteren 12 banka üzerinde yapılan araştırmada hisse başına piyasa değerleriyle hisse başına kazanç ve defter değeri arasındaki ilişkiyi belirlemek için kullanılan Ohlson modeli ile analiz edilmiştir. Defter değeri ve piyasa değeri arasında anlamlı bir ilişki bulunamazken; hisse başına kazanç ve piyasa değeri arasındaki ilişkinin anlamlı ve her iki dönem için de pozitif olduğu tespit edilmiştir. Araştırmanın bulguları UFRS 9'un uygulamaya başlanması ile hisse başına kazancın hisse başına piyasa değeri üzerindeki etkisinin azaldığını göstermektedir. Yapılan analiz TFRS 9 standardının uygulanmaya başlanmasının beklenen ekonomik etkiye sahip olmadığını göstermektedir.

TFRS 9 standardı son 5 yıldır uygulanmakta olan görece yeni bir standarttır. Standardın yeni uygulanmaya başlanmasının yanında uygulama yapılan sektörde az sayıda şirketin yer alması gözlem sayısını oldukça düşürmektedir. Bu durum çalışmanın önemli kısıtlarından birisi olarak göze çarpmaktadır. Çalışmanın değerlendirilmesi kısıtlayan bazı etkenler bulunmaktadır. Bunların arasında öncelikle veri setinin küçük olması belirtilebilir. Ancak Türkiye'de TFRS 9'un etkilerini inceleyen ilk çalışma olması sebebiyle önem arz etmektedir. Daha sonra yapılacak çalışmalarda daha fazla örneklemin kullanılması veya çalışmanın farklı modellerle yapılması literatüre katkı sağlayacaktır.

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Kalitenin Evrimi ve Kalite 4.0

Dr. Öğr. Üyesi Elif Bilgin¹

Dr. Öğr. Üyesi Erdal Yılmaz²

¹Marmara Üniversitesi, İşletme Fakültesi, İşletme Bölümü, ebilgin@marmara.edu.tr , ORCID: 0000-0002-5823-3822

² Marmara Üniversitesi, İşletme Fakültesi, İşletme Bölümü, erdalyilmaz@marmara.edu.tr , ORCID: 0000-0002-7730-2096

Özet: Kalite kavramı, endüstriyel süreçlerin ve ürünlerin iyileştirilmesine odaklanan bir perspektifle tarihsel olarak gelişmiştir. İlk başlarda, kalite kontrolü - muayene yaklaşımı benimsenmiş ve üründe ve üretim süreçlerindeki hataları tespit etmek amacıyla kullanılmıştır. Zamanla kalite anlayışı genişlemiş, sadece kontrol etmek değil, planlama-uygulama ve kontrolü birlikte ele alan kalite yönetimi ile müşteri memnuniyetini ve sürekli iyileştirmeyi hedefleyen bir yaklaşım haline gelmiştir. Dijitalleşme ve Endüstri 4.0 dönemiyle birlikte kalite anlayışı yeniden önemli bir değişim geçirmiştir ve Kalite 4.0 kavramı ortaya çıkmıştır. Kalite 4.0, teknolojik ilerlemelerin kalite yönetimine entegrasyonunu vurgular ve ürün ve üretim süreçlerinde veri analitiği, yapay zeka, nesnelerin interneti (IoT) gibi Endüstri 4.0 araçlarının kullanımını içerir. Bu çalışmanın amacı Kalite 4.0'ın getirdiği yeniliklerin, avantaj ve uygulamadaki zorlukların sunulmasıdır. Çalışmada öncelikle kalite kavramı ve kalite anlayışının tarihsel değişiminden bahsedilmiştir. Ardından endüstri 4.0 kavramı ve kaliteye etkilerine değinilmiştir. Son olarak dijitalleşme teknolojilerinin kalite yönetimine etkileri ve Kalite 4.0'ın boyutları, sunduğu avantajlar ve uygulanmasındaki engeller ele alınmıştır.

Anahtar Kelimeler: Kalite, Dijitalleşme, Endüstri 4.0, Kalite 4.0

The Evolution of Quality and Quality 4.0

Abstract: The concept of quality has historically evolved with a focus on improving industrial processes and products. Initially, a quality control approach was adopted to detect errors in products and production processes. Over time, the understanding of quality expanded and became an approach that aimed at customer satisfaction and continuous improvement. With the advent of digitalization and the Industry 4.0 era, the concept of quality has undergone significant changes, giving rise to the concept of Quality 4.0. Quality 4.0 emphasizes the integration of technological advancements into quality management, incorporating tools such as data analytics, artificial intelligence, and the Internet of Things (IoT) in product and production processes. The aim of this study is to present the innovations brought about by Quality 4.0 and discuss the advantages and challenges in its implementation. The study initially discusses the concept of quality and the historical evolution of the quality management. It then explores the concept of Industry 4.0 and its impact on quality. Finally, the study addresses the impacts of digitalization technologies on quality management and explores the dimensions of Quality 4.0, the advantages it offers, and the challenges in its implementation.

Key Words: Quality, Digitalization, Industry 4.0, Quality 4.0

1. GİRİŞ

Kalitenin tarihini ilk insanların hayatta kalabilmek için üretim yapmasıyla başlatabiliriz. Avlanma, yiyecek bulma, toplama, bu yiyeceklerin barınaklara taşınması ve saklanması ilk üretim faaliyeti örnekleridir. Bu dönemdeki kalitenin kontrolü ise son derece basittir. Topladığın bitkiyi yedin, avlanırken silahın avı etkisiz hale getirdi ve sen ölmediysen; kalite uygun. Bugünkü anlamda kalite ise 'müşteri için üretim'in başlamasıyla birlikte ele alınır. Sanayi devrimlerinden önceki dönemde üreticiler kendi ürettikleri ürünün kalitesini de kontrol edebilmekteydi. 18.yy'da 1. Sanayi Devrimi'yle üretim miktarındaki artışın sonucunda üretim süreçlerinde hataları tespit etmek için kalite kontrol denetçileri ortaya çıkmıştır. Kontrol elemanlarınca muayene ile kalite kontrol endüstriyel kalite kontrolün ilk dönemi kabul edilmektedir. 19. yy sonlarındaki 2. Sanayi Devrimi'nde seri üretim ve fabrika sistemlerinin gelişimiyle birlikte kalite yönetimi daha fazla önem kazanmıştır. Frederick Winslow Taylor'ın bilimsel yönetim prensipleri, işçilerin performansını artırmayı ve kaliteyi sağlamayı hedeflemiştir. Bu dönemde muayene anlayışından istatistiksel süreç kontrol yaklaşımına geçilmiştir. 3. Sanayi Devrimi ile birlikte kalite anlayışı da değişmiş ve sürekli iyileştirmeye doğru evrilmiştir. Kalite kontrolünden daha kapsamlı bir yaklaşım olan Toplam Kalite Yönetimi benimsenmiştir. TKY, tüm organizasyonun kaliteye odaklanması, müşteri memnuniyetinin sağlanması ve sürekli iyileştirmenin teşvik edilmesi prensiplerine dayanır. 21.yy'a gelindiğinde 4. Sanayi Devrimi-Endüstri 4.0 ile birlikte, kalite yönetimi de belirgin bir dönüşüm geçirmiştir. Dijitalleşme ve yeni teknolojilerin hızla ilerlemesi, kalite yönetimine büyük bir etki yapmıştır. Kalite 4.0 kavramı ortaya çıkmış ve bu, teknolojik ilerlemelerin kalite yönetimine entegrasyonunu vurgulamıştır. Endüstri 4.0 araçları, veri analitiği, yapay zeka, nesnelerin interneti (IoT) gibi teknolojileri kalite süreçlerine dâhil ederek daha akıllı ve verimli bir kalite yönetimi anlayışı sunmaktadır. Müşteri odaklılık, sürekli iyileştirme ve teknolojik entegrasyon

gibi prensipler, kalite yönetiminin tarihsel değişiminde önemli rol oynamıştır. Sonuç olarak, kalite yönetimi sanayi devrimlerinin ilerlemesiyle birlikte evrilmiş ve yeni teknolojilerin ortaya çıkmasıyla sürekli olarak dönüşmeye devam etmektedir.

2. KALİTE KAVRAMI ve KALİTENİN TARİHÇESİ

Kalite kavramı; felsefe, ekonomi, pazarlama ve üretim yönetimi gibi farklı disiplinlerce incelenegelmiştir. Felsefe, tanımlara odaklanırken; ekonomi disiplini, kâr elde etme ve pazar dengesi gibi konuları; pazarlama, tüketici davranışı ve müşteri memnuniyetini; üretim yönetimi ise mühendislik uygulamaları ve üretim kontrolü perspektifinden kalite konusunu incelemiştir. Sonuç olarak, her disiplin kalite kavramını, kendi terimleriyle farklı bir analitik çerçevede ele almıştır (Garvin, 1988: 39).

Kalite(Qualites), Latince “nasıl oluştuğu” anlamına gelen “qualis” kelimesinden gelmektedir. Kalite kavramı ürünün soyut ve somut bileşenlerinin neler olduğunu ifade etmektedir. Kalite, günlük kullanımda üstünlüğü ve iyiliği ifade etmek için kullanılmakta ve bu anlamda öznel değerleri içermektedir. Ürünün ölçülebilen, belirlenebilen ve çoğu kez kalite standartları veya mevzuatlarla belirlenen kalitesi ise nesnel kalite olarak ifade edilmektedir. Kalitenin bu çok boyutlu özelliği farklı tanımları olmasına yol açmıştır. Juran, “müşterinin istediği estetik, dayanıklılık, güvenilirlik vb. özelliklere sahip ve hatalardan arındırılmış ürünlerin kullanım amacına uygunluk” olarak, Deming benzer ifadeyle “müşteri gereksinimlerine uygunluk” olarak tanımlamış, çıktılarının değil sürecin kalitesinin önemi üzerinde durmuş ve kalitenin artırılması için değişkenliğin azaltılması gerektiğini söylemiştir. Kotler, “ürünün müşteriler tarafından değinilen veya ima edilen istekleri karşılayabilme yeteneğine sahip niteliklerinin toplamı” ifadesini kullanmıştır. Amerikan Kalite Kontrol Derneği-American Society for Quality Control (ASQC) kaliteyi, “bir mal ya da hizmetin belirli bir gereksinimi karşılayabilme yeteneklerini ortaya koyan karakteristiklerin tümü” olarak tanımlar. Japon Sanayi Standartları Komitesi: “ürün ya da hizmeti ekonomik bir yoldan üreten ve tüketicinin isteklerine cevap veren bir üretim sistemidir” ve ISO 8402 Kalite Sözlüğünde kalite için “Kalite, bir mal ya da hizmetin belirlenen veya olabilecek gereksinimleri karşılama yeteneğine dayanan özelliklerin toplamıdır.” demektedir.

“Kalite nedir?” sorusuna cevap verebilmek için ürünün veya sürecin sahip olduğu bazı özelliklere bakmak gerekmektedir. Juran kalitenin iki boyutundan bahseder, ‘tasarım’ ve ‘uygunluk’ kalitesi. Tasarım kalitesi, tercih edilen özelliklerin tasarımda yer alması iken; uygunluk kalitesi ise gerçekleştirilen üretimin tasarımda belirtilen özelliklere uyması şeklinde açıklanabilir. Garvin ise kalite stratejisi belirlenirken sekiz boyutta ele alınması gerektiğini söyler: ‘Performans’, ‘Estetik’, ‘Ek Özellikler’, ‘Uygunluk’, ‘Güvenilirlik’, ‘Dayanıklılık’, ‘Algılanan kalite’ ve ‘Servis yeteneği’.

Kalite anlayışı tarihsel süreçte endüstrinin geçirdiği dört aşamaya paralel olarak değişim göstermiştir. 18. yy’ın sonlarında buhar gücünün daha verimli kullanılmasını sağlayan mekanik tezgâhların bulunmasıyla atölye üretiminden fabrika üretimine geçişle tanımlanan Birinci Sanayi Devrimine yol açan temel gelişme 1763 yılında James Watt’ın İskoçya’da buharla çalışan makineyi icat etmesidir. Bu icat sayesinde Edmund Cartwright 1784 yılında mekanik dokuma tezgâhını icat ederek dokuma işleminin makineleşmesini sağlamış ve makineleşme çağının öncüsü olmuştur (Bilgin, 2021: 125). 1. Sanayi Devrimi ile insan gücüne bağlı üretim yerini makinalara bırakmış bu büyük değişiklik ile de üretim miktarındaki büyük artış, ekonomik ilişkilerde ve toplumsal yapıda olduğu kadar kalite kontrolünde de değişimleri beraberinde getirmiştir. 1. Sanayi Devrimi ile paralel muayene ile kalite kontrol yönteminde, işletmenin sunduğu tüm mal ve hizmetlerin, müşteri ihtiyaçlarını karşılamak için belirlenen özelliklere uygun olmasını denetlemek amaçlanır.

19. yy sonlarında üretimde ikinci büyük değişim Amerika’da geliştirilen montaj hattı teknolojisi ve Taylor’un yönetim bilimi ilkeleri ile olmuştur. Üretimde elektrik enerjisinin kullanımı, imalatta iş bölümü ve seri üretimin ilk örneği 1870 yılında Cincinnati’de bir mezbahada uygulanmıştır (Çelikaş, vd., 2015: 25). 1913’te Henry Ford’un otomobil fabrikasında uygulamaya başladığı “seri üretim bandı” tekniğinin diğer sektörlerde de kullanılmasıyla üretimde verimlilik önemli ölçüde arttırılmıştır. Fordizm olarak anılan bu Sanayi Dönemi “kitleler için kitlesel üretim” sloganıyla öne çıkmaktadır. Üretim miktarındaki bu artışın bir zorunluluğu olarak ve istatistik bilimindeki gelişmeler sayesinde kalite kontrolde istatistiksel kalite ve süreç kontrol yöntemi uygulanır olmuştur. W.Shewhart ve W.E Deming’in 1940’larda istatistik alanındaki çalışmaları üretimde kalite kontrolünde de uygulanmıştır. “Kabul örnekleme” yöntemi ile muayene elemanları, her ürüne %100 muayene yerine, ürün yığınının örnek alarak, örneğin muayene sonucunu ürün yığının kabulü/reddi kararında kullanmıştır (Dahlggaard, vd, 2007: 7). Ek olarak, “Kontrol diyagramları” aracılığıyla sadece bitmiş ürünün değil üretim sürecin kalite takibi mümkün olmuştur.

20.yy başlarında artan rekabet ve müşteri taleplerindeki çeşitliliğe yanıt veremeyen Fordist üretim anlayışı yerini esnekliğin ve çeşitliliğin ön planda olduğu, maliyetlerin azaltılmasını hedefleyen yeni üretim stratejilerine bırakmıştır. Bu yönetim stratejisi değişimi ile eşzamanlı olarak 1968 yılında, bir grup mühendis tarafından geliştirilen bir cihaz olan PLC (programlanabilir mantık devresi), sanayide 3. Sanayi Devrimi olarak adlandırılan yeni bir çağın başlangıcını işaret etmiştir. "Programlanabilir makineler" ve onların geliştirilmesiyle birlikte, elektronik ve bilgisayar tabanlı teknolojilerle üretim tam otomasyona geçebilmiştir. Bu da üretim süreçlerinde esneklik, çeşitlilik ve hız artışı sağlarken aynı zamanda maliyetleri düşürmeyi mümkün kılmıştır. Bu dönemde kalite anlayışı da değişmiş Toplam Kalite Yönetimi (TKY) benimsenmiştir. TKY, sunulan mal ve hizmetlerin müşterilerin gereksinimlerini ve beklentilerini karşılayarak, firmanın ve paydaşlarının faaliyetlerinin her birinde kalite faaliyetlerinin uygulanmasını hedefleyen bütünsel bir yönetim anlayışıdır (Sader vd., 2022: 1166).

4. Sanayi Devrimi ifadesi ilk kez 2011 yılında Hannover Ticaret fuarında Almanya'nın 2020 Yüksek Teknolojisi Stratejisi Hareket Planının bir parçası olarak tanıtılmıştır. Sanayii olduğu kadar toplumu da değiştirecek bu yeni dönem-Endüstri 4.0; bilişim, iletişim, internet, otomasyon, veri toplama ve analizi gibi teknolojilerin işletmelerin tüm fonksiyonları ve tüketicileriyle entegre olduğu bir dönemdir. Dijital teknolojiler ve otomasyonun üretim süreçlerine entegrasyonunu ile birlikte kalite yönetiminde de dönüşüm gerçekleşmiştir. 'Kalite 4.0' bu dönüşümün kalite yönetimi alanında gerçekleşmesini ifade etmektedir. Geleneksel kalite yönetimi yaklaşımları, üretim süreçlerinin kontrol edildiği ve hataların minimize edildiği bir perspektifi temsil ederken, Kalite 4.0 daha akıllı, bağlantılı ve eşzamanlı bir yaklaşım sunmaktadır. Bu yaklaşım, büyük veri analitiği, sensörler ve akıllı cihazlar aracılığıyla gerçek zamanlı veri toplama ve analizini içerir. Bu sayede, üretim süreçlerindeki kalite sorunları daha hızlı ve etkili bir şekilde tespit edilebilir ve önlenir. Ayrıca, Kalite 4.0'ın önemli bir unsuru, işbirliği ve paylaşıma dayalı bir yaklaşımı teşvik etmesidir. Tedarik zinciri paydaşları arasında bilgi ve veri paylaşımı, daha iyi kalite yönetimi sağlamak ve süreçlerin optimize edilmesine olanak tanımak için önemlidir. Kalite 4.0'ın hedefleri arasında yüksek kalite standartları, verimlilik artışı ve müşteri memnuniyetinin sağlanması yer almaktadır. Endüstri 4.0 ile birlikte Kalite 4.0, sürdürülebilir üretimin hayata geçirilmesinde önemli bir rol oynayacaktır.

Tablo 1: Kalitenin Sanayi Devrimleri ile Evrimi

Dönemler:	Endüstri 1.0	Endüstri 2.0	Endüstri 3.0	Endüstri 4.0
Üretim Anlayışı	Buhar Çağı / Mekanik Üretim Sistemleri	Elektrik Çağı / Kitlel Üretim	Bilgi Çağı / Bilişim ve Otomasyon Sistemleri	Siber-Fiziksel Sistemler Çağı / Kitlel Özelleştirme
Kalite Anlayışı	Kalite Kontrolü, Muayene	Kabul Örnekleme, İstatistiksel Kalite Kontrol	Toplam Kalite Yönetimi	Kalite Sorumluluğu, Açık Kalite

Kaynak: (Broday, 2022, s. 371).

3. KALİTE 4.0

Kalite 4.0 terimi, endüstri 4.0'ın bir parçası olarak kalite yönetiminin dijitalleşmesini, üretim süreçleri, insan ve teknolojinin entegrasyonunu ve buna bağlı değişen kültürü ifade etmektedir. Endüstri 4.0, Bulut Bilişim, Siber-Fiziksel Sistemler (CPS) ve Nesnelerin İnterneti (IoT) gibi teknolojileri içermekte ve üretim süreçlerinde otomasyonun yaygınlaşmasını sağlamaktadır. Bu teknolojilerin bir sonucu olarak da Kalite 4.0 kavramı ortaya çıkmıştır. Endüstri analisti ve araştırmacı Dan Jacob'a göre kalite, dijitalleşme teknolojileri aracılığıyla şirket çapında bir strateji olmalıdır. Kalite 4.0, sadece yeni teknolojiyle değil; bu teknolojinin kullanıcıları ve değer zinciri boyunca süreçlerle ilgilidir (Jacob, 2017: 6). Kalite 4.0, akıllı kararların mümkün olabilmesi için deneysel öğrenmeye, deneysel bilgi keşfine ve gerçek zamanlı veri üretme-toplama ve analize dayanan yeni bir anlayışı ifade etmektedir (Escobar, vd., 2021: 750).

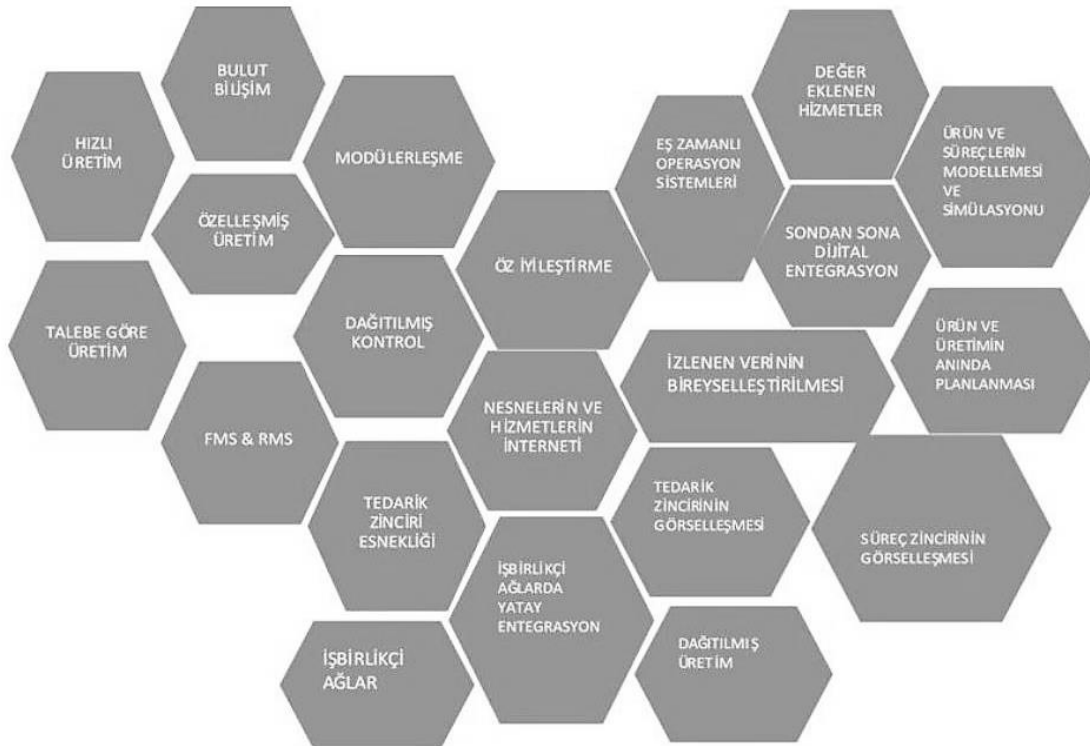
4. Sanayi devrimi ile şekillenen ve "Kalite 4.0" olarak adlandırılacak bu yeni kalite anlayışı ilk defa 2015'te ASQ-Kalitenin Geleceği Raporu'nda açıklanmıştır (ASQ, 2015). Rapora göre, kalite ve tüm endüstriyel ekosistemin geleceğine dair beklentilerin başında kalite mesleğindeki vurgunun verimlilik, etkililik ve memnuniyetten sürekli öğrenme ve adaptasyona doğru değişmesi gelmektedir. Bilgiye erişebilirlik ve şeffaflık nedeniyle işletme içi ve işletmeler arasındaki sınırlar değişecektir. Tedarik zincirinde her şeyi bilme ve üretim süreçlerinde görünürlük (gerçek zamanlı olarak izleyebilme ve tepki verebilme) kalite performansı ve yaratılan değeri yükseltecektir. Raporda ayrıca değer zincirinin tüm aşamalarında müşteri katılımındaki artış beklentisine vurgu yapılmıştır.

Kalite 4.0 konusunda öncü bir diğer çalışma, 2019 yılında Boston Consulting Group (BCG)'un, Alman Kalite Topluluğu (DGQ-Deutsche Gesellschaft für Qualität) ve Amerikan Kalite Topluluğu (ASQ-American Society for

Quality) ile birlikte hazırladığı “Quality 4.0 Takes More Than Technology” başlıklı rapordur (BCG, ASQ, DGQ, 2019). Çalışma kapsamında, Kalite 4.0 girişimlerinin mevcut durumunu ve gelecekteki etkisini değerlendirmek amacıyla, tüketici ürünleri, endüstriyel ürünler, ilaç ve tıbbi teknolojiler gibi 18 ana sektörde faaliyet gösteren, çoğunluğu Alman ve Amerikan şirketleri olmakla birlikte Çin, Japonya ve Avrupa ülkelerinden 221 şirketin yöneticileri ve kalite yöneticilerine anket uygulanmıştır. Bu anket ile katılımcıların Kalite 4.0’ın o günkü durumuna ilişkin görüş ve 2024’e yönelik tahminlerinin değerlendirilmesi, öncü uygulama örneklerinin -başarı ve başarısızlık tecrübelerinin- incelenmesi ve kalite anlayışında bir dönüşümü gerçekleştirmek için gerekenlerin ve karşılaşılabilecek zorlukların belirlenmesi hedeflenmiştir. Anketin bulguları raporda 5 ana başlıkta toplanmıştır. Katılımcıların ‘Kalite 4.0’ın değer zinciri süreçleri için önemine ilişkin görüşleri’, ‘değer zinciri süreçlerinde Kalite 4.0 uygulamalarına dair başarı ve başarısızlık öyküleri’, ‘Kalite 4.0 uygulamalarını benimseme seviyesi’, ‘Kalite 4.0’ın gelecekteki uygulamalarına dair beklentileri’, ‘Kalite 4.0 uygulamalarındaki zorluklara dair görüşleri’. Rapora göre katılımcıların %74’ü Kalite 4.0 uygulamalarının üretim ve Ar-Ge süreçlerinde iyileştirmelerde son derece önemli olduğunu düşünmektedir. Satış sonrası hizmetler(%64), satınalma(%59) ve lojistik ve satış aşamaları için bu oran %50’lere doğru düşmektedir. Ankete katılan 221 şirketten sadece %16’sı Kalite 4.0’ı uygulamaya başladığını söylerken (bu şirketler, çalışmanın devamında öncü olarak adlandırılmış), %20’si uygulama planı yapmaya başladığını, %63’ü ise henüz planlama aşamasına bile gelmediğini söylemiştir (bu iki katılımcı kategorisi, takipçi olarak adlandırılmış). Avrupalı (çoğunlukla da Alman) şirketlerin öncü şirketlerde oranının belirgin biçimde yüksek olduğu görülmüştür. Kalite 4.0’ın temel kalite metriklerinde önemli iyileştirmeler sağlaması beklenmektedir. Ancak raporda dikkat çeken bir bulgu, öncülerin bu iyileştirmelerin büyüklüğü konusunda takipçilere göre daha düşük beklentilere sahip olmasıdır. Bu bulgu muhtemelen öncülerin gerçek dünyadaki uygulama zorluklarıyla yüz yüze geldiği gerçeğini yansıtmaktadır. Rapordaki son başlık olan zorluklar konusunda ise dijital beceri ve yetenek eksikliğini birinci sırada yer alırken, dijitalleşme stratejisinin belirsizliği ikinci, kalite kültürü eksikliği ise üçüncü sırada yer almıştır.

Dijitalleşme çağının yeni teknolojileri, kalite anlayışını da şekillendirmektedir. Bu yeni kalite anlayışı ile üretimin etkileşim içinde olacağı konuları Gümüsoğlu (2018) aşağıdaki şekilde görülen başlıklarla gruplandırmıştır.

Şekil 1: Kalite anlayışına yön veren Endüstri 4.0 alanları



Kaynak: Gümüsoğlu (2018: 553).

3.1. Kalite 4.0’ın Boyutları

Üretim süreçlerinin dijitalleşmesinden önemli ölçüde etkilenecek alanlardan birisi de kalite yönetimidir. Endüstri 4.0’ın temel kavramları (Akıllı Fabrika, Siber Fiziksel Sistemler, vb.) geleneksel kalite yönetimi

fonksiyonlarının da değişimini beraberinde getirecektir. Bu çerçevede Kalite 4.0, tasarım kalitesi, uygunluk kalitesi ve performans kalitesinin yeni teknolojilerin kullanılması sonucu dijitalleştirilmesidir (Sony, 2021: 781). Dijital teknolojilerin kalite yöneticilerin kullanımına oldukça gelişmiş araçlar sunmakta olduğu açıktır. Dijital teknolojiler ile bir firma, üretim süreçlerini gerçek zamanlı izleyebilir, sensörler yardımıyla büyük hacimde veri toplayabilir, bu büyük veriyi analiz edebilir, kalite sorunlarını ve bakım ihtiyaçlarını daha kapsamlı bir şekilde inceleyebilir (Johnson, 2019: 22). Bu akıllı teşhis araçları, işletmelerin sürekli yüksek kaliteli üretim yapma yeteneklerini geliştirmek için bir fırsat oluşturmaktadır. Ancak Kalite 4.0, teknolojiden ve onun kullanıma sunduğu araçların kullanımından daha farklı boyutları olan, geniş kapsamlı bir olgu olarak görülmeli ve ele alınmalıdır. (Jamkhaneh, 2022: 5)

Sony vd. (2020), Kalite 4.0'ı sekiz boyutta ele almıştır: (1) Büyük veri işleme, (2) Öngörücü analizi geliştirme, (3) Kalite 4.0 ile yatay, dikey ve uçtan uca entegrasyon, (4) Stratejik avantaj için Kalite 4.0 kullanımı, (5) Kalite 4.0'da liderlik, (6) Kalite 4.0 eğitimi, (7) Kalite 4.0 için organizasyon kültürü ve (8) Kalite 4.0 için üst yönetimin desteği. Yine Sony vd. 2021 yılında işletmelerin Kalite 4.0'a geçişe hazır olma faktörlerini inceledikleri çalışmalarında bu sekiz boyutu yeniden ele almışlar ve küçük değişikliklerle yeniden tanımlamışlardır: (1) Üst yönetimin desteği, (2) Kalite 4.0 vizyon ve stratejisi, (3) Liderlik, (4) Eğitim ve ödüllendirme, (5) Kalite 4.0'ın bilinme ve farkındalığı, (6) Organizasyonun Kalite 4.0'a yönelik kültürü, (7) Müşteri odaklılık ve (8) Tedarikçi odaklılık.

Literatüre göre geleneksel kalite yönetim sistemini dijitalleşmeye uyarlamanın göstergelerini ve etkili faktörlerini ortaya koyan en kapsamlı çalışmalardan biri de Jacob (2017) tarafından yapılmıştır. Bu çalışmada Jacob, on bir boyut tanımlamıştır: (1) Veri, (2) Analiz, (3) Bağlantı, (4) İş birliği, (5) Uygulama geliştirme, (6) Ölçeklenebilirlik, (7) Yönetim sistemi, (8) Uygunluk, (9) Kültür, (10) Liderlik ve (11) Yetkinlik.

Veri: Kalite yönetimindeki, özellikle etkin karar alma süreçlerindeki en önemli unsurlarından biridir. Bilgi teknolojilerindeki ilerlemeler, işletmelere daha büyük miktarda veriye daha hızlı ve daha hassas bir şekilde erişme olanağı sağladıkça verinin önemi de artmaktadır. Bununla beraber işlenmesi gereken verilerin miktarının sürekli artması, geleneksel analiz tekniklerinin yetersizliğini ortaya çıkartmakta, yeni analiz araçlarına duyulan gereksinimi arttırmaktadır. (Lee vd., 2013: 38) Bu amaçla daha gelişmiş araçlar yardımıyla analiz edilmesi gereken veriler hacim, çeşitlilik, hız, doğruluk unsurları ile detaylı bir şekilde ele alınmalıdır (Erevelles vd., 2016: 898).

Dijitalleşme ile geleneksel sistemlere göre veri boyutunda en önemli değişikliklerin başında verinin hacmi gelmektedir. Geleneksel sistemlerde de önemli hacimde veri toplanıyor olsa da (düzeltici ve önleyici faaliyetler – DÖF, kalite olayları, vb.) sensörlerle donatılmış, bağlı cihazlardan gelen veri hacmi devasa boyutlardadır. Böylesi bir sistemde veri hacmiyle beraber veri çeşitliliği ve hızının da artacağı açıktır. Birbirleriyle bağlı üretim aktörlerinden gerçek zamanlı verilerin toplanmasının, geleneksel yaklaşımlara göre sağladığı önemli avantajlardan biri de verilerin doğru olacağıdır. Geleneksel kalite sistem verileri sıklıkla otomasyon eksikliği ve sistemin parçalı yapısı nedeniyle düşük doğruluktadır.

Analiz: Veri odaklı analitik yaklaşımlar; esnek, otomatik ve zamana bağlı eylem seçenekleri sunarak işletmelerin iş değerlerini arttırmalarına yardımcı olmak için büyük öneme sahiptirler (Soltanpoor ve Sellis, 2016: 245). Kalite yönetimindeki yönlendirici algoritmalar, karar verme süreçlerindeki insanın oynadığı rol üzerinden iki farklı seviyede değerlendirilebilir (Hagerty, 2017). İlk seviye karar destek sistemidir. Bu algoritmalar karar vericilerin kararlarını iyileştirmek için onlara bir çözüm seti sunacak, en iyi seçenek karar verici tarafından bu çözüm seti yardımıyla belirlenecektir. Yönlendirici analitiğin ikinci seviyesinde karar, yapay zekâ algoritmaları yardımıyla ortaya çıkartılacaktır. Bu tür algoritmalarda makine öğrenimi yoluyla önerilen eylemin otomatik bir şekilde hayata geçirilmesi amaçlanmaktadır. (Sony ve ark., 2020: 784)

Bağlantı: Bağlantısallık ile tedarik zinciri süreçlerindeki tüm aktörlerin (organizasyonlar, ürünler, insanlar, makineler, cihazlar, vb.) birbirleriyle etkileşim halinde olmasına odaklanan bir ekosistemin kurulması amaçlanmaktadır (Filiz, 2022: 181). Burada üç entegrasyon düzeyi söz konudur: dikey, yatay ve uçtan uca. Dikey entegrasyon ile işletmenin içindeki tüm kalite planlama, kalite kontrol ve kalite iyileştirme faaliyetlerinin bütünleştirilmesi hedeflenir. Yatay entegrasyonda ise kalite planlama, kontrol ve iyileştirme faaliyetleri, ürün ve hizmet üretimi sürecinde iş birliği yapılan tüm diğer organizasyonlara odaklanılır. Uçtan uca entegrasyonda da kalite planlama, kontrol ve iyileştirme faaliyetleri ürün yaşam döngüsünün farklı aşamalarına, özellikle de kullanım aşamasına yönlendirilir. (Sony vd., 2020: 785).

İş Birliği: Farklı kişilerin ya da organizasyonların bir araya gelerek ortak amaçlara ulaşmak için çalışmasını ifade eder. Bilgi, beceri, kaynak ve deneyimlerin paylaşılması ile etkin ve yenilikçi süreçlerin ortaya çıkartılmasına

odaklanılabilir. Sosyal medya ve blok zincir teknolojisi gibi yenilikler gerek işletme içerisindeki birimlerin gerekse işletme dışından tedarik zinciri aktörlerinin etkileşimini kolaylaştırmakta ve hızlandırmaktadır.

Sosyal medyanın yetkinlik ve kalite kültürünü geliştirmek için uygulama alanları oldukça geniştir. Sosyal medya, üreticilere özellikle nihai müşterileri ile doğrudan etkileşime girme ve böylelikle çok daha geniş katılımı sanal Mükemmeliyet Merkezleri oluşturmalarına olanak sağlamaktadır. Blok zincirler ise özellikle SQM (Tedarik Zinciri Kalite Yönetimi) ve izlenebilirlik alanlarında yüksek potansiyele sahip bir dönüşüm teknolojisi olarak karşımıza çıkmaktadır. Blok zincirler, temelde güvenli, kamusal ve dağıtık bir kayıt defteridir. (Jacob, 2017: 16)

Uygulama geliştirme: Uygulamalar, şirketlerin süreçlerin yerine getirildiği, verilerin toplandığı ve sunulduğu, analitik verilerin görselleştirildiği, iş birliklerinin kurulduğu dijital ortamlardır.

Teknoloji çözüm sağlayıcılarının desteği ile şirketlerin kendi uygulamalarını oluşturup kullanıma sunmaları giderek yaygınlaşmaktadır. Mobil uygulamalar, daha hızlı ve rahat erişilebilirlik imkânı sunarken aynı zamanda katılım, benimseme ve verimlilik sağlamaktadır. Sabit ve taşınabilirliği düşük cihazlardan mobil cihazlara oradan da artık yavaş yavaş giyilebilir teknolojilerin yaygınlaşmaya başladığı bir döneme girilmesiyle beraber uygulamaların kullanım alanları da vaatleri de büyük bir hızla artmaktadır.

Ölçeklenebilirlik: Veri hacmi, kullanıcı sayısı, cihaz sayısı ve analitik işlemlerin sayısı arttıkça bunların birbirleriyle etkileşim halinde olması ve bu verilerin yayılım düzeyi büyük önem arz etmektedir. Küresel ölçekte olmadan, geleneksel kalite ve Kalite 4.0 uygulamaları çok daha az etkili olan araçlardır. Süreçleri, en iyi uygulamaları, yetenekleri ve kurum genelinde öğrenilen dersleri uyumlu hale getirmek başarılı bir işletme için kritik öneme sahiptir. Bu noktada, Bulut bilişim, ölçeklenebilirlik için önemli bir katkı sağlar. Bulut sayesinde üreticiler Yazılım Hizmeti Olarak (SaaS) edinebilirler, yazılımı yerinde edinme, kurma ve yönetme gereği olmadan kolayca kullanıma sunabilirler. Bulut sayesinde Altyapı Hizmeti Olarak (IaaS) küresel olarak erişilebilir ve yüksek kullanılabilirlik çözümlerini kolaylıkla hayata geçirebilirler. Bazı sağlayıcılar Platform Olarak Hizmet (PaaS) sunar, çekirdek yazılıma ek olarak bir dizi iş ortağı ekosistemini oluşturabilirler.

Yönetim sistemi: Kalite Yönetim Sistemi, kalite yönetimi faaliyetlerinin merkezidir. İş akışlarını standartlaştırmak, kalite süreçlerini birbirleriyle uyumlu hale getirmek, veri doğruluğunu artırmak, uyumluluğu sağlamak ve bir ortak uygulama içinde iş birliğini teşvik etmek amacına odaklanır. Kalite Yönetim Sisteminin etkin bir şekilde hayata geçirilebilmesi için üreticiler, süreçleri uyumlu hale getirmeli, bu süreçleri yazılım desteği ile standartlaştırıp otomatikleştirmeli, otomatikleştirilmiş süreçleri diğer sistem ve operasyonlarla bağlamalı, böylelikle kolektif analitik verilere ve öğrenmeye dayalı sistemi ortaya çıkartmalıdırlar. Bu yaklaşım, yüksek değerli personelin odak noktasını mekanik detaylardan uzaklaştırarak yenilikçi çabalara yönlendirmesine yardımcı olacaktır.

Uygunluk: Bir organizasyonun sunduğu ürün veya hizmetlerin kalitesi ile ilgili olan yasalara, yönetmeliklere, standartlara, iç politika ve prosedürlere uygun olması anlamına gelecektir. Günümüz teknolojisi, uygunluk yönetiminde önemli kolaylıklar sunmakta ve uygunluk çabalarını ve riskini azaltmaktadır. Bu durum, Kalite 4.0'ın yaygınlaşması ile daha da genişleyecektir. Sosyal iş birliği, uygunluğa yönelik başarılı ve başarısız yaklaşımları farklı birimler arasında paylaşma mekanizmalarını geliştirir. Gelişen analitik araçlar, organizasyonları potansiyel uygunluk ihlallerine karşı uyararak veya ihlalleri önlemek için kullanılabilir. Entegre IT/OT veri modelleri ve/veya blok zincir gibi veri odaklı iş birliği teknolojileri denetlenebilirlik konusunda önemli avantajlar sunabilir.

Kültür: Kurumsal kültür, organizasyonun üyeleri tarafından paylaşılan normlar, inançlar ve değerler kümesidir (Gimenez-Espin vd., 2012: 3). Kalite kültürüne sahip bir şirket ise dört temel öğeye sahip olacaktır: süreç katılımı, sorumluluk, güvenilirlik ve yetkilendirme. Kalite 4.0, geliştirilmiş kalite performansını desteklemek için teknoloji kullanımını gerektirir. Teknolojiye yatırım yaparak, kötü kalitenin maliyeti önlenir. Operasyonların ve kalitenin daha fazla kontrolünü sağlayan teknolojiler, yalnızca daha yüksek verimlilikle sonuçlanmakla kalmaz, aynı zamanda çalışanlara işlerini yapmaları için daha iyi araçlar sunar. Bu da süreç katılımı, sorumluluk, güvenilirlik ve yetkilendirme faktörlerinin tümünde iyileşme sağlama imkânını ortaya çıkarır.

Liderlik: Organizasyonel hedeflere ulaşmak için etkileyici, motive edici bir şekilde faaliyetleri yönlendirme becerisine sahip olma yeteneğidir. Liderler, duruma göre uygun liderlik tarzı kullanarak istenilen hedeflere ulaşmayı amaçlarlar. Kalite 4.0 söz konusu olduğunda ihtiyaç duyulan, yeniliklere açık ve öğrenmeyi dikkate alan bir liderlik tarzıdır. Yenilikçilik ve öğrenmeye açık olan liderlik tarzlarından birisi dönüşümsel liderliktir. Ancak dönüşümsel liderlik tarzı literatürde idealize edilmiş etki, ilham verici motivasyon, zihinsel uyarım ve vizyon sağlama ile sınırlı olarak tanımlanır. Kalite 4.0 için bu özelliklerin öğrenmeyi merkeze alma ve yenilikçiliğin özendirilmesi ile zenginleştirilmesi gerekecektir. (Sony, 2020: 785)

Yetkinlik: Bir bireyin belirli bir görevi etkili ve verimli bir şekilde tamamlayabilme yeteneğidir. İşletmeler, çalışanlarının temel yeterliliğini iyileştirmek için çaba sarf ederler. Bazı durumlarda işletmeler, bilginin bireyler arasındaki paylaşımı için yine bireylere güvenirler. Birçok işletme ise yapılandırılmış yaklaşımlardan yararlanır. Bu işletmeler bilginin paylaşımı ve çalışan yetkinliklerinin artırılması için eğitim programlarından, sertifikasyonlardan, ölçme ve değerlendirme sistemlerinden faydalanacaktır. Geleneksel kalitenin yapılandırılmış yaklaşımını uygulayan kalite yöneticileri, yeni teknolojileri yetkinlik artışını sağlamak için kullanabilirler. Örneğin kurum içi deneyim ve öğrenilen dersleri paylaşmak için sosyal medyanın kullanılmasını sağlayabilirler. Makine öğrenimi / yapay zekâ yardımı ile yeni uzmanlık alanları geliştirebilecekleri gibi artırılmış gerçeklikle zenginleştirilmiş eğitim programları tasarlayabilirler. Sensörler yardımıyla çalışan eylemlerini uygunluk, yetkinlik, verimlilik ve güvenlik açısından hassas bir şekilde değerlendirebilirler.

Kaliteyi iyileştirmeyi hedefleyen üreticiler, Kalite 4.0'ın tanımlanan 11 ekseninde durdukları noktayı değerlendirmeli ve ihtiyaçlarına göre yatırım önceliklerini belirlemelidir.

3.2. Kalite 4.0 Araçları

4. Sanayi Devrimi teknolojilerinin kalite yönetim süreçleri ile entegrasyonu, endüstriyel ekosistem bütününde kalite performansının artmasını sağlayacaktır. Radzwill'e göre (2018:8) kalite performans metriklerinin iyileştirilmesinde aşağıda sıralanan Endüstri 4.0 teknolojileri özellikle öne plana çıkmaktadır:

Yeni nesil teknolojiler: Sensörler, mobil cihazlar, ağlar, Nesnelerin İnterneti (IoT), entegre sistemler, sanal gerçeklik(VR) ve bulut bilişim(CC) gibi yeni teknolojik gelişmeler. Bu araçlardan IoT, kullandığı üründeki kalite boyutlarına hız, kullanım kolaylığı, kolay erişim gibi boyutları da eklemektedir. Kalite performans ölçütlerine bu boyutların da eklenmesi gerektiği unutulmamalıdır.

Büyük veri: Büyük veri, hızlı bir şekilde farklı formatlarda, yüksek veri kalitesinde, farklı paydaşlardan gelen büyük veri kümelerini yönetme ve analiz etme altyapısıdır. Kalite 4.0, üretim sürecindeki verilerin toplanması, depolanması ve analiz edilmesi için büyük veri teknolojilerini kullanır. Bu teknoloji, müşteri taleplerinin daha kolay belirlenmesi ve bu taleplere uygun üretimin yapılabilmesine katkı sunar. Ayrıca verilerin gerçek zamanlı olarak toplanabilmesi ve büyük veri yığınlarının bir araya getirilip analizi ile geleneksel veri analiz araçları kullanılarak tespit edilemeyen, kaliteyi etkileyen değişkenler arasındaki ilişkilerin ve örüntülerin tespiti mümkün olacaktır.

Blok zinciri: Dijital verilerin güvenilir ve izlenebilir bir şekilde kaydedilmesini ve paylaşılmasını sağlayan bir dağıtık veri tabanı teknolojisidir. Kalite 4.0, blok zinciri teknolojisi kullanarak üretim sürecindeki verilerin güvenli bir şekilde depolanmasını ve paylaşılmasını sağlar. İşlemlerin (nesneler ve bilgi için) şeffaflığını ve denetlenebilirliğini artırarak, kalite kriterleri karşılanmadığı müddetçe işlemlerin gerçekleşmesini engelleyerek kalite performansının arttıracaktır. Blok zincir teknolojileri veri kalitesini ve güveni sağlamaya, bununla birlikte bir kalite kültürü geliştirmeye katkıda bulunmaktadır.

Yapay Zeka (AI): Yapay zeka, büyük miktardaki verileri analiz ederek kalite hatalarını tespit etmek için kullanılabilir. Sensörler aracılığıyla toplanan gerçek zamanlı verilere dayanarak makine ve ekipman arızalarını tahmin edebilir. Bu, öngörücü bakım uygulamalarıyla birlikte, ekipman arızalarının önceden tespit edilerek zamanında müdahale yapılmasını sağlar. Bu da üretim sürekliliğini artırırken, maliyetleri düşürülebilecektir.

Makina Öğrenimi (ML): Karar verme için sezgisel yöntemlerin kullanıldığı durumlarda ve ayrıca tahmin yapma, bilgi filtreleme ve öneri sistemleri için kullanılır. Makina öğrenme algoritmaları, kalite kontrol süreçlerinde hataları tespit etme ve nedenlerini anlama konusunda daha etkili ve hızlı olabilecektir.

Yapay Sinir Ağları ve Derin Öğrenme: Yapay sinir ağları, biyolojik sinir sistemlerinden esinlenen bir tür makine öğrenimi yöntemidir. Çalışma mantığı, birçok yapay sinir hücresi veya nöronun bir araya gelerek bilgi işleridir. Her nöron, girdileri alır, bu girdileri işler ve sonuçları diğer nöronlara iletebilir. Yapay sinir ağlarının en önemli katkısı, büyük veri setleri üzerinde karmaşık örüntüleri ve ilişkileri tanıma yeteneğidir. Kalite 4.0 bağlamında, bu teknoloji, üretim süreçlerinin izlenmesi, hataların tanımlanması ve kalite kontrolünün iyileştirilmesinde kullanılabilir. Derin öğrenme, yapay sinir ağlarının özel bir alt dalıdır. Bu teknoloji, çok katmanlı (derin) yapay sinir ağlarını kullanarak karmaşık problemleri çözmek için tasarlanmıştır. Yapay sinir ağları ve derin öğrenme, Kalite 4.0'ın veri odaklı ve öngörüye dayalı yaklaşımını destekler. Bu teknolojiler, kalite yönetim sistemini daha etkin hale getirerek ürün ve süreç kalitesini artırmada önemli bir rol oynamaktadır.

Veri bilimi ve istatistik: Yukarıda sıralanan teknolojilerin eşgüdümlü çalışmasını ifade eder. Örüntü tespiti, modelleme, tahmin ve çözümler üretme yoluyla kalite yönetimine katkı sağlar. Sorun çözmeyle ilgili bilgi

oluşturan veri birleştirme, veri sınıflama, gerçek zamanlı veri toplama ve dinamik modelleme ile ilişkilerin tespitine imkân sunacaktır. Kalite 4.0, büyük veri setlerinin güvenli bir şekilde saklanması ve işlenmesini gerektirir. Veri bilimi, veri güvenliği için istatistiksel analizler ve güvenlik önlemleri geliştirilmesini destekler.

3.3. Kalite 4.0'ı Uygulamada Zorluklar

Kalite performansında iyileştirme beklentileriyle birlikte Kalite 4.0 uygulamalarında zorluklarla karşılaşmaktadır. Kalite 4.0 kavramının ilk dönemlerinde bu zorlukların başında teknoloji düzeyi sayılmaktayken, hızla gelişen teknolojik altyapı sayesinde özellikle büyük ölçekli ve Kalite 4.0 uygulamalarında öncü şirketler dijital beceri ve yetenek eksikliğini en önemli engel olarak söylemektedir. Buna karşın, günümüzde halen küçük ölçekli işletmeler için Yapay Zeka, Büyük Veri gibi Endüstri 4.0 teknolojilerine uyum temel zorluk olarak görülmektedir. Yapılan bir çalışmada (Antony, vd. 2022: 1181) katılımcılar deneyimledikleri Kalite 4.0 zorlukları sorusunu, (1)uzun mühendislik onay süreçleri, (2)kültürü değiştirmenin zorluğu, (3)mevcut teknolojilerinin eski olması- örneğin, üretim ekipmanları Endüstri 4.0 teknolojisiyle uyumsuz- nedeniyle, veri sistemleriyle %100 entegrasyonun sorun teşkil etmesi; (4)büyük veri, yapay zeka, dijital ikiz, makine öğrenmesi gibi Endüstri 4.0 konularında bilgi eksikliği şeklinde yanıtlamışlardır. İşletme içi zorluklara ek olarak işletme dışı engeller de Kalite 4.0'ın uygulanmasını zorlaştırmaktadır. Bunların başında tüketiciler gizliliklerinden şüphe duyması ve ilgili verileri paylaşmaktan çekinmesi gelmektedir (Corti, vd., 2021: 3). BCG'un 2019 tarihli raporunda sunulduğu üzere öncü uygulayıcılar veya takipçiler için önem ve etki dereceleri değişmekle birlikte, işletmelerin Kalite 4.0 uygulamalarında karşılaşacağı başlıca zorluklar aşağıdaki şekilde sayılabilir:

Teknoloji Uyumu ve Entegrasyonu: Endüstri 4.0 teknolojileri ve Kalite 4.0 uygulamaları, mevcut altyapıya uyumlu hale getirilmelidir. Bu, yeni teknolojilerin eski sistemlerle sorunsuz bir şekilde entegre edilmesini gerektirir.

Büyük Veri Yönetimi: Büyük miktarda veri üretmek ve analiz etmek, veri yönetimi ve depolama zorluklarını ortaya çıkarır. Bu verilerin etkili bir şekilde işlenmesi ve kullanılması önemlidir.

Veri Güvenliği: Kalite 4.0 uygulamaları, hassas verilerin paylaşılmasını gerektirebilir. Bu nedenle veri güvenliği, birçok organizasyon için kritik bir zorluktur.

Dijital Yetenek Eksikliği: Yeni teknolojileri anlayabilen ve kullanabilen nitelikli personel bulmak ve eğitmek önemlidir. Bu, dijital becerilere sahip personelin eksikliği ile ilgilidir.

Maliyet: Kalite 4.0 uygulamaları genellikle büyük yatırım gerektirmektedir. Hem yeni teknolojilerin alımı hem de dijital beceri ve yetenek sahibi çalışanların ücretlerinin yüksekliği ve mevcut çalışanların sürekli eğitim maliyetleri gibi etkenler yatırım maliyetlerini yükseltmektedir.

Dijital Dönüşüm Kültürü: Organizasyon içinde dijital dönüşümü teşvik etmek ve kültürel değişimi desteklemek zor olabilir.

Regülasyon ve Uyumluluk: Bazı sektörlerde, veri güvenliği ve dijital uygulamalar için özel düzenlemelere ve uyumluluk gereksinimlerine uymak zorunludur.

Süreçlerin Yeniden Tasarımı: Kalite 4.0, iş süreçlerinin yeniden tasarımını gerektirebilir. Bu süreçlerin değiştirilmesi ve uyarlanması, organizasyon içinde dirençle karşılaşabilir.

4. SONUÇ

Kalite kavramı, tarihsel olarak endüstriyel süreçlerin ve ürünlerin iyileştirilmesine odaklanan bir perspektifle gelişmiştir. Başlangıçta, kalitenin 'kontrolü' yaklaşımı benimsenmiş ve ürünlerdeki ve üretim süreçlerindeki hataları tespit etmek amacıyla kullanılmıştır. İşletme başarı kriteri olarak üretim artışının hedeflendiği bu dönemin ardından maliyetleri azaltmak ve sonrasında da müşteri memnuniyetini arttırmak başarı faktörü olarak ön plana geçmiştir. Bu dönemlerde kalite anlayışı da genişlemiş ve hataları tespit etmeye yönelik reaktif anlayış yerini hataları önlemeye yönelik proaktif anlayışa bırakmıştır. Kalite yönetimi, arızalı ürüne odaklanmak yerine müşteri memnuniyetini ve sürekli iyileştirmeyi hedefleyen bir yaklaşım haline gelmiştir. Günümüzde ise dijitalleşme ve Endüstri 4.0 ile birlikte kalite anlayışında önemli bir değişim yaşanmış ve bu yeni dönem Kalite 4.0 olarak adlandırılmıştır. Endüstri 4.0 ile birlikte Kalite 4.0, tedarik zinciri ağı bütününde yaratılan değeri arttırmayı ön plana çıkarmaktadır. Özellikle yapay zekâ, makine öğrenmesi gibi teknolojiler ve gerçek zamanlı bilgiye erişim sayesinde kalite hatalarını tespit etmeyi aşmış, hatalara sebep olacak faktörlerin önceden tespit ve tahmini ile sürecin hatalardan tamamen arındırılması mümkün olacaktır. Böylece Kalite 4.0, sürdürülebilir

üretim süreçlerini optimize ederek kaliteyi artırmak ve kaynakları daha verimli kullanarak çevresel etkiyi en aza indirmek için de önemli bir rol oynayacaktır. Tedarik zinciri boyunca verilerin toplanması, depolanması ve analiz edilmesinde kullanılan büyük veri teknolojileri ile müşteri talepleri daha kolay ve doğru belirlenecek ve bu taleplere uygun üretim ile müşteri memnuniyeti artacaktır. Bulut bilişim, veri bilimi ve istatistik, nesnelerin interneti, makine öğrenmesi, yapay zeka, büyük veri ve sanal gerçeklik gibi Endüstri 4.0 teknolojileri, stratejik liderlik, kalite kültürü, müşteri odaklılık, kalite yönetim sistemi, tedarikçi kalite yönetimi, yetkinlik, analitik düşünce, veriye dayalı karar verme, veri yönetimi, inovasyon ve kalite sonuçları gibi tüm kalite yönetim faktörlerini olumlu yönde etkileyecektir. Ancak Kalite 4.0'ın sadece bir teknolojik dönüşüm olmadığı, işletmenin kalite kültürünün ve çalışanların bu yeni teknolojilere uyum sağladığı oranda başarı elde edileceği unutulmamalıdır.

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The Impact of Corporate Social Responsibility on Employer Preference: A Study on Potential Employees

Dr. Öğr. Üyesi Emine Çetinel¹

Dr. Öğr. Üyesi Sevdije Ersoy Yılmaz²

¹Çankırı Karatekin Üniversitesi / İktisadi ve İdari Bilimler Fakültesi, Uluslararası Ticaret ve Finansman Bölümü, eminecetinel@karatekin.edu.tr, ORCID: 0000-0001-5957-5886

²Çankırı Karatekin Üniversitesi / İktisadi ve İdari Bilimler Fakültesi, Uluslararası Ticaret ve Finansman Bölümü, sevdieyilmaz@karatekin.edu.tr, ORCID: 0000-0002-1476-3944

Abstract: This study aims to determine the impact of corporate social responsibility on the employer preference of potential employees. Accordingly, the main objective of the study is to investigate which dimensions of corporate social responsibility, namely working conditions, philanthropic activities, consumer policies and environmental policies, are more prominent in the employer preferences of university students who will actively participate in the labor market in the near future. Additionally, the study also aims to find an answer to the question of which activities conducted within the framework of corporate social responsibility by the business are more highly valued in employer preferences by potential employees. The data for the research were collected from 29 students who were continuing their education in the Faculty of Economics and Administrative Sciences at Çankırı Karatekin University during the 2022-2023 academic year and who had taken "Business Ethics and Social Responsibility" course. In the context of the research purpose, the closed (indirect) fictional scenario technique, which is a qualitative research method, was utilized. The obtained data were analyzed using the NVivo 12 qualitative data analysis program. According to the research findings, it was determined that the CSR dimensions were ranked as environmental policies, working conditions, philanthropic activities and consumer policies according to their power to influence the participants' employer preferences.

Key Words: Corporate Social Responsibility, Employer Preference, Potential Employees

1. INTRODUCTION

Businesses are units that bring together production factors to produce goods and services with the aim of making a profit. In this way, businesses that bring together production factors that would otherwise remain idle in the production process increase the welfare level of the society by performing activities such as creating employment, producing products and services that will improve the quality of life of the society and distributing the profit they earn to their stakeholders. Therefore, for many years, businesses were not expected to carry out any social obligations beyond producing, making a profit and distributing that profit among their stakeholders. However, it is observed that from the middle of the century, this narrow perspective towards the social responsibilities of businesses began to change. It is possible to say that developments such as increasing pressures on various economic and social factors, financial scandals such as the Enron case making transparency a necessity for businesses, poor working conditions especially in developing countries and environmental disasters caused by businesses during their production activities have played an important role in this change in perspective on the social responsibilities of businesses (Swaen and Chumpitaz, 2008). As a result of these developments, especially since the 1950s, it has been emphasized that businesses should take responsibility towards the world in general and more specifically towards the communities they are a part of, the environment, consumers and even their competitors (Alparslan and Aygün, 2013; Balı and Cinel, 2011; Montgomery and Ramus, 2003). In this context, today's businesses are no longer regarded solely as organizations whose purpose is to achieve financial gains, but also as organizations with social responsibilities towards their stakeholders (Balı and Cinel, 2011: 46). Another significant development in this process is that, with social transformations and the decline in the power of the nation-states, governments have gradually begun to transfer their responsibilities for developing solutions to social issues to businesses (Sarı Aytekin et al., 2019). Thus, it is possible to say that the areas of corporate social responsibility of businesses have expanded even further.

The social responsibilities undertaken by businesses in addition to their profit-making objectives are addressed in a wide range of stakeholders such as employees, partners, consumers, government and society and the activities carried out by the business in this context are considered as an important factor that shapes the perceptions of all these stakeholders towards the business. So much so that in today's world, it is observed that the sensitivity a business displays towards corporate social responsibility is as important as the quality of its products in the preference of its products by customers (Bozpolat and Güzelgün Arslan, 2021; Sánchez-Torné et

al., 2020; Sarı Aytekin et al., 2019). In this context, it is possible to say that businesses that engaging in social responsibility activities will create a positive image among their stakeholders and increase the preferability of the business. Therefore, it is possible to assume that the social responsibility activities of a business will also have an impact on the labor market and will positively affect the employer preferences of potential employees. In this context, this study aims to determine the mechanisms through which corporate social responsibility dimensions influence the employer preferences of potential employees.

2. CONCEPTUAL FRAMEWORK

Corporate social responsibility (CSR) is defined in various ways in the literature. Accordingly, when we look at the definitions of CSR, which is a very comprehensive concept including respect for basic human rights, sensitivity to employee rights, gender equality, environmental awareness, improvement of social welfare and respect for consumer rights, it is generally observed that only one aspect of the concept is addressed (Sánchez-Torné et al., 2020; Simpson and Aprim, 2018). Therefore, making a generally accepted definition of CSR exceeds the scope of this study. Accordingly, based on the definitions within the scope of the literature, if we were to provide a general definition, it would be possible to define CSR as the voluntary allocation of the corporate resources of the business to meet the needs of stakeholders and improve social welfare without economic and legal obligations (Kumari et al., 2021; Rank & Contreras, 2021; Chaudhary, 2020; Verčič & Čorić, 2018). When examining the definitions provided in the literature, it is seen that there is no clarity regarding the motivation behind the business engaging in CSR activities. Accordingly, it is noteworthy that CSR is sometimes presented as a voluntary approach realized due to business interests and sometimes due to the pressures faced by the business to respond to various social expectations (Swaen and Chumpitaz, 2008). As can be seen, the commonly accepted point regarding CSR in the literature is the emphasis on the need for the business to be voluntary in fulfilling their social responsibilities, regardless of the reason (Özdemir and Okur, 2020; Balı and Cinel, 2011). Therefore, it is possible to say that CSR, which is a concept beyond just fulfilling legal responsibilities, also requires businesses to voluntarily act honestly in their relations with stakeholders, be environmentally conscious, engage in activities that will improve the quality of life of their employees and society and contribute to economic growth (Balı and Cinel, 2011).

Due to its very comprehensive nature, CSR is analyzed as a multidimensional concept in the literature. Accordingly, there are various typologies in the literature that attempt to explain the multidimensional nature of CSR. It is possible to categorize these typologies into two groups: typologies based on the responsibilities of businesses and typologies centered on stakeholder groups, i.e., those affected by the actions of the business (Swaen and Chumpitaz, 2008). Among the theories based on the nature of the responsibilities of businesses, the most frequently referenced typology in the literature was developed by Carroll (1991). This typology, called the Social Responsibility Pyramid, emphasizes responsibilities based on economic, legal, ethical and philanthropic aspects (Gedikçi Öndoğan, 2021; Özdemir and Okur, 2020; He and Lai, 2014; Swaen and Chumpitaz, 2008). As previously mentioned, another classification emerging in the literature, is typologies based on business stakeholders (He and Lai, 2014). Stakeholders, defined as anyone who is affected by or may be affected by the activities of the business, constitute the basis of stakeholder theory, which is frequently used in CSR studies. According to this, the stakeholder theory based on the premise that the business needs the support of the stakeholder groups it interacts with. Stakeholder theory, which sees CSR as a series of practices for different stakeholder groups rather than a one-dimensional structure, uses a multidimensional perspective in the assessment of CSR. Within the scope of stakeholder theory, CSR activities are generally categorized into four main areas: employee, consumer, philanthropic and environmental activities (Schaefer et al., 2020). According to this typology, employees are considered to be among the key stakeholders in CSR practices due to their capacity to shape public perception of the business's CSR sensitivity and it is argued that CSR activities in a business should start from the workplace (Boadi et al., 2020; Balı and Cinel, 2011).

Consumers constitute the second stakeholder group. Accordingly, it is stated that responsibilities towards consumers should be fulfilled through CSR activities such as providing accurate information about products and services, protecting consumer rights and valuing customer satisfaction (Chaudhary, 2020; Balı and Cinel, 2011). Finally, the company's interest in social and environmental issues is evaluated within the scope of philanthropic and environmentally focused activities. Accordingly, businesses are expected to engage in philanthropic activities such as working for human and animal rights, demonstrating sensitivity to social issues as well as environmentally-focused activities such as minimizing harm to the environment in production processes and developing projects to use resources efficiently (Balı and Cinel, 2011).

CSR activities are activities carried out by a business for the benefit of stakeholders, the environment and society, without seeking profit and at a certain cost. In other words, the activities carried out by a business within the scope of CSR do not provide a direct financial gain to the business. Moreover, it is not possible to say that the results of the efforts undertaken by the business under CSR will be immediately noticeable in the short term (Alparslan and Aygün, 2013). Therefore, from a financial perspective, it is evident that CSR imposes additional costs on the business by utilizing resources that could be employed elsewhere to strengthen its position against competitors (Carlini et al., 2019). In addition, CSR activities are a strategic tool that conveys the message that the business is ready to make efforts to benefit stakeholders, the environment and society. Therefore, it is possible to think that CSR will create positive perceptions of the business both internally and externally (Lindholm, 2018; Verčič and Čorić, 2018). In this direction, it is clear that CSR activities will bring many advantages, primarily in terms of corporate reputation. Indeed, within the scope of the literature, it is possible to come across many studies that demonstrate that CSR activities increase the corporate reputation of the business by creating a positive image of the company (Gedikçi Öndoğan, 2021; Kumari et al., 2021; Sarı Aytekin et al., 2019; Bakan et al., 2018; Swaen and Chumpitaz, 2008). Accordingly, while CSR allows the business to gain legitimacy in the eyes of its stakeholders, it also contributes to the differentiation of the business and its products from its competitors (Sarı Aytekin et al., 2019). In other words, investment in CSR activities indirectly leads the business to differentiate itself from its competitors, even if not directly. Also, the results obtained in the literature that CSR increases consumers' brand loyalty by strengthening the corporate image support this thesis (Bozpolat and Güzelgün Arslan, 2021; Sánchez-Torné et al., 2020; He and Lai, 2014). Indeed, researchers point out that CSR also has a significant impact on current employees. Accordingly, the business that are sensitive to social issues and make efforts to benefit its employees and other stakeholders create a positive image on employees, make it possible for these employees to trust the business (Kumari et al., 2021) and take pride in being part of the business (Rank and Contreras, 2021; Schaefer et al., 2020; Balı and Cinel, 2011). Of course, this leads to the emergence of many positive employee behaviors, including performance. As a matter of fact, studies confirm that CSR has many positive outcomes, including enhancing firm performance (Bozpolat and Güzelgün Arslan, 2021; Alparslan and Aygün, 2013), employee performance (Boadi et al., 2020), job satisfaction (Sánchez-Torné et al., 2020; Schaefer et al., 2020; Bakan et al., 2018) and corporate identity perception (Carlini and Grace, 2021; Boadi et al., 2020; Chaudhary, 2020). Another group that is most affected by the CSR activities carried out by the business is potential employees.

One of the most important resources for today's businesses is a competent workforce. Therefore, it is of great importance for businesses to not only retain their current workforce but also to establish strategies that will attract talented employees to the business. In this context, it is argued that CSR will increase the chances of an organization to attract potential employees based on the importance of corporate reputation among the factors that affect potential employees' choice of employer (Verčič and Čorić, 2018). In fact, studies have shown that potential employees prefer businesses that they would be proud to be a member of, that have values that are compatible with their own values and that have positive expectations regarding the attitudes and behaviors towards their employees (Rank and Contreras, 2021). However, potential employees do not have first-hand knowledge of these workplaces as they are not yet part of the workplaces they are considering applying for. In other words, individuals in the job search process have limited information to make an assessment of what working conditions await them in a workplace they are considering for an application. Therefore, in such a situation where there is information asymmetry, individuals would rely on the information they already have about the business. At this point, CSR activities carried out by the business stand out as an important source of information representing the values and ethics of the business (Carlini et al., 2019; Verčič and Čorić, 2018). Therefore, it is possible to say that CSR as a source of information, will guide potential applicants on the extent to which the values of the business are align with their own values and it will motivate them to make application decisions to businesses that they perceive as a good place to work (Rank and Contreras, 2021; Carlini et al., 2019; Verčič and Čorić, 2018). Indeed, studies in the literature reveal that CSR activities carried out by the business are an important factor in potential employees' preference of one employer over another, much like their impact on consumers' preference of one brand over another (Chaudhary, 2020; Özcan and Elçi, 2020; Özdemir and Okur, 2020; Simpson and Aprim, 2018; Verčič and Čorić, 2018; Balı and Cinel, 2011). Furthermore, there are also studies in the literature that reveal that especially young employees are willing to forgo financial benefits in order to work for a business with a better reputation in terms of CSR and ethics (Montgomery and Ramus, 2003). Therefore, it would be a meaningful endeavor for both academics and practitioners to identify which dimensions of CSR are highlighted for potential employees.

3. METHODOLOGY

This study aims to determine the impact of CSR on potential employees' choice of employer. Accordingly, the main purpose of this study is to investigate which of the sub-dimensions of CSR, namely working conditions, philanthropic activities, consumer policies and environmental policies, are prioritized by university students who will actively participate in the labor market in the near future. The study also aims to find an answer to the question of which of the activities carried out within the framework of CSR dimensions are more important to potential employees in their choice of employer. Within the scope of the research, data were collected from 29 students who continued their education in the Faculty of Economics and Administrative Sciences at Çankırı Karatekin University during 2022-2023 semester and took the *"Business Ethics and Social Responsibility"* course. Accordingly, participants were included in the study using a non-probability sampling method.

Closed (indirect) fictional scenario technique, which is a qualitative research method, was used in the study. In this context, 4 scenarios were created as a result of the literature review based on dimensions of CSR. Within the scope of these scenarios, it was tried to find out which CSR dimension the participants would prioritize in their employer preferences and why. At the same time, participants were asked to respond to the question of which of the CSR activities mentioned in each scenario would be more important in their employer preferences, along with the reasons why.

The data obtained were analyzed with NVivo 12 qualitative data analysis program. The data were analyzed through content analysis method. In order to ensure the reliability of the study, the inter-rater reliability method, which is frequently used in qualitative research, was adopted. As stated in the literature, in this method, two or more coders analyze the qualitative database and determine codes for the database. In order to determine the level of agreement on these codes, coder results are compared (Arslan, 2022:402). Within the scope of the research, data obtained by two independent researchers were compared and the final agreed code list was reached.

4. FINDINGS

Table 1 summarizes the findings regarding which CSR activities carried out within the framework of the working conditions dimension participants prioritize more in their employer preference. Participants stated that within the scope of working conditions, CSR activities related to respect for employee rights (24), training opportunities (22), occupational health and safety (17) and finally, job creation (12) would be effective in employer preference respectively. Accordingly, it is seen that in job creation category, the codes *"sensitivity to social issues indicator"* (9) and *"reducing unemployment"* (4) have emerged. In another category, which is respect for employee rights, it is observed that the codes *"fair working environment"* (9) and *"valuing employees"* (8) are repeated the most. In the category of training opportunities, the codes *"supporting career development"* (12) and *"valuing employees"* (7) had the highest frequency, while the codes *"reducing anxiety levels"* (10) and *"feeling safe"* (7) were the most repeated codes in the occupational health and safety category. As can be seen on the Table 1, *"valuing employees"* stands out as a repeated code in three categories. In the job creation category, only two codes were identified as *"sensitivity to social problems indicator"* (9) and *"reducing unemployment"* (4).

Table 1: Frequency and Significance Analysis Results for the Working Conditions Dimension

Category	Code	Frequency
Job Creation	Sensitivity to Social Issues Indicator	9
	Reducing Unemployment	4
Respect for Employee Rights	Fair Working Environment	9
	Valuing Employees	8
	Increasing Employee Motivation	6
	Supporting Union Activities	5
	Increased Organizational Attractiveness	4
	Respecting Employees' Legal Rights	3
	Strengthening Corporate Commitment	2
Training Opportunities	Supporting Career Development	12
	Valuing Employees	7
	Strengthening Corporate Commitment	4
	Improving the Quality of the Workforce in the Country	2
Occupational	Reducing Anxiety Levels	10

Health and Safety	Feeling Safe	7
	Valuing Employees	4
	Improving Employee Performance	2
	Establishing a Trustworthy Employer Image	2

In the context of the research, the results revealing which categories of financial assistance, cultural activities and project support in the philanthropic activities dimension of CSR are prioritized by the participants in their employer preferences are given in Table 2. According to the findings, participants have primarily taken into account financial assistance (22), project support (16) and cultural activities (12) in employer preference. When Table 2 is examined, it can be seen that the codes of "creating a human-centric corporate image" (15) and "sensitivity to social issues" (12) are repeated the most in the financial assistance category. Within the project support category, it was determined that the participants emphasized the codes of "investing in the future" (9) and "sensitivity to social issues" (7) the most. Finally, it is noteworthy that only the code "increasing organizational attractiveness" (13) was found in the category of cultural activities, which was determined to be the least considered in employer preference.

Table 2: Frequency and Significance Analysis Results for the Philanthropic Activities Dimension

Category	Code	Frequency
Financial Assistance	Creating a Human-Centric Corporate Image	15
	Sensitivity to Social Issues	12
	Perception of Equal Opportunities	7
	Taking Pride in the Employer	7
	Increasing Employee Motivation	5
	Prioritizing Human Values	3
Cultural Activities	Increased Organizational Attractiveness	13
Project Support	Investing in the Future	9
	Sensitivity to Social Issues	7
	Creating a Company Image that Supports Creativity	5
	An Indicator of Business Vision	3

When examining Table 3 summarizing the data related to the consumer policies dimension of CSR, it can be observed that participants prioritize CSR activities related to consumer rights more prominently compared to activities within the scope of providing honest and accurate information in their employer preference. Accordingly, the analysis revealed that "*increasing consumer satisfaction*" (14) and "*operating in accordance with business ethics*" (10) were the most repeated codes by the participants within the scope of CSR activities related to consumer rights. Under the category of honest and accurate information, the codes "*transparency*" (14) and "*gaining consumer trust*" (11) were prominent.

Table 3: Frequency and Significance Analysis Results for the Consumer Policies Dimension

Category	Code	Frequency
Consumer Rights	Increasing Consumer Satisfaction	14
	Operating in accordance with Business Ethics	10
	Increasing Employee Motivation	7
	Increasing Business Profitability	6
	Supporting Corporate Image	5
Honest and Accurate Information	Transparency	14
	Gaining Consumer Trust	11
	Ensuring Customer Loyalty	5
	Supporting Consumer Decisions with Accurate Information	4
	Creating a Perception of Institutional Consistency	3

The findings regarding which CSR activities related to the environmental policies dimension participants prioritize more in their employer preference are presented in Table 4. According to the results of the frequency and significance analysis conducted in this context, the participants prioritized the categories of environmentally friendly production practices (23), consumption of natural resources (15) and ecological balance (13) in their employer preference, respectively. When the codes created in the context of the categories are examined, it can be observed that the codes "*environmental awareness*" (17) and "*investing in the future*" (9) have the highest frequency within the scope of environmentally friendly production practices. In

the category of consumption of natural resources, it has been determined that participants emphasize the subjects of "supporting corporate image" (9) and "efficient use of resources" (7). Finally, in the ecological balance category, it is noteworthy that activities related to "raising public awareness" (8) and "respect for nature" (6) are effective in the participants' employer preference.

Table 4: Frequency and Significance Analysis Results for the Environmental Policies Dimension

Category	Code	Frequency
Consumption of Natural Resources	Supporting Corporate Image	9
	Efficient Use of Resources	7
Environmentally Friendly Production Practices	Environmental Awareness	17
	Investing in the Future	9
	Creating an Innovative Corporate Image	6
	Increasing Employee Motivation	5
Ecological Balance	Raising Public Awareness	8
	Respect for Nature	6

The content analysis results of the responses to the question "which dimension of CSR would be more effective in your employer preference?" asked to the participants in the scope of the research are presented in Table 5.

Table 5: Ranking of the Dimensions of Corporate Social Responsibility that Affect Participants' Employer Preference

Category	Frequency
Environmental Policies	16
Working Conditions	8
Philanthropic Activities	3
Consumer Policies	2
Total	29

As can be seen in Table 5, participants prioritize the dimension of environmental policies (16) more than other dimensions in their employer preference. In other words, potential employees attach more importance to CSR activities related to environmental policies than working conditions, philanthropic activities and consumer policies in their employer preferences. Accordingly, it is seen that the majority of the participants who stated that activities related to environmental policies would be more effective in employer preference drew attention to the fact that the environment is the basic condition of human life. Some of the participants' statements in this regard are as follows:

"...The Earth and the ecosystem in which we live is an irreparable value that we cannot regain and that concerns all of humanity. In this context, when all policies are taken into consideration, environmental policy should, in my opinion, be prioritized a bit more and receive the necessary value." (Participant 3)

"...Because as long as there are factors that harm nature and our environment, neither working conditions nor philanthropic activities nor consumer policies make sense. When we lose our life spaces, it doesn't seem very possible to complete the remaining elements..." (Participant 6)

"...Because environment equals life." (Participant 9)

"...In a system where ecological balance is disrupted, the existence of life will not be possible, so the importance of other factors will no longer matter..." (Participant 24)

"...The reason for this is that the universe is the biggest company for us. And if we don't think about this institution that gives us free opportunities, no company or person will matter when it goes bankrupt." (Participant 29)

When Table 5 is analyzed, it is seen that the participants prioritize the working conditions dimension (8) the most after the environmental policies dimension in their employer preference. According to this, participants stated that they would feel more valued in a peaceful and safe working environment where their career goals are supported and they expressed that this would be an important factor in their employer preferences. The noteworthy statement from one of the participants is as follows:

"...In my opinion, the principles and policies that a company should care about first and foremost are working conditions. Because what a company should have in the first place is social awareness and social principles.

When these are in place, it will be easier for other aspects of a company to develop and (the business) will reach a more successful outcome....” (Participant 4)

The findings obtained within the scope of the study show that 3 participants stated that the philanthropic dimension of CSR would be more effective in their employer preferences. Participants who stated that they prioritize the philanthropic dimension more in their employer preferences emphasized that this is because it supports the company's image, reflecting a manifestation of social responsibility and serving as an indicator of altruism. In this context, one participant's statement makes these reasons more visible:

“...I think that a business that cares about people it does not even know will also care about its own employees....” (Participant 23)

When examining Table 5, it is seen that participants pay the least attention to the consumer policies dimension in their employer preferences regarding CSR dimensions. According to this, two participants stated that consumer policies are the most important dimension in their employer preferences. These participants emphasized that along with ensuring consumer satisfaction, business success would also increase. In this context, the noteworthy statement of one of the participants is as follows:

“...In my opinion, the most important factor is consumer policies. Because a satisfied consumer creates a satisfied society. And a satisfied society supports the growth of the company.” (Participant 2)

5. CONCLUSION

Qualified employees are an irreplaceable resource whose strategic importance is increasingly recognized in today's working conditions. For this purpose, it has become a necessity for today's businesses to establish strategies that will attract talented employees to the business while ensuring the continuity of the existing workforce. Studies have shown that individuals find businesses to be more attractive as potential employers when they take pride in being part of them, the company have values aligned with their own and they exhibit positive attitudes and behaviors towards their employees. In this context, CSR emerges as one of the strategic tools to attract potential employees to the business. Therefore, it would be a meaningful effort for both researchers and practitioners in the field to highlight which dimensions of CSR, as a concept emphasized for its potential to influence employer preference in the literature, shape the decisions of potential employees through which mechanisms. Based on this, this study was conducted with the aim of determining the impact of CSR on potential employees' employer preferences. Within the scope of the research, data were collected from 29 students who continued their education at Çankırı Karatekin University Faculty of Economics and Administrative Sciences during the 2022-2023 academic period and taken the course "Business Ethics and Social Responsibility". The data obtained through the qualitative research method of closed (indirect) fictional scenario technique was analyzed using the NVivo 12 qualitative data analysis software.

When evaluating the research findings, it was observed that the CSR dimensions were ranked as environmental policies, working conditions, philanthropic activities and consumer policies according to their power to influence the participants' employer preferences. Accordingly, potential employees defined environmental policies as the most important CSR activity for themselves, justifying their preference based on the fundamental necessity of a sustainable environment for human life. It was determined that the participants prioritized the working conditions dimension the most after the environmental policies dimension in employer preference. According to this, participants stated that they would feel more valued in a peaceful and secure working environment where their career goals are supported. According to another finding obtained within the scope of the study, it was observed that the code of "valuing employees" was formed under three categories, which are respect for employee rights, training opportunities and occupational health and safety, in the working conditions dimension of CSR. It is also noteworthy that the codes "fair working environment", "supporting career development", "reducing anxiety levels" and "feeling safe" were frequently repeated in different categories under this dimension. As emphasized in the literature, businesses that engaging in CSR activities create a corporate image that strives to benefit their employees and other stakeholders. It is stated that this created image also leads both current and potential employees to trust the business and take pride in being part of it (Kumari et al., 2021; Rank and Contreras, 2021). Therefore, it is possible to say that the findings obtained within the scope of this study align with the findings of other studies conducted in the literature.

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Türk Bankacılık Sektöründe Faaliyet Gösteren Yabancı Sermayeli Mevduat Bankalarının Finansal Performanslarının DuPont Yöntemine Göre Analizi: 2015 - 2022 Dönemi

Doç. Dr. Erdal Arslan¹

Dr. Öğr. Üyesi Ali Bora²

¹Selçuk Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, İktisat Bölümü, erdalarslan@selcuk.edu.tr, ORCID: 0000-0003-4892-2963

²Selçuk Üniversitesi, Sosyal Bilimler MYO, Finans Bankacılık ve Sigortacılık Bölümü, ali.bora@selcuk.edu.tr, ORCID: 0000-0002-1766-0123

Özet: Yabancı sermayeli bankalar bulundukları ülke ekonomilerine olumlu katkı sağlamalarının yanında olumsuz etkileri de olmakta, özellikle kriz dönemlerinde kendi karlarını artıran ancak krizi tetikleyen davranışlarda bulunabilmektedirler. Bu banka grubunun sektördeki payının düşük olması durumunda krizlerin kaynağı olarak gösterilemeyeceğini savunan görüşler de bulunmaktadır. Yabancı sermayeli bankalar gelişmekte olan ülke piyasalarına şube (genel müdürlük) açarak veya bankaların hisselerini satın alarak girebilmektedirler. Ülkemizde 2006 yılına kadar özel sermayeli mevduat bankalarının sayısı yabancı sermayeli mevduat bankalarının sayısından fazla iken, 2006 yılında bu durum değişmiş ve yabancı sermayeli mevduat bankaları sayı olarak özel sermayeli mevduat bankalarını geçmiştir. 2015 yılından itibaren Türk Bankacılık sisteminde 3 kamu sermayeli, 9 özel sermayeli ve 21 yabancı sermayeli mevduat bankası faaliyetine devam etmekte iken 2020 yılında özel sermayeli mevduat bankalarının sayısı 8'e düşmüş ve 2022 yılında da bu şekilde devam etmiştir.

Bu çalışmada, Türk Bankacılık sektöründe faaliyet gösteren yabancı sermayeli bankaların 2015-2022 dönemi performansları DuPont çoklu oran analizi sistemi kullanılarak incelenmektedir. DuPont sistemi ilk başlarda şirketlerin finansal performanslarını, finansal oranlardan özkaynak karlılığı ile ölçmek için kullanılan, daha sonra bankacılık sektörüne uyarlanarak bu sektörde de kullanılmaya başlanan bir finansal analiz tekniğidir. DuPont sisteminde özkaynak karlılığının kaynağı detaylı olarak analiz edilmektedir. Yabancı sermayeli mevduat bankalarının özkaynak karlılığı 2016, 2017 ve 2020 yıllarında bankacılık sektör ortalamasının altında kalmış, aynı yıllarda özkaynak karlılığını oluşturan oranlardan aktif karlılığı da sektör ortalamasının altında gerçekleşmiş, özkaynak karlılığını oluşturan diğer oran olan özkaynak çarpanı 2015 yılı hariç sektör ortalamasının altında yer almıştır. Yabancı sermayeli mevduat bankaların toplam aktiflerin özkaynaklara bölünmesi ile elde edilen özkaynak çarpanı incelenen yıllar itibarıyla kamu sermayeli bankaların sahip olduğu oranların altında, 2018, 2021 ve 2022 yılları hariç özel sermayeli bankaların sahip olduğu oranlarla aynı veya altında oranlara sahip olmuştur. Çalışmada Türkiye Bankalar Birliğinin yayınlamış olduğu istatistikler ve raporlardan elde edilen veriler kullanılmıştır.

Anahtar Kelimeler: Türk Bankacılık Sistemi, Yabancı Bankalar, Banka Performansları, Finansal Oran Analizi, DuPont Yöntemi

Abstract: Foreign-owned banks have a positive impact on the economies of their countries, as well as negative effects. Especially in times of crisis, they increase their own profits; however, they can also engage in the types of behaviour that triggered the crisis itself. There are arguments that this bank group cannot be shown as a source of crises because of its low share in the sector. Foreign-owned banks can enter markets in developing countries by opening branches (general directorate) or purchasing the shares of banks. While the number of private-owned deposit banks in our country was more than the number of foreign-owned deposit banks until 2006, this situation changed in 2006 and foreign-owned deposit banks exceeded private-owned deposit banks in number. While 3 state-owned deposit banks, 9 private-owned deposit banks and 21 foreign-owned deposit banks have been operating in the Turkish Banking System since 2015, the number of private capital deposit banks decreased to 8 in 2020 and will continue like this in 2022.

In this study, the 2015-2022 period performances of foreign-owned deposit banks operating in the Turkish Banking Sector are examined using the DuPont multiple ratio analysis system. The DuPont system is a financial analysis technique that was initially used to measure the financial performance of companies with return on equity from financial ratios, and was later adapted to the banking sector and started to be used in this sector as well. In the DuPont system, the source of return on equity is analyzed in detail. The return on equity of foreign-owned deposit banks remained below the banking sector average in 2016, 2017 and 2020. In the same years, the return on assets, one of the ratios that constitute the return on equity, was also below the sector average, and the equity multiplier, which is the other ratio that constitutes the return on equity, was below the sector average, except for 2015. The equity multiplier of foreign-owned deposit banks, obtained by dividing the total assets by equity, has been below the rates of state-owned banks as of the years examined, and has been at the same or lower rates than the rates of private-owned banks, except for the years 2018, 2021 and 2022. Data obtained from statistics and reports published by the Banks Association of Turkey were used in the study.

Keywords: Turkish Banking System, Foreign-Owned Banks, Bank Performance, Financial Ratio Analysis, DuPont Method

1. GİRİŞ

Türkiye’de yabancı bankacılığın tarihi Osmanlı Devleti’nin son dönemlerinde 1847 yılında Galata bankerleri tarafından kurulan İstanbul Bankası (Banquede Constantinople) ile başlamış ve 1852 yılına kadar faal olmuştur. Sonrasında adı “Osmanlı Bank” olan ancak sermayesi İngiliz ve Fransız olan Londra merkezli bir ticaret bankası 1856 yılında kurulmuş ve daha sonra Osmanlı Devleti’nin kâğıt para basma imtiyazını da içeren borçlanma hizmetlerini üstlenmiştir. Osmanlı Bankasının Birinci Dünya Savaşı sırasında Osmanlı Hükümetinin avans ve banknot ihraç isteğini geri çevirerek kendine verilen para basma görevini yerine getirmemiştir. Akgüç (2007)’e göre Türkiye’de yabancı bankalar Osmanlı Devleti ve 1980 – 2000 dönemlerinde yeni banka kurarak ya da şube açarak, bankacılık sektörüne girmişler, 2000 yılından sonra ise pay satın alma yoluyla, yeni bir banka kurmadan, kurulmuş yerli sermayeli bankayı satın alarak, bankacılık sektöründe faaliyet göstermeye başlamışlardır.

Yapılan çalışmalarda gelişmekte olan ülkelerde yabancı sermayeli bankaların performansı yerli sermayeli bankalara göre daha iyi çıkmakta, gelişmiş ülkelerde ise yerli sermayeli bankaların performansları daha iyi çıkmaktadır. Yabancı sermayeli bankalar bulundukları ülkede sayı olarak fazla olmasına rağmen aktif toplam içerisindeki payları düşük olması sebebiyle krizlere etkileri fazla olmamaktadır (Tschoegl, 2003). Yabancı sermayeli bankaların krize etkilerinin az olmasının yanında bulundukları ülkelerde bazı olumsuz etkiler ortaya çıkarabilmektedir. Bu olumsuz etkiler; özellikle kriz dönemlerinde kaynaklarını krizin etkilerini en aza indirecek şekilde kullanmamaları, tersine krizi tetikleyici yönde kendi karlılıklarını artıracak şekilde kullanmaları olarak sayılmaktadır. Yabancı sermayeli bankalar bulundukları ülkelerde olumlu katkıları da olmaktadır. Bu katkılar; planlama, kredi değerlendirme ve pazarlama ile istihdam alanlarında katkı sağlamak, yerli bankaların etkinliğini artırmak olarak sayılabilmektedir. Yabancı sermayeli bankalar gelişmekte olan ülke piyasalarına ilk önce şube olarak girmeyi, sermaye piyasalarında faaliyet göstermekte, bankaların hisselerinin alınması yoluyla ortaklık kurmayı tercih etmektedirler.

Türk Bankacılık Sektöründe (TBS), yabancı sermayeli bankaların 2005 yılında %5,2 olan sektördeki payları 2006 yılında %12,2’ye, 2014 yılında %15,4 iken 2015 yılında %26,9’a yükselmiştir. 2015 yılı bu açıdan önem kazanmaktadır. 2022 yılında ise Türkiye’de kurulmuş 16 yabancı sermayeli mevduat bankasından aktif büyüklüğüne göre ilk beş banka satın alma ile yabancı banka statüsüne geçmiştir. Bu beş banka TBS’de faaliyet gösteren yabancı sermayeli mevduat bankalarının %21,6 olan piyasa payının %18,9’unu oluşturmaktadır.

Bu çalışmada Türkiye’de kurulmuş yabancı sermayeli bankaların 2015 yılındaki durumu incelenmiş, incelemede çoklu oran analizi yöntemi olarak da adlandırılan DuPont yöntemi kullanılmıştır. DuPont yöntemi bankanın performansını özkaynak karlılığı ile ölçen bir yöntemdir. Burada önemli husus özkaynak karlılığı bileşenleridir. Dupont yönteminde özkaynak karlılığı bileşenleri; kar marjı, aktif verimliliği ve özkaynak çarpanı çarpımından oluşmaktadır. Özkaynak karlılığında sorun olan bankanın bu sorununun kar marjından mı, aktif verimliliğinden mi yoksa kullandığı kredi miktarına bağlı olarak özkaynak çarpanından mı kaynaklandığı bu yöntemde kolayca tespit edilebilmektedir. Çalışmada Giriş bölümünün ardından yabancı bankalar ve DuPont yöntemiyle ilgili yapılmış çalışmalardan oluşan Literatür yer almaktadır. Üçüncü bölümde DuPont analiz yöntemi anlatılmakta, dördüncü bölümde 2015 – 2022 Döneminde TBS’de gelişmeler ve yabancı bankalara değinilmektedir. Beşinci bölümde TBS’de Faaliyet Gösteren Yabancı Sermayeli Mevduat Bankalarının 2015 - 2022 Dönemi Finansal Performanslarının DuPont Yöntemine Göre Analizi yer almaktadır. Çalışmada kullanılan veriler Türkiye Bankalar Birliği (TBB)’nin yayınlamış olduğu istatistikler ve raporlardan elde edilmiştir.

2. LİTERATÜR

Yabancı bankalar ve DuPont yöntemiyle ilgili yapılmış olan yerli ve yabancı çalışmalar bu bölümde incelenmektedir. Denizer (1999) çalışmasında 1980 – 1997 döneminde bankacılık sistemine yabancı banka girişlerinin etkisini incelemiş, yerli bankalar ile yabancı bankalar etkinlik, karlılık ve piyasa payları açısından karşılaştırmıştır. Çalışma sonucunda, yabancı bankaların karlılığının daha yüksek olduğu belirlenmiştir (Denizer, 1999: 4, 8). Banka grupları faaliyet giderleri açısından karşılaştırıldığında yabancı bankaların başlangıçta daha yüksek faaliyet giderlerine sahip olduğu, daha sonraları yerli bankaların faaliyet giderlerinin yükseldiği görülmüştür. Banka gruplarının şube ağı incelendiğinde yabancı bankaların düşük düzeyde kaldığı görülmüş ve bu durum yabancı bankaların perakende bankacılıkta olmadığı şeklinde değerlendirilmiştir (Denizer, 1999: 9, 10).

Claessens, et al. (2001) tarafından yapılan çalışmada, yabancı banka girişlerinin yerel bankacılık sektörüne etkisi, 1988 – 1995 dönemi için incelenmiş, çalışma sonucunda gelişmiş ülkelerde yabancı bankaların yerli

bankalara göre daha düşük faiz marjı, faaliyet giderleri ve karlılığa sahip olduğu, gelişmekte olan ülkelerde ise tersi olduğu ortaya konmuştur (Claessens, et al, 2001: 893).

Çakar (2003) tarafından yapılan çalışmada, Türkiye’de yabancı bankaları incelemiş, çalışma sonucunda liberalleşme sonucu Türk bankacılık sektörüne giriş yapan yabancı bankaların, özellikle kriz dönemlerinde kaynaklarını krizin etkilerini en aza indirecek yönde kullanmadıkları, aksine kendi karlılıklarını düşünerek krizi tetikleyici yönde faaliyet gösterdikleri sonucu elde edilmiştir (Çakar, 2003: 95).

Tschoegl (2003) tarafından yapılan çalışmada, yabancı bankaların sektörde fazla ağırlığı olmaması sebebiyle krizlere etkisinin çok az olduğu ortaya konmuş, incelenen 12 ülkeden sekizinde yabancı bankaların aktif büyüklüklerine göre sektördeki paylarının %20’nin altında olduğu görülmüş, yabancı bankaların sektöre girişini teşvik eden politikaların krize yol açan politikalar olmadığı, yabancı banka giriş engelleri ile büyük bankacılık krizleri arasında pozitif yönde bir ilişki olduğu, başarısız devlet bankalarının kredilerinin verimsiz alanlarda kullandırıldığı ortaya konmuştur (Tschoegl, 2003: 20).

Lensink ve Hermes (2004), çalışmalarında yabancı bankaların bankacılık sektörüne girmesinin yerli bankalar üzerindeki kısa dönemli etkileri, ana ülkenin ekonomik gelişmişlik düzeyine bağlı olduğu tezi üzerinden incelenmiştir. Çalışmada, yabancı bankaların sektöre girmesinin yerli bankalar üzerindeki etkileri 48 ülkedeki banka verileri ile 1990 – 1996 dönemi için incelenmiştir. Çalışma sonucunda düşük gelişmişlik düzeyindeki ekonomilere yabancı banka girişlerinin yerli bankalara yüksek maliyet ve marjin etkisi ile ilişkili olduğu, gelişmişlik düzeyi yüksek ekonomilerde ise yerli bankalar üzerinde maliyetlerin, karlılığın ve marjin düşüşü yönünde etkilerin olduğu belirlenmiştir (Lensink ve Hermes, 2004: 553, 554).

Tekebaş (2005) yapmış olduğu çalışmada, yabancı bankaların Türk bankacılık sektörüne giriş sebepleri, yabancı bankaların sektördeki konumu ve olası pay artışının etkileri, daha önce yapılan çalışmalar çerçevesinde incelenmiştir (Tekebaş, 2005: 4). Çalışmanın sonucunda, yabancı bankaların ortaya çıkarabilecekleri olumsuzluklar; Türkiye’de yabancı bankaların sisteme hakim olması durumunda sistemik risk ihtimalinin ortaya çıkacağı, kriz anında yabancı bankaların kendi ülkelerine fon transferi yapmaları durumunda ülke ekonomisinin dengelerini bozabilecekleri şeklinde belirtilmiştir. Yabancı bankaların ortaya çıkardığı riskin yanında sağladığı katkılar; zayıf bankaların sektörden çekilmesi, karlılığın düşerek rekabet ortamının oluşması, sektörde verimlilik artışı kalite ve gelişime katkı sağlama, yeni teknolojilerin kullanılmasına öncülük etme, yeni ürün sunma, hizmet kalitesini artırma şeklinde sıralanmıştır (Tekebaş, 2005: 41).

Yabancı bankalar üzerine yapılan çalışmalar, bu bankaların gelişmekte olan ülke piyasalarına ilk önce sınırlı hacimde şubeler olarak girmeyi tercih ettiklerini ve daha çok sermaye piyasalarında faaliyet gösterdiklerini, gittikleri ülkelerdeki perakendeci bankaların hisselerinin alınması yoluyla ortaklık kurma ya da yeniden yapılandırılan banka hisselerinin alınması yönünde davranıldığını ortaya koymaktadır (TBB, Bankacılık ve Araştırma Grubu, 2005: 4).

Kosmidou et al. (2006) tarafından yapılan çalışmada İngiltere’nin bankacılık sektörü açısından Avrupa Birliği’nin en önemli ülkesi olduğu, banka aktifleri açısından Avrupa Birliği’nin %25’inden fazlasını elinde bulundurduğunu, ayrıca dünyadaki sınır ötesi kredi hesaplarının %20’sine sahip olması nedeniyle en büyük uluslararası bankacılık merkezi olduğu ve yabancı bankaların, bankacılık sektörünün toplam aktiflerinin %55’ine sahiptir olduğu belirtilmektedir. Yerli ve yabancı bankaların performanslarını ortaya çıkarmak için yapılan çalışmada karlılık, likidite risk ve etkinlik faktörü ile ilgili finansal oranlar 26 yerli, 32 yabancı banka üzerinde 1998 – 2001 dönemi için incelenmiş ve yerli bankaların yabancı bankalara göre daha yüksek performans gösterdiği belirlenmiştir (Kosmidou et al., 2006: 189, 190, 192).

Önal ve Sevimeser (2006) tarafından yapılan çalışmada Türk bankacılık sektöründe faaliyet gösteren bankaların sahiplik yapılarına göre etkinlikleri karşılaştırılmıştır. Çalışmanın sonucunda en etken banka grubunun yabancı bankalar olduğu, yabancı bankaları kamu bankaları takip ettiği ve özel bankalar etkinlik açısından listenin sonunda yer aldığı tespit edilmiştir (Önal ve Sevimeser, 2006: 295).

Ülkemizde 2001 sonrasında yabancı sermayenin bankacılık sektörüne gelişinde banka satın alma, blok alım yoluyla nitelikli paya sahip olma ve Borsada banka pay senetleri satın alma yöntemleri kullanılmıştır (Akgüç, 2007: 13).

2001 yılında Türkiye’deki yabancı şirketlerin karlılığı düşmüş ve Türk bankalarının bilançolarında zarar ortaya çıkmıştır. Bu durum daha sonra yabancı bankalar için avantaj oluşturmuş, 2000 yılı bilançolarında Türkiye’de zarar göstermeyen iki banka Chase ve Citibank olmuş, bu bankalar da reel sektör ile kredi ilişkilerini sınırlı

tutmuştur. Krizden sonra faizlerin düşmesi ile daha önce alınan hazine borçlanma senetleri ile bankalar önemli ölçüde karlar elde etmişlerdir (Apak, 2007: 20).

Aktaş ve Kargın (2007) tarafından yapılan çalışmada Türk Bankacılık Sektöründeki yabancı bankalar ile ulusal bankalar bazı finansal oranlar açısından karşılaştırılmış, çalışma sonucuna göre, yabancı bankalar daha yüksek sermaye yeterliliği ve likidite oranlarına, sağlam bir finansal yapıya sahip olduğu sonucuna ulaşılmıştır (Aktaş ve Kargın, 2007: 31, 44).

Ata (2009) tarafından yapılan çalışmada, Türk bankacılık sektöründe yer alan yerli ve yabancı bankalar finansal performansları açısından karşılaştırılmış, çalışmanın sonucunda performans göstergeleri açısından yerli bankaların yabancı bankalara oranla daha etkin olduğu ancak özellikle faiz dışı giderin toplam aktive oranı, aktif karlılığı ve faaliyet karının toplam aktive oranı değişkenleri açısından yabancı bankaların etkinliğinin arttığı görülmüştür (Ata, 2009: 109, 122).

Çelik ve Ürünveren (2009) tarafından yapılan çalışmada yabancı banka girişlerinin Türk bankacılık sektöründe rekabet düzeyini ne derecede etkilediği incelenmiş, çalışma sonucunda, Türk bankacılık sektörünün 2002-2007 döneminde bir yıl hariç tümünde monopolistik bir yapıya sahip olduğu, yabancı banka girişlerinin sadece 2006 yılında Türk bankacılık sektörünün piyasa yapısına rekabetçi bir davranış kazandırdığı belirlenmiştir (Çelik & Ürünveren, 2009: 42).

Sarıtaş ve Gökçe (2012) tarafından yapılan çalışmada Türk Bankacılık Sistemi içerisinde faaliyet gösteren ulusal ve yabancı sermayeli bankaların sermaye yeterlilik oranı ile sermayenin kaynağı arasındaki korelasyon ve sermayenin kaynağı ile piyasaya kullandırılan kümülatif kredi miktarı arasındaki ilişki 2005 – 2010 dönemi için incelenmiş, çalışma sonucuna göre 2005 – 2008 döneminde ulusal sermayeli bankaların sermaye yeterlilik oranının yabancı sermayeli bankalara göre daha yüksek olduğu, 2009 – 2010 yıllarında ise bu durumun tam tersi gerçekleştiği görülmüş, 2005 – 2010 döneminde ulusal sermayeli bankaların piyasaya sağladığı ortalama kümülatif kredi miktarı, yabancı sermayeli bankalardan daha fazla olduğu ortaya konmuştur (Sarıtaş & Gökçe, 2012: 37, 39, 40, 41).

Akbalık ve Sırma (2013) tarafından yapılan çalışmada 2001 krizi sonrası Türk Bankacılık sektörüne dahil olan yabancı sermayeli bankaların sistem içindeki faaliyet etkinliği incelenmiş, çalışma sonucunda yabancı bankaların etkinliğinin yıllar içinde azaldığı ve ölçek olarak da sistem içindeki ağırlıklarının belirleyici olmadığı görülmüştür (Akbalık ve Sırma, 2013: 1).

Arslan ve Bora (2016) tarafından yapılan çalışmada, Ülkemiz ekonomisinde ve bankacılık sektöründeki 1990 – 2013 dönemine ait gelişmeler ile özel sermayeli bankalar ile yabancı sermayeli bankaların davranışları incelenmiş, çalışma sonucunda banka grupları enflasyonun ve buna bağlı olarak devlet tahvili - hazine bonusu faizlerinin yüksek olduğu dönemlerde çok yüksek faize bağlı karlar elde etmişler, enflasyonun ve devlet tahvili - hazine bonusu faizlerinin düştüğü dönemlerde faiz dışı gelirlerini artırma yoluna gittiği sonucuna ulaşılmıştır (Arslan & Bora, 2016: 9).

Bora ve Arslan (2017) yapmış oldukları çalışmada, Ülkemizde faaliyette bulunan yabancı sermayeli bankaların 2015 yılı faaliyetlerini oran analizi yöntemi kullanarak incelemiş, çalışma sonucunda yabancı sermayeli bankaların sektör payları 2014 yılında %15,4 iken 2015 yılında %26,9 a çıktığı, Ülkemizde kurulmuş yabancı sermayeli bankaların %21,2'sinin satın alma yolu ile faaliyetlerine başladığı, şube sayısı ve personel sayısı ile aktif büyüklüğe göre, kredilere, mevduata göre ve karlılığa göre sektör payları dikkate alındığında yabancı sermayeli bankalar grubuna 2015 yılında geçen Garanti Bankası, 2006 yılında geçen Denizbank ve Finans Bank ilk üç sırayı aldığı belirlenmiştir (Bora & Arslan, 2017: 6).

Gümüş ve Çıbık (2018) tarafından yapılan çalışmada DuPont yöntemi kullanılarak borsada işlem gören gayrimenkul yatırım ortaklığı şirketleri içindeki 25 şirketin özsermaye verimlilik analizleri yapılmış, bu analizler sonucunda en iyi işletme Ak Merkez GYO işletmesi olduğu, şirketin özsermaye verimliliğinin yüksek olmasının sebebi net kar marjının yüksek olması ve aktif devir hızı oranının da diğer işletmelere göre yüksek olması sonucuna ulaşılmıştır (Gümüş & Çıbık, 2018: 2178-2192).

Arslan ve Bora (2021) çalışmalarında, Türk Bankacılık Sektöründe faaliyet gösteren mevduat bankaları sermaye yapılarına göre gruplandırarak, 2015-2019 dönem finansal performanslarını DuPont yöntemine göre karşılaştırmalı olarak incelemiş, çalışma sonucunda kamu sermayeli mevduat bankalarının 2015-2018 yılları arasında sektör ortalamasının üzerinde özkaynak karlılığına sahip olduğu, 2019 yılında ise sektör ortalamasının altında kaldığı, özel sermayeli mevduat bankalarının ağırlıklı olarak sektör ortalamasının altında kaldığı, yabancı

sermayeli mevduat bankalarının ise özellikle 2018 ve 2019 yıllarında sektör ortalamasının üzerinde özkaynak karlılığına sahip olduğu belirlenmiştir (Arslan & Bora, 2021: 6356).

Arslan ve Bora (2022) yapmış oldukları çalışmada, Türk Bankacılık Sektöründe faaliyette bulunan Kalkınma ve Yatırım Bankalarının 2015 – 2020 dönemi performansları özkaynak karlılığı bileşenlerine göre incelenmiş, çalışma sonucunda; 2015 – 2020 dönemi boyunca kalkınma ve yatırım bankalarının bankacılık sektörü ortalamasına göre daha yüksek aktif karlılığı elde ettiği, ancak bankacılık sektörünün özkaynak çarpanı ortalamasının daha yüksek olduğu belirlenmiştir (Arslan & Bora, 2022: 27).

İslamoğlu ve Konak (2023) çalışmalarında, yerel ve yabancı sermayeli ticari bankaların kârlılıkları ile taşıdıkları likidite riskleri arasındaki ilişki karşılaştırmalı olarak incelenmiş, çalışmanın sonucunda karlılık açısından yabancı sermayeli bankaların aktif kârlılığının yerli sermayeli bankalardan daha yüksek olduğu, yerli sermayeli bankaların özkaynak kârlılığının yabancı sermayeli bankalardan daha yüksek olduğu belirlenmiş, likidite açısından yabancı sermayeli bankaların daha yüksek likiditeye sahip olduğu, yabancı sermayeli bankalarda aktif kârlılığıyla likidite arasında istatistiksel olarak anlamlı pozitif yönlü bir ilişki bulunduğu ortaya konmuştur (İslamoğlu & Konak, 2023: 53).

Ajmera (2012) tarafından yapılan çalışmada, DuPont modeli ile 2006-2011 yılları arası bankacılık sektörünün finansal sağlığı analiz edilmiş, PBDIT/Satışlar oranı en yüksek banka SBI, Satışlar/Net varlıklar oranı en yüksek Corporation Bankası, PBDIT/Net varlık oranı en yüksek SBI, Dena Bank ve Corporation Bankası, PAT/PBDIT oranı en yüksek Dena Bank, Net varlık/Net değer oranı en yüksek Baroda Bank ve Özkaynak karlılık oranı (ROE) en yüksek SBI olarak belirlenmiştir (Ajmera, 2012: 58).

Balaj (2015) tarafından yapılan çalışmada Kosova’da yerli ve yabancı bankaların 2001-2007 dönemine ait finansal performansları DuPont finansal analiz modeli kullanılarak karşılaştırmalı olarak incelenmiş; yabancı bankaların daha etkin ve karlı olduğu, daha yüksek aktif karlılığı ve özkaynak karlılıklarına sahip olduğu belirlenmiştir. Yabancı bankaların yüksek özkaynak karlılık oranları yüksek faiz marjından kaynaklandığı belirlenmiş, bu durum, yabancı bankaların maliyet yönetiminin daha iyi olduğu ve yüksek kaldıraç oranı kullandıklarının göstergesi olarak değerlendirilmiştir. Yabancı bankalarla karşılaştırıldığında yerli bankaların daha yüksek aktif verimliliğine rağmen düşük karlılığının nedeni zayıf kalitede kredi portföyüne bağlı olarak yüksek kredi karşılıkları maliyetleri olarak belirlenmiştir. Buna göre, yerli bankaların çoğunlukla düşük kredibiliteye sahip müşterilere sahip olduğu sonucuna ulaşılmıştır (Balaj, 2015: 71).

Haider (2016) tarafından yapılan çalışmada Hindistan bankacılık sektörünün en büyük kamu ve özel sermayeli bankalarından Baroda Bank ve HDFC Bank’ın finansal karlılığı DuPont yöntemiyle analiz edilmiş, HDFC Bank’ın Baroda Bank’a göre finansal kaynakları daha etkin yönettiği sonucuna ulaşılmıştır (Haider, 2016: 9).

Rooplata (2016) tarafından yapılan çalışmada Hindistan’da 19 ulusal banka performansı DuPont analiz yöntemiyle incelenmiş, sonuçta Baroda Bank ile India Bank karşılaştırılmış, Baroda Bank son beş yılda en yüksek karı elde etmesine rağmen India Bank daha yüksek özkaynak karlılığı elde etmiştir. Bu durumda daha yüksek kar elde eden bankanın daha yüksek özkaynak karlılığı elde edeceği anlamına gelmediği sonucuna ulaşılmıştır (Rooplata, 2016: 211).

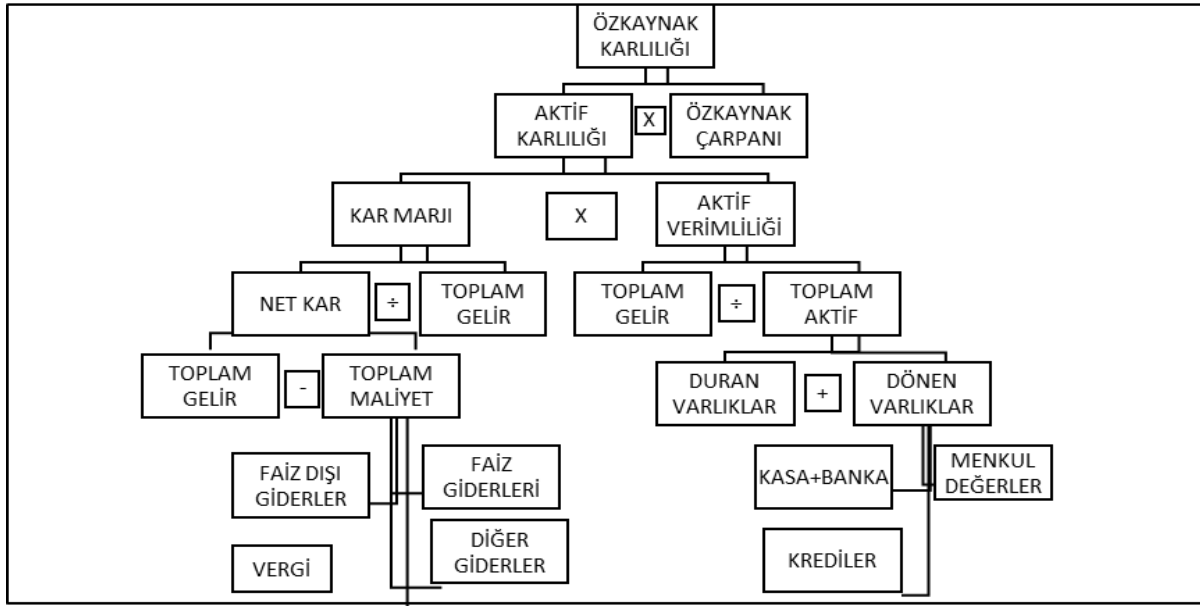
Rahman ve Rubel (2018) tarafından yapılan çalışmada 15 Bangladeş ticaret bankasının DuPont yöntemiyle 2010-2016 dönemine ait finansal performansları incelenmiş, çalışma sonucunda Dhaka Bank en yüksek, AB Bank’ın ise en düşük özkaynak karlılığına sahip olduğu belirlenmiştir (Rahman & Rubel, 2018: 165).

AlAli (2019) tarafından yapılan çalışmada Kuveyt bankalarının 2012-2017 dönemi finansal performansları DuPont sistemine göre analiz edilmiş, National Bank of Kuwait aktif karlılığına göre en iyi banka, Ahli United bankası ikinci en iyi banka olmuş, özkaynak karlılığına göre ise Ahli United bankası en iyi performansa sahip banka, National Bank of Kuwait ise ikinci en iyi banka olmuştur. Diğer taraftan en kötü performansa sahip bankanın ise Warba bankası olduğu, AlAhli bankasının da onu takip ettiği belirlenmiştir (AlAli, 2019: 1-6).

3. DUPONT ANALİZ YÖNTEMİ

Bir bankanın yönetiminin hedeflerine ulaşip ulaşmadığını görmek için bankanın getiri ve risk ölçümleri analiz edilmelidir. Başlangıç aşamasında, analiz için karlılık verilerine ulaşılmasına imkan sağlayacak bilanço ve gelir tablosu bilgileri yeterli olacaktır. Analize, özsermaye karlılığı modeliyle başlanması uygun olacaktır. Yaygın olarak DuPont modeli olarak bilinen özsermaye karlılığı modeli, bir bankanın karlılığının kaynaklarını görmek için özsermaye getirisini birkaç temel bileşene ayırır. Ardından, bankanın geliştirmek isteyebileceği alanları belirlemek için bileşenler analiz edilir (Rose & Fraser, 1988: 201).

Şekil 1: Bankacılık Sektörü Açısından DuPont Şeması



Kaynak: Hempel & Simonson, 1999: 60; Berk, 2000: 53; Tandon et al., 2016: 66.

DuPont analiz yöntemi, işletmelerin dönemsel faaliyetinin sonucunu özkaynak karlılığı ile ölçen çoklu finansal oran analizi yöntemi olarak da tanımlanabilmektedir. Şekil 1'de gösterilen bankacılık sektöründe özkaynak karlılığını oluşturan bileşenler aşağıdaki şekilde formüle edilebilmektedir (Rose ve Fraser, 1988: 201).

$$\text{Özkaynak Karlılığı} = \frac{\text{Net Kar}}{\text{Toplam Özkaynak}} \quad (1)$$

$$\text{Özkaynak Karlılığı} = \text{Aktif Karlılığı} \times \text{Özkaynak Çarpanı} \quad (2)$$

$$\text{Özkaynak Karlılığı} = \frac{\text{Net Kar}}{\text{Toplam Aktifler}} \times \frac{\text{Toplam Aktifler}}{\text{Toplam Özkaynak}} \quad (3)$$

$$\text{Aktif Karlılığı} = \text{Kar Marjı} \times \text{Aktif Verimliliği} \quad (4)$$

$$\text{Özkaynak Karlılığı} = \text{Kar Marjı} \times \text{Aktif Verimliliği} \times \text{Özkaynak Çarpanı} \quad (5)$$

Dönem sonu elde edilen net karın toplam özkaynaklara bölünmesi (1) ile özkaynak karlılığı hesaplanmaktadır. Ayrıca özkaynak karlılığı, aktif karlılığı ile özkaynak çarpanının çarpılması (2) sonucu da hesaplanabilmektedir. Aktif karlılığı, kar marjı ile aktif verimliliği çarpılarak elde (4) edildiği dikkate alındığında özkaynak karlılığı; kar marjı, aktif verimliliği ve özkaynak çarpanının çarpılması (5) ile hesaplanabilmektedir. İncelenen bankanın/bankaların özkaynak karlılığında bir problem varsa bu problemin kaynağının bulunması açısından bu formül yol gösterici olmaktadır. Buna göre, bir bankanın özkaynak karlılığı sektör ortalamasının altında kalmışsa bunun nedeninin kar marjından mı, aktif verimliliğinden mi yoksa özkaynak çarpanından mı kaynaklandığı kolayca belirlenebilmektedir (Arslan & Bora, 2021: 6364).

4. 2015 – 2022 DÖNEMİNDE TÜRK BANKACILIK SEKTÖRÜNDE GELİŞMELER VE YABANCI BANKALAR

4.1. 2015-2022 Yılları Arasında Yılında Türkiye'de Bankacılık Sektöründeki Gelişmeler

2015 yılında bankacılık sektöründeki önemli gelişmelerden biri bankacılık sektöründe %11,4 aktif büyüklüğe sahip Garanti Bankasında yaşanmıştır. BDDK'nın 14 Temmuz 2015 tarih ve 6370 sayılı Kurul Kararı ile İspanyada yerleşik Banco Bilbao Vizcaya Argentaria SA (BBVA)'nın Türkiye Garanti Bankası A.Ş. sermayesinin %14.89'ünü devralmasına; böylece Bankadaki doğrudan payının %25.01'den %39.90'a yükselmesine; Doğu Holding A.Ş.'nin Bankadaki doğrudan payının %20.41'den %6.18'e düşmesine izin verilmiştir. Anlaşma hükümlerine uygun olarak hisse devir işlemleri 27 Temmuz 2015 tarihi itibarıyla tamamlanmıştır. Devir sonrasında BBVA, Banka'daki hakim ortak konumuna gelmiş Banka özel sermayeli bankalar grubundan Türkiye'de kurulmuş yabancı bankalar grubuna geçmiştir (www.tbb.org.tr, 25.03.2016). Böylece bankacılık sektöründe aktif büyüklüğe göre %15,5 paya sahip olan yabancı sermayeli bankaların payı %26,9'a yükselmiştir (TBB, Temmuz 2023). BDDK'nın 2 Nisan 2015 tarih ve 6262 sayılı Kararı ile, Tekstil Bankası A.Ş. hisselerinin %75,50'sine sahip olan GSD Holding A.Ş.'nin

tüm payının, Çin Halk Cumhuriyetinde mukim Industrial and Commercial Bank of China Limited'in devralmasına izin verilmiş, 22 Mayıs 2015 tarihinde yapılan Olağanüstü Genel Kurul toplantısında hisse devir işlemi onaylanmış ve banka Türkiye'de kurulmuş yabancı bankalar grubuna geçmiştir. 5 Kasım 2015 tarihinde alınan genel kurul kararı gereğince bankanın ticari ünvanının "ICBC Turkey Bank A.Ş." olarak değişmesine karar verilmiş ve 19 Kasım 2015 tarih ve 8950 sayılı Türkiye Ticaret Sicili Gazetesi'nde yayınlanmıştır (TBB, Temmuz 2023). Fibabanka A.Ş. sermayesi 21 Aralık 2015 tarihinde yapılan olağanüstü genel kurul kararı ile IFC (Uluslararası Finans Kurumu) ve EBRD (Avrupa İmar ve Kalkınma Bankası) tarafından eşit oranda karşılanmak üzere artırılmıştır. Yapılan Sermaye İştirak Sözleşmesi ile banka sermayesine karşılık gelmek üzere IFC(%9.95) ve EBRD(%9.95)'ye hisse senedi bastırılıp pay edilmesine ve böylece her iki kurumun Fibabanka A.Ş.'ye toplam %19,90 oranında ortak olmalarına karar verilmiştir (TBB, Temmuz 2023). QNB Finansbank A.Ş., BDDK'nın 7 Nisan 2016 tarih ve 6833 sayılı Kararı ile Finans Bank A.Ş. sermayesinde National Bank of Greece'e ait %82.33, NBGI Holding B.V.'ye ait %7.90, NBG Finance PLC'ye ait %9.68; toplam %99.81 oranındaki hisselerin Katarlı Qatar National Bank S.A.Q.'ya devrine izin verilmiştir. Satış işlemi 15 Haziran 2016 tarihinde tamamlanmış olup NBG'nin Finansbank A.Ş. sermayesi üzerinde herhangi bir hak sahipliği kalmamıştır. Bankanın ticari unvanı, 17 Ocak 2018 tarihli Genel Kurul toplantısında alınan karar gereğince "QNB Finansbank A.Ş." olarak değişmiştir (TBB, Temmuz 2023). Şekerbank T.A.Ş.; BTA Securities JSC'nin sahip olduğu %9,43 oranındaki kalan paylar ise 29 Nisan 2016 tarihinde Şekerbank T.A.Ş. tarafından satın alınmıştır (TBB, Temmuz 2023).

Tasarruf Mevduatı Sigorta Fonu (TMSF) Fon Kurulunun 26 Ocak 2017 tarih ve 2017/25 sayılı kararı ile 5411 sayılı Bankacılık Kanununun 134. maddesinin 5. fıkrası ve 6183 sayılı Amme Alacaklarının Tahsil Usulü Hakkında Kanun hükümleri uyarınca TMSF tarafından haczedilen gerçek ve tüzel kişilere ait Adabank A.Ş.'nin %94,4439625 oranındaki hisselerinden Adabank Ticari ve İktisadi Bütünlüğü oluşturulmuş, 25 Nisan 2017 tarihinde ihale ile satışa çıkarılmıştır. İhaleye TMSF tarafından iştirak edilmiş olup, söz konusu bütünlük açık artırma aşamasında alacağa mahsuben Tasarruf Mevduatı Sigorta Fonu'na ihale edilmiş, 2 Mart 2018 tarihinde hisse devri yapılmış pay defterine işlenmiştir (TBB, Temmuz 2023). 'BDDK'nın, 5 Mayıs 2016 tarih ve 29703 sayılı Resmi Gazetede yayınlanan, 2 Mayıs 2016 tarih ve 6880 sayılı Kararı ile %99,99 pay sahipliği Bank of China Limited'e ait olmak üzere bir mevduat bankası kurulmasına izni verilmiştir. Bu husus, 10 Ocak 2017 tarihinde İstanbul Ticaret Sicil Müdürlüğü nezdinde tescil edilerek banka esas sözleşmesi ile birlikte 17 Ocak 2017 tarihli ve 9243 sayılı Türkiye Ticaret Sicili Gazetesinde ilan olunmuştur. BDDK'nın, 7 Aralık 2017 tarih ve 30263 sayılı Resmi Gazetede yayınlanan, 1 Aralık 2017 tarih ve 7612 sayılı Kararı ile Bank of China Turkey A.Ş. ünvanlı mevduat bankasına faaliyet izni verilmesine karar verilmiştir. Banka, 9 Mayıs 2018 tarihinde bankacılık faaliyetlerine başlamıştır (TBB, Temmuz 2023). Ziraat Bankası, Bakanlar Kurulu'nun 24 Ocak 2017 tarih ve 2017/9756 sayılı Kararı çerçevesinde, Bankanın Hazine'ye ait hisselerinin tamamı Türkiye Varlık Fonu'na devredilmiştir (TBB, Temmuz 2023). MUFG Bank Turkey A.Ş.'nin ticari unvanı 26 Mart 2018 tarihli Olağan Genel Kurul Toplantısında alınan karar gereğince "MUFG Bank Turkey A.Ş." olarak değişmiş, 2 Nisan 2018 tarihinde tescil edilmiştir (TBB, Temmuz 2023). Bankacılık Düzenleme ve Denetleme Kurulu'nun, 27 Haziran 2019 tarih ve 8426 sayılı Kararı ile Sberbank of Russia'nın Denizbank A.Ş.'de sahip olduğu %99,85 oranındaki hisselerinin doğrudan Birleşik Arap Emirlikleri'nin Dubai Emirliği'nde mukim Emirates NBD Bank PJSC (ENBD)'ye devrine ve Sberbank'ın Bankadaki doğrudan payının % 0'a gerilemesine izin verilmesine karar verilmiştir (TBB, Temmuz 2023). Türk Ticaret Bankası A.Ş.'nin yeniden faaliyete geçme çalışmaları sonucunda, BDDK'nın 20 Kasım 2021 tarih ve 31665 sayılı Resmi Gazete'de yayınlanan, 4 Kasım 2021 tarih ve 9895 sayılı Kurul Kararı ile "Türk Ticaret Bankası A.Ş."ye faaliyet izni verilmiş, banka 29 Nisan 2022 tarihinde faaliyetlerine başlamıştır (TBB, Temmuz 2023).

4.2. 2015 – 2022 Döneminde Türk Bankacılık Sektöründe Faaliyet Gösteren Yabancı Bankalar

Türkiye'de faaliyet gösteren yabancı sermayeli mevduat bankaları iki gruba ayrılmaktadır. Bunlardan birincisi Türkiye'de kurulmuş yabancı sermayeli mevduat bankaları, ikincisi ise Türkiye'de şube açan yabancı sermayeli mevduat bankalarıdır. 2015 yılında Türkiye'de kurulmuş yabancı sermayeli mevduat bankaları sayısı 16, Türkiye'de şube açan yabancı sermayeli mevduat bankaları sayısı 5'tir. Bu başlık altında Türkiye'de kurulmuş yabancı sermayeli mevduat bankaları hakkında bilgi verilecektir.

2022 yılında sayısı 16 olan Türkiye'de kurulmuş yabancı bankalar şunlardır: Alternatifbank A.Ş., Arap Türk Bankası A.Ş., Bank of China Turkey A.Ş., Burgan Bank A.Ş., Citibank A.Ş., Denizbank A.Ş., Deutsche Bank A.Ş., HSBC Bank A.Ş., ICBC Turkey Bank A.Ş., ING Bank A.Ş., MUFG Bank Turkey A.Ş., Odea Bank A.Ş., QNB Finansbank A.Ş., Rabobank A.Ş., Turkland Bank A.Ş., Türkiye Garanti Bankası A.Ş.'dir.

Tablo 1, Ülkemizde faaliyette bulunan yabancı bankalardan Ülkemizde kurulmuş yabancı sermayeli mevduat bankalarının kuruluş yılları, kuruluş yöntemi ve aktif büyüklüğüne göre piyasa paylarını göstermektedir.

Tablo 1: Yabancı Sermayeli Bankaların Kuruluş Yılları ve Yöntemleri, Aktiflere Göre Piyasa Payı

Türkiye’de Kurulmuş Bankalar	Kuruluş Yılı	Aktif Büyüklüğüne Göre Piyasa Payı (2022, %)	Kuruluş Yöntemi
Türkiye Garanti Bankası A.Ş.	1946	8,8	Satın alma: 2015
QNB Finansbank A.Ş.	23 Eylül 1987	4,6	Satın alma: 2006
Denizbank A.Ş.	18 Ağustos 1996	4,0	Satın alma: 2006, 2012
ING Bank A.Ş.	13 Mart 1990	0,8	Satın alma: 2007
HSBC Bank A.Ş.	1 Ağustos 1990	0,7	İlk kuruluş: 2001 Demirbank’ın satın alınması
Toplam: 18,9			
Odea Bank A.Ş.	27 Ekim 2011	0,5	İlk kuruluş
ICBC Turkey Bank A.Ş.	24 Eylül 1985	0,5	Satın alma: 2015
Alternatifbank A.Ş.	20 Şubat 1992	0,4	Satın alma: 2013
Burgan Bank A.Ş.	18 Şubat 1992	0,4	Satın alma: 2007, 2012
Citibank A.Ş.	26 Aralık 2003	0,3	İlk kuruluş
MUFG Bank Turkey A.Ş. (The Bank of Tokyo-Mitsubishi UFJ)	20 Aralık 2012	0,3	İlk kuruluş
Turkland Bank A.Ş.	1986	0,1	İlk kuruluş, satın alma: 2007
Arap Türk Bankası A.Ş.	18 Temmuz 1976	0,1	İlk kuruluş
Deutsche Bank A.Ş.	7 Nisan 1988	0,1	İlk kuruluş
Rabobank A.Ş.	1 Ağustos 2013	0,0	İlk kuruluş
Bank of China Turkey A.Ş.	5 Mayıs 2016	0,0	İlk kuruluş
Toplam: 2,7			
%21,6			

Kaynak: Türkiye’de Bankacılık Sistemi, 1959 – 2022, Temmuz 2023.

Tablo 1’e göre, 2022 yılı itibariyle Ülkemizde kurulmuş 16 yabancı sermayeli mevduat bankalarından aktif büyüklüğüne göre ilk beş banka, satın alma ile yabancı banka statüsüne geçmiştir. Bu beş banka Ülkemiz Bankacılık Sektöründe faaliyet gösteren yabancı sermayeli mevduat bankalarının %21,6 olan piyasa payının %18,9’unu oluşturmaktadır. Bu beş bankadan üçü %8,8 paya sahip Türkiye Garanti Bankası, %4,6 paya sahip QNB Finansbank, %4 paya sahip Denizbank olurken dördüncü ve beşinci sıradaki ING Bank ve HSBC Bank %1’in altında paya sahiptir ve payları sırası ile %0,8 ve %0,7’dir. Geri kalan 11 bankanın aktiflerdeki payı toplamda %2,7’dir.

4.3. Türk Bankacılık Sektöründe Yabancı Bankaların Yeri

Tablo 2: Bankaların Toplam Aktiflere Göre Sektör Payları Oranı, %

	2015	2016	2017	2018	2019	2020	2021	2022
Türk Bankacılık Sektörü	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
Mevduat Bankaları	95,2	94,5	94,3	93,0	92,8	93,2	92,8	93,8
Kamusal Sermayeli	30,1	30,9	32,6	34,1	36,3	41,0	38,6	41,1
Özel Sermayeli	38,0	37,3	36,5	34,4	33,2	30,6	31,8	30,9
Yabancı Sermayeli	26,9	26,2	25,1	24,4	23,2	21,5	22,3	21,8
Kalkınma ve Yatırım Bankaları	4,8	5,5	5,7	7,0	7,2	6,8	7,2	6,2

Kaynak: TBB, Türkiye’de Bankacılık Sistemi 1959 - 2022, Temmuz 2023.

Tablo 2, Türk Bankacılık Sektöründe faaliyet gösteren bankaların 2015-2022 dönemi toplam aktiflere göre sektör paylarını göstermektedir. Buna göre yabancı sermayeli mevduat bankalarının sektördeki payı 2015 yılında %26,9 iken yıllar itibariyle gerilemiş ve 2022 yılında %21,8’e kadar düşmüştür. Yabancı sermayeli mevduat bankalarının sektör payındaki yaklaşık beş puanlık gerilemeye karşın özel sermayeli mevduat bankalarının sektör payı yedi puan gerileyerek, 2015 yılında %38’den 2022 yılında yaklaşık %31’e düşmüştür.

Aynı dönemde kamu sermayeli mevduat bankalarının sektör payı 2015 yılında %30,1 iken on bir puan artarak 2022 yılında %41,1'e yükselmiştir. Yine aynı dönemde kalkınma ve yatırım bankalarının piyasa payı yaklaşık 1,5 puan artarak 2015 yılında %4,8'den 2022 yılında %6,2'ye yükselmiştir. İlgili dönem içerisinde yabancı sermayeli ve özel sermayeli mevduat bankalarının gerileyen payı çoğunlukla kamu sermayeli mevduat bankalarına gitmiştir.

Tablo 3: Bankaların Toplam Krediler ve Alacaklara Göre Sektör Payları, %

	2015	2016	2017	2018	2019	2020	2021	2022
Türk Bankacılık Sektörü	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
Mevduat Bankaları	94,5	93,6	93,1	91,2	91,6	92,1	90,9	93,0
Kamusal Sermayeli	30,0	31,4	33,1	35,7	38,1	41,3	39,1	41,3
Özel Sermayeli	38,0	36,9	35,5	32,4	31,0	29,3	29,8	29,6
Yabancı Sermayeli	26,4	25,3	24,4	23,0	22,4	21,5	21,9	22,0
Kalkınma ve Yatırım Bankaları	5,5	6,4	6,9	8,8	8,4	7,9	9,1	7,0

Kaynak: TBB, Türkiye'de Bankacılık Sistemi 1959 - 2022, Temmuz 2023.

Tablo 3, toplam krediler ve alacaklara göre Türk Bankacılık Sektöründe faaliyet gösteren bankaların sektör paylarını göstermektedir. Bu tablo aktiflere göre sektör paylarındaki gelişmeye benzer şekilde gelişme göstermektedir. Tablo 3'e göre yabancı sermayeli mevduat bankalarının krediler ve alacaklara göre sektördeki payı 2015 yılında %26,4 iken yıllar itibarıyla gerilemiş ve 2022 yılında %22'ye kadar düşmüştür. Yabancı sermayeli mevduat bankalarının sektör payındaki 4,4 puanlık gerilemeye karşın özel sermayeli mevduat bankalarının sektör payı 8,4 puan gerileyerek, 2015 yılında %38'den 2022 yılında yaklaşık %29,6'ya düşmüştür. Aynı dönemde kamu sermayeli mevduat bankalarının krediler ve alacaklara göre sektör payı 2015 yılında %30 iken 11,3 puan artarak 2022 yılında %41,3'e yükselmiştir. Yine aynı dönemde kalkınma ve yatırım bankalarının piyasa payı 1,5 puan artarak 2015 yılında %5,5'ten 2022 yılında %7'ye yükselmiştir. İlgili dönem içerisinde yabancı sermayeli ve özel sermayeli mevduat bankalarının gerileyen payı çoğunlukla kamu sermayeli mevduat bankalarına gitmiştir. Bu durum, bankaların kullandırması olduğu kredilerin miktarının doğrudan aktiflere göre sektör payını etkilediğini göstermektedir. Diğer bankalara göre kullandırılan kredi miktarını artıran banka toplam aktiflere göre sektör payını da artırmış olmaktadır.

Tablo 4: Türkiye'de Kurulmuş Yabancı Sermayeli Mevduat Bankalarının Toplam Aktiflere Göre Sektör Payları, %

	2015	2016	2017	2018	2019	2020	2021	2022
Türk Bankacılık Sektörü	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
Mevduat Bankaları	95,2	94,5	94,3	93,0	92,8	93,2	92,8	93,8
Yabancı Sermayeli	26,9	26,2	25,1	24,4	23,2	21,5	22,3	21,8
Türkiye Garanti Bankası A.Ş.	11,4	10,9	10,5	9,8	9,3	8,7	8,9	8,8
QNB Finansbank A.Ş.	3,8	3,9	4,1	4,3	4,3	4,0	4,4	4,6
Denizbank A.Ş.	3,8	4,0	3,9	3,8	3,7	3,5	3,6	4,0
ING Bank A.Ş.	2,2	1,9	1,7	1,6	1,4	1,1	1,0	0,8
HSBC Bank A.Ş.	1,4	0,9	0,8	0,9	0,8	0,8	0,9	0,7
Toplam	22,6	21,6	21,0	20,4	19,5	18,1	18,8	18,9

Kaynak: TBB, Türkiye'de Bankacılık Sistemi 1959 - 2022, Temmuz 2023.

Tablo 4, Ülkemizde kurulmuş yabancı sermayeli mevduat bankalarından toplam aktiflere göre en büyük paya sahip beş bankanın sektör paylarını göstermektedir. Türkiye'de kurulmuş yabancı sermayeli mevduat bankaları içerisinde 2022 yılına göre %8,8 ile en yüksek paya sahip Garanti Bankası, ikinci sırada %4,6 ile QNB Finansbank, üçüncü sırada %4 ile Denizbank, dördüncü sırada %0,8 ile ING Bank ve beşinci sırada %0,7 ile HSBC Bank gelmektedir. Bu bankalardan Garanti Bankası'nın payı 2015 yılında %11,4 iken 2022 yılında %8,8'e gerilemiş, sektör payı gerileyen diğer bankalar ING Bank ve HSBC Bank olmuştur. ING Bank'ın sektör payı 2015 yılında %2,2 iken 2022 yılında %0,8'e, HSBC Bank'ın 2015 yılında %1,4 olan payı da 2022 yılında %0,7'ye düşmüştür. İncelenen dönem içerisinde toplam aktiflere göre sektör payını artıran bankalar QNB Finansbank ve Denizbank olmuştur. 2015 yılında QNB Finansbank'ın %3,8 olan payı 2022 yılında 0,8 puan artışla %4,6'ya, Denizbank'ın %3,8 olan payı ise sadece 0,2 puan artışla %4'e yükselmiştir. Bu bankaların toplam aktiflere göre sektör

paylarındaki değişimin kaynağı kullandıkları kredi miktarlarındaki değişim olmaktadır. Diğer bankalara göre kullandırılan kredi miktarını artıran banka toplam aktiflere göre sektör payını da artırmaktadır.

Tablo 5: Bankalarda Toplam Mevduatın Toplam Pasiflere Oranı, %

	2015	2016	2017	2018	2019	2020	2021	2022
Mevduat Bankaları	58,7	59,6	58,7	59,9	63,5	62,7	63,6	67,9
Kamusal Sermayeli	62,1	62,0	60,9	60,9	65,3	64,7	66,0	72,9
Özel Sermayeli	58,1	59,5	58,3	59,4	62,2	60,7	60,8	64,5
Yabancı Sermayeli	55,9	57,2	56,6	59,4	62,6	61,9	63,8	66,4

Kaynak: TBB, Türkiye’de Bankacılık Sistemi 1959 - 2022, Temmuz 2023.

Tablo 5, Türk Bankacılık Sektöründe faaliyet gösteren mevduat bankalarının fon kaynakları içerisinde mevduat oranını göstermektedir. 2015 yılında Türk Bankacılık Sektöründe mevduat bankalarının mevduatın toplam pasiflere oranı ortalaması %58,7 iken 2022 yılında yaklaşık dokuz puan artarak %67,9 olmuştur. Yıllar itibariyle bu orandaki yükselme mevduat bankalarının fon kaynakları olarak mevduata daha fazla yöneldiğini göstermektedir. Yabancı sermayeli mevduat bankalarında da bu oran benzer seyir izlemiş, 2015 yılında %55,9 olan mevduatın toplam pasiflere oranı 2022 yılında 10,5 puan yükselerek %66,4 olmuştur. Yabancı sermayeli mevduat bankaları da yıllar itibariyle kamu sermayeli ve özel sermayeli mevduat bankalarında olduğu gibi fon kaynağı olarak mevduata yönelmişlerdir.

Tablo 6: Türkiye’de Kurulmuş Yabancı Sermayeli Mevduat Bankalarında Toplam Mevduat / Toplam Pasif Oranı, %

	2015	2016	2017	2018	2019	2020	2021	2022
Mevduat Bankaları	58,7	59,6	58,7	59,9	63,5	62,7	63,6	67,9
Yabancı Sermayeli	55,9	57,2	56,6	59,4	62,6	61,9	63,8	66,4
Türkiye Garanti Bankası A.Ş.	55,4	56,7	55,7	60,7	63,6	65,2	67,7	68,6
Denizbank A.Ş.	55,3	61,3	62,2	61,1	64,1	61,9	60,5	67,2
QNB Finansbank A.Ş.	56,7	53,1	53,7	55,3	58,1	57,5	61,1	65,5
ING Bank A.Ş.	48,0	50,8	52,4	55,3	68,6	65,7	64,2	68,1
HSBC Bank A.Ş.	60,2	62,2	66,5	75,8	79,6	71,3	76,6	81,0

Kaynak: TBB, Türkiye’de Bankacılık Sistemi 1959 - 2022, Temmuz 2023.

Tablo 6, Ülkemizde kurulmuş yabancı sermayeli mevduat bankalarının ilgili yıllara ait toplam mevduatın toplam pasiflere oranını göstermektedir. İncelenen dönem boyunca bu banka grubunun sahip olduğu oran artsa da ağırlıklı olarak mevduat bankalarının sahip olduğu ortalama oranın altında kalmıştır. Bu grupta yer alan tüm bankalar da sahip olduğu oranı artırmışlardır. Bu banka grubu içerisinde en yüksek orana sahip banka HSBC Bank olurken en düşük orana sahip banka ise 2015 yılında ING Bank, 2022 yılında QNB Finansbank olmuştur. HSBC Bank 2015 yılında %60,2 orana sahipken bu oran yıllar itibariyle artış göstererek 2022 yılında %81’e yükselmiştir. Buna göre HSBC Bank 2022 yılında fon kaynaklarının büyük çoğunluğunu mevduat yoluyla temin etmiştir. ING Bank 2015 yılında %48 oranı ile bu yıldaki en düşük mevduatın toplam pasiflere oranına sahip banka olmuştur. Bu oran, mevduat bankaları ortalaması olan %58,7’nin yaklaşık on puan, Türkiye’de kurulmuş yabancı sermayeli mevduat bankaları ortalaması olan %55,9’un sekiz puan altında kalmıştır. 2022 yılında hem mevduat bankaları ortalaması olan %67,9’un hem de Türkiye’de kurulmuş yabancı sermayeli mevduat bankaları ortalaması olan %66,4’ün altında kalan banka %65,5 ile QNB Finansbank olmuştur.

Tablo 7: Bankaların Toplam Krediler / Toplam Varlıklar Oranı (%)

	2015	2016	2017	2018	2019	2020	2021	2022
Türk Bankacılık Sektörü	65,2	66,1	66,9	64,7	65,5	63,7	57,5	56,6
Mevduat Bankaları	64,7	65,5	66,1	63,4	64,7	63,0	56,3	56,1
Kamusal Sermayeli	64,9	67,2	67,9	67,6	68,8	64,2	58,2	56,9
Özel Sermayeli	65,2	65,5	65,1	61,0	61,2	61,0	53,9	54,2
Yabancı Sermayeli	63,8	63,8	65,2	61,0	63,3	63,6	56,5	57,1
Kalkınma ve Yatırım Bankaları	75,8	76,6	81,2	81,7	76,4	73,6	72,6	64,0

Kaynak: TBB, Türkiye’de Bankacılık Sistemi Seçilmiş Rasyolar 2012 - 2022, Ağustos 2023.

Tablo 7, Türk Bankacılık Sektöründe faaliyet gösteren bankaların fon kullanım alanları içerisinde kredilerin payını göstermektedir. Tablo 7'ye göre bankaların 2015 yılına göre 2022 yılında kullandırmış olduğu kredileri önemli ölçüde (yaklaşık on puan) azalttığı dikkat çekmektedir. Kullandırılan kredilerin azalması DuPont yönteminde özkaynak çarpanını düşürerek özkaynak karlılığını etkilemektedir. Bu konuya sonraki başlıklarda değinilecektir. Tablo 7'ye göre Türk Bankacılık sektöründe faaliyet gösteren bankaların kullandırdıkları kredilerin toplam varlıklara oranı ortalaması 2015 yılında %65,2 iken 2020 yılından itibaren önemli ölçüde azalmaya başlamış ve 2022 yılında %56,6'ya gerilemiştir. Bu azalma mevduat bankalarında yaklaşık 8,5 puan olurken kalkınma ve yatırım bankalarında yaklaşık 12 puan olmuştur. Sermaye sahipliğine göre mevduat bankalarına baktığımızda yabancı sermayeli mevduat bankaları 2015 yılında %63,8 ile banka grupları içerisinde en düşük orana sahipken 2022 yılında bu oran 6,7 puan gerileyerek %57,1'e düşmüştür ancak bu oran ile sermaye sahipliğine göre banka grupları içerisinde en yüksek orana sahip olan banka grubu olmuştur. Kamu sermayeli mevduat bankalarında 2015 yılında %64,9 olan oran, 2019 yılında %68,8'e kadar çıksa da 2022 yılında 2015 yılına göre sekiz puan gerileyerek %56,9'a, özel sermayeli mevduat bankalarında ise 2015 yılında %65,2 olan oran 11 puan gerileyerek 2022 yılında %54,2'ye düşmüştür. Yabancı sermayeli mevduat bankaları, 2015 yılından 2019 yılına kadar hem bankacılık sektörü ortalamasının hem de mevduat bankaları ortalamasının altında kalmış, 2020 ve 2021 yıllarında bankacılık sektörü ortalamasının altında, mevduat bankaları ortalamasının üzerinde yer almış, 2022 yılında ise hem bankacılık sektörü hem de mevduat bankaları ortalaması üzerinde orana sahip olmuşlardır.

Tablo 8: Türkiye'de Kurulmuş Yabancı Sermayeli Mevduat Bankalarının Toplam Krediler / Toplam Varlıklar Oranı (%)

	2015	2016	2017	2018	2019	2020	2021	2022
Mevduat Bankaları	64,7	65,5	66,1	63,4	64,7	63,0	56,3	56,1
Yabancı Sermayeli	63,8	63,8	65,2	61,0	63,3	63,6	56,5	57,1
Türkiye Garanti Bankası A.Ş.	62,6	65,5	64,5	62,1	64,2	63,9	<u>56,1</u>	58,1
Denizbank A.Ş.	61,0	59,9	62,9	63,3	67,6	67,8	61,3	<u>57,2</u>
QNB Finansbank A.Ş.	66,8	62,0	65,7	59,7	65,5	65,7	<u>57,3</u>	60,1
ING Bank A.Ş.	71,5	70,1	72,7	65,0	60,7	63,3	<u>57,4</u>	63,3
HSBC Bank A.Ş.	64,7	58,1	61,8	47,8	50,3	60,4	<u>39,4</u>	44,2

Kaynak: TBB, Türkiye'de Bankacılık Sistemi Seçilmiş Rasyolar 2012 - 2022, Ağustos 2023.

Tablo 8, Ülkemizde kurulmuş yabancı sermayeli mevduat bankalarının sahip olduğu toplam kredilerin toplam varlıklara oranını göstermektedir. Tablo 8'e göre 2015 yılında en yüksek orana sahip banka %71,5 ile ING Bank olurken, en düşük orana sahip banka %61 ile Denizbank olmuştur. 2022 yılında da en yüksek orana sahip banka %63,3 ile ING Bank iken en düşük orana sahip banka %44,2 ile HSBC Bank olmuştur. HSBC Bank 2015 yılı hariç incelenen dönem boyunca mevduat bankaları ortalamasının altında orana sahipken, Türkiye Garanti Bankası incelenen sekiz yılın beş yılında, Denizbank dört yılında, QNB Finansbank ise üç yılında mevduat bankaları ortalamasının altında kalmıştır. ING Bank incelenen dönem boyunca mevduat bankaları ortalamasının üzerinde oranla faaliyetine devam etmiştir. Türkiye Garanti Bankası'nın sahip olduğu oran 2015 yılında %62,6 iken 4,5 puanlık gerileme ile 2022 yılında %58,1'e, Denizbank'ın oranı 2015 yılında %61 iken 3,8 puanlık gerileme ile 2022 yılında %57,2'ye, QNB Finansbank'ın 2015 yılında %66,8 iken 6,7 puanlık gerileme ile 2022 yılında %60,1'e, ING Bank'ın 2015 yılında %71,5 iken 8,2 puanlık gerileme ile 2022 yılında %63,3'e, HSBC Bank'ın 2015 yılında %64,7 iken 20,5 puanlık gerileme ile 2022 yılında %44,2'ye düşmüştür. Burada en dikkat çekici düşüşün 20,5 puanlık düşüş ile HSBC Bank'ta olduğu görülmektedir. İncelenen dönem boyunca bankaların en düşük orana sahip olduğu yıllara bakıldığında; sadece Denizbank'ın 2022 yılı iken diğer bankaların 2021 yılı olduğu dikkat çekmektedir. Burada da yine en dikkat çekici orana sahip banka %39,4 ile HSBC Bank olmuştur.

5. TÜRK BANKACILIK SEKTÖRÜNDE FAALİYET GÖSTEREN YABANCI SERMAYELİ MEVDUAT BANKALARININ FİNANSAL PERFORMANSLARININ DUPONT YÖNTEMİNE GÖRE ANALİZİ: 2015 - 2022 DÖNEMİ

5.1. Mevduat Bankalarının Özkaynak Karlılığı (Aktif Karlılığı x Özkaynak Çarpanı)

Bir bankanın özkaynak karlılığı, dönem net karının özkaynaklara bölünmesi ile elde edilir. Özkaynak karlılığı ayrıca denklem 2'de belirtildiği gibi aktif karlılığı ile özkaynak çarpanı çarpımından da elde edilmektedir. Bu

denklem, özkaynak karlılığı ile ilgili problem olduğunda bu problemin kaynağının belirlenmesi açısından önemli fikir vermektedir. Tablo 9, özkaynak karlılığını aktif karlılığı ve özkaynak çarpanı bileşenleri olarak göstermektedir.

Tablo 9: Mevduat Bankalarının Özkaynak Karlılığı ve Bileşenleri (Aktif Karlılığı x Özkaynak Çarpanı)

Özkaynak Karlılığı (Net Dönem Karı / Özkaynak) (%)									
Mevduat Bankaları	2015	2016	2017	2018	2019	2020	2021	2022	Ortalama
Kamu Sermayeli	14,7	16,1	17,5	13,9	8,7	9,7	6,5	27,0	14,3
Özel Sermayeli	9,0	13,5	14,0	13,5	10,0	10,8	17,5	50,0	17,3
Yabancı Sermayeli	11,0	12,3	14,7	14,8	12,5	10,3	17,1	45,7	17,3
TBS Ortalaması	10,8	13,5	14,9	13,8	10,6	10,5	14,0	40,2	16,0
Aktif Karlılığı (Net Dönem Karı / Aktifler) (%)									
Mevduat Bankaları	2015	2016	2017	2018	2019	2020	2021	2022	Ortalama
Kamu Sermayeli	1,5	1,6	1,7	1,2	0,7	0,8	0,4	1,8	1,2
Özel Sermayeli	1,0	1,5	1,5	1,5	1,2	1,2	1,8	5,7	1,9
Yabancı Sermayeli	1,2	1,4	1,7	1,7	1,5	1,2	1,7	4,6	1,9
Sektör Ortalaması	1,2	1,5	1,7	1,5	1,2	1,1	1,2	3,7	1,6
Özkaynak Çarpanı (Toplam Aktifler / Özkaynaklar) (X)									
Mevduat Bankaları	2015	2016	2017	2018	2019	2020	2021	2022	Ortalama
Kamu Sermayeli	9,8	10,2	10,6	10,9	11,3	12,7	17,0	13,5	12,0
Özel Sermayeli	9,0	9,1	8,8	8,5	8,2	8,8	10,8	8,9	9,0
Yabancı Sermayeli	9,2	8,9	8,7	8,6	8,2	8,8	11,1	9,9	9,2
Sektör Ortalaması	8,9	9,0	9,0	9,0	8,9	9,9	12,5	10,5	9,7

Kaynak: TBB, Türkiye'de Bankacılık Sistemi, 1959-2022, Temmuz 2023; TBB, Türkiye'de Bankacılık Sistemi Seçilmiş Rasyolar, 2012-2022, Ağustos 2023.

Tablo 9'da, yabancı sermayeli mevduat bankalarının durumu incelendiğinde; 2016, 2017 ve 2020 yıllarında sektör ortalamasının altında özkaynak karlılığına sahip olduğu görülmektedir. Özkaynak karlılığının aktif karlılığı ile özkaynak çarpanı çarpımı bileşenlerinden oluştuğu dikkate alındığında yabancı sermayeli mevduat bankalarının aktif karlılığının sadece 2016 yılında sektör ortalamasından düşük olduğu, bununla birlikte özkaynak çarpanının da 2015 yılı hariç incelenen dönem boyunca sektör ortalamasının altında kaldığı görülmektedir. Bu çerçevede yabancı sermayeli mevduat bankalarının 2016, 2017 ve 2020 yıllarında özkaynak karlılığının sektör ortalamasından düşük olmasının nedeni özkaynak çarpanının sektör ortalamasının altında kalmasının yanında 2016 yılı için esas neden aktif karlılığının düşük olmasıdır. 2015 yılı hariç incelenen yıllarda özkaynak çarpanı sektör ortalamasının altında kalmasına rağmen sadece üç yılda özkaynak karlılığı sektör ortalamasının altında kalmıştır. 2017 yılında yabancı sermayeli mevduat bankalarının aktif karlılığı sektör ortalaması ile aynı olmasına, 2020 yılında sektör ortalamasından yüksek olmasına rağmen özkaynak çarpanının sektör ortalamasının altında kalması nedeniyle 2017 ve 2020 yıllarında özkaynak karlılığı sektör ortalamasının altında kalmıştır. Bu durum, bankaların kullandığı kredi miktarının özkaynak karlılığını etkileyebileceğini göstermektedir.

5.2. Mevduat Bankalarının Aktif Karlılığı (Kar Marjı x Aktif Verimliliği)

Bir bankanın aktif karlılığı, dönem net karının toplam aktiflere bölünmesi ile elde edilir. Aktif karlılığı ayrıca denklem 4'te belirtildiği gibi kar marjı ile aktif verimliliğinin çarpımından da elde edilmektedir. Bu denklem, aktif karlılığı ile ilgili problem olduğunda bu problemin kaynağının belirlenmesi açısından önemli fikir vermektedir. Tablo 10, aktif karlılığını kar marjı ve aktif verimliliği bileşenleri olarak göstermektedir.

Tablo 10: Mevduat Bankalarının Aktif Karlılığı ve Bileşenleri (Kar Marjı x Aktif Verimliliği)

Aktif Karlılığı (Net Dönem Karı / Aktifler) (%)									
Mevduat Bankaları	2015	2016	2017	2018	2019	2020	2021	2022	Ortalama
Kamu Sermayeli	1,5	1,6	1,7	1,2	0,7	0,8	0,4	1,8	1,2
Özel Sermayeli	1,0	1,5	1,5	1,5	1,2	1,2	1,8	5,7	1,9
Yabancı Sermayeli	1,2	1,4	1,7	1,7	1,5	1,2	1,7	4,6	1,9
Sektör Ortalaması	1,2	1,5	1,7	1,5	1,2	1,1	1,2	3,7	1,6
Kar Marjı (Net Kar / Toplam Gelir*) (%)									
Mevduat Bankaları	2015	2016	2017	2018	2019	2020	2021	2022	Ortalama

Kamu Sermayeli	16,8	17,2	17,3	11,1	6,7	8,6	4,5	13,6	7,7
Özel Sermayeli	13,0	16,0	16,7	13,1	10,5	13,3	17,0	34,3	13,1
Yabancı Sermayeli	10,3	14,3	16,9	13,3	11,9	12,1	15,6	29,3	12,4
Sektör Ortalaması	14,0	16,4	17,5	13,0	10,4	12,0	12,5	25,4	11,3
Aktif Verimliliği (Toplam Gelir/Toplam Aktifler) (%)									
Mevduat Bankaları	2015	2016	2017	2018	2019	2020	2021	2022	Ortalama
Kamu Sermayeli	8,3	8,6	8,8	10,6	10,5	7,7	8,2	10,9	9,2
Özel Sermayeli	8,3	8,7	8,8	11,4	11,0	8,7	8,6	13,8	9,9
Yabancı Sermayeli	8,6	9,0	9,3	12,0	12,1	8,9	8,9	13,0	10,2
Sektör Ortalaması	8,2	8,6	8,7	10,9	10,7	8,1	8,2	12,1	9,4

Kaynak: TBB, Türkiye'de Bankacılık Sistemi, 1959-2022, Temmuz 2023; TBB, Türkiye'de Bankacılık Sistemi Seçilmiş Rasyolar, 2012-2022, Ağustos 2023.

*Toplam Gelirler = Faiz Gelirleri + Temettü Gelirleri + Net Ticari Kar/Zarar + Net Ücret Komisyon Gelirleri + Diğer Faaliyet Gelirleri

Tablo 10'da yabancı sermayeli mevduat bankalarının durumu incelendiğinde; 2016 yılında aktif karlılığının sektör ortalamasının altında kaldığı görülmektedir. Tablo 10, aktif karlılığının sektör ortalamasının altında kalmasının nedenlerini ortaya koymaktadır. Buna göre 2016 yılında yabancı sermayeli mevduat bankalarının toplam gelirlerin toplam aktiflere oranından oluşan aktif verimliliği sektör ortalamasının üzerinde olmasına rağmen net karın toplam gelirlere oranından oluşan kar marjının sektör ortalamasının altında kalması sebebiyle 2016 yılında aktif karlılığı sektör ortalamasının altında kalmıştır. 2015 ve 2017 yıllarında da kar marjının sektör ortalamasının altında olmasına rağmen aktif karlılığının sektör ortalaması ile aynı olmasının nedeni, bu yılları da kapsayan incelenen dönem boyunca aktif verimliliğinin sektör ortalamasının üzerinde olmasıdır. Bu durum, bankaların aktiflerinin krediler ve menkul kıymetler gibi gelir getirici yatırımlarda değerlendirilmesinin önemini ortaya koymaktadır.

5.2. Mevduat Bankalarının Özkaynak Karlılığı Bileşenleri (Kar Marjı X Aktif Verimliliği X Özkaynak Çarpanı)

Yukarıda da değinildiği gibi, bir bankanın özkaynak karlılığı, dönem net karının özkaynaklara bölünmesi ile elde edildiği gibi ayrıca denklem 5'te de belirtildiği şekilde kar marjı ile aktif verimliliği ve özkaynak çarpanının çarpımından da elde edilmektedir. Nihai olarak bu denklem, özkaynak karlılığında ortaya çıkacak problemin kaynağının kar marjından mı, aktif verimliliğinden mi yoksa kullanılan kredi miktarını da içeren özkaynak çarpanından mı kaynaklandığını belirlenmesi açısından büyük kolaylık sağlamaktadır. Tablo 11, özkaynak karlılığını kar marjı, aktif verimliliği ve özkaynak çarpanı bileşenleri olarak göstermektedir.

Tablo 11: Mevduat Bankalarının Özkaynak Karlılığı Bileşenleri (Kar Marjı X Aktif Verimliliği X Özkaynak Çarpanı)

Özkaynak Karlılığı (Kar Marjı X Aktif Verimliliği X Özkaynak Çarpanı) (%)									
Mevduat Bankaları	2015	2016	2017	2018	2019	2020	2021	2022	Ortalama
Kamu Sermayeli	14,7	16,1	17,5	13,9	8,7	9,7	6,5	27,0	14,3
Özel Sermayeli	9,0	13,5	14,0	13,5	10,0	10,8	17,5	50,0	17,3
Yabancı Sermayeli	11,0	12,3	14,7	14,8	12,5	10,3	17,1	45,7	17,3
Sektör Ortalaması	10,8	13,5	14,9	13,8	10,6	10,5	14,0	40,2	16,0
Kar Marjı (Net Kar / Toplam Gelir**) (%)									
Mevduat Bankaları	2015	2016	2017	2018	2019	2020	2021	2022	Ortalama
Kamu Sermayeli	16,8	17,2	17,3	11,1	6,7	8,6	4,5	13,6	7,7
Özel Sermayeli	13,0	16,0	16,7	13,1	10,5	13,3	17,0	34,3	13,1
Yabancı Sermayeli	10,3	14,3	16,9	13,3	11,9	12,1	15,6	29,3	12,4
Sektör Ortalaması	14,0	16,4	17,5	13,0	10,4	12,0	12,5	25,4	11,3
Aktif Verimliliği (Toplam Gelir/Toplam Aktifler) (%)									
Mevduat Bankaları	2015	2016	2017	2018	2019	2020	2021	2022	Ortalama
Kamu Sermayeli	8,3	8,6	8,8	10,6	10,5	7,7	8,2	10,9	9,2
Özel Sermayeli	8,3	8,7	8,8	11,4	11,0	8,7	8,6	13,8	9,9
Yabancı Sermayeli	8,5	9,0	9,3	12,0	12,1	8,9	8,9	13,0	10,2
Sektör Ortalaması	8,2	8,6	8,7	10,8	10,7	8,1	8,2	12,1	9,4

Özkaynak Çarpanı (Toplam Aktifler / Özkaynaklar) (X)									
Mevduat Bankaları	2015	2016	2017	2018	2019	2020	2021	2022	Ortalama
Kamu Sermayeli	9,8	10,2	10,6	10,9	11,3	12,7	17,0	13,5	12,0
Özel Sermayeli	9,0	9,1	8,8	8,5	8,2	8,8	10,8	8,9	9,0
Yabancı Sermayeli	9,2	8,9	8,7	8,6	8,2	8,8	11,1	9,9	9,2
Sektör Ortalaması	8,9	9,0	9,0	9,0	8,9	9,9	12,5	10,5	9,7

Kaynak: TBB, Türkiye'de Bankacılık Sistemi, 1959-2022, Temmuz 2023.; TBB, Türkiye'de Bankacılık Sistemi Seçilmiş Rasyolar, 2012-2022, Ağustos 2023.

Tablo 11'de yabancı sermayeli mevduat bankalarının durumu incelendiğinde; özkaynak karlılığını olumsuz etkileyen iki değişken göze çarpmaktadır. Bunlardan birincisi özkaynak çarpanı, ikincisi kar marjıdır. Yabancı sermayeli mevduat bankaları incelenen dönem boyunca sektör ortalamasının üzerinde aktif verimliliği elde etmiş ancak özellikle kredilere bağlı olarak düşük özkaynak çarpanı kullanmıştır. İncelenen dönemde özellikle 2016 ve 2017 yıllarında düşük özkaynak çarpanı ile birlikte düşük kar marjı bu yıllardaki özkaynak karlılığını düşürmüştür. Ayrıca 2020 yılında sadece düşük özkaynak çarpanı bu yıldaki özkaynak karlılığını sektör ortalamasının altında kalmasına yol açmıştır. Bankaların yapmış olduğu gelir getirici yatırımların özellikle vermiş olduğu kredilerin miktarı ile birlikte bu kredilerden elde ettikleri gelir de önemlidir. Elde edilen gelirin toplam aktiflere oranı tek başına özkaynak karlılığını yükseltmeye yeterli olmadığı durumda kar marjının da yüksek olması gerekmektedir.

6. SONUÇ

Türk Bankacılık Sektöründe faaliyet gösteren mevduat bankalarının 2015-2022 dönemi toplam aktiflere göre sektör payları incelendiğinde; yabancı sermayeli mevduat bankalarının sektördeki payı 2015 yılında %26,9 iken yıllar itibariyle gerilemiş ve 2022 yılında %21,8'e kadar düşmüştür. Yabancı sermayeli mevduat bankalarının sektör payındaki yaklaşık beş puanlık gerilemeye karşın özel sermayeli mevduat bankalarının sektör payı yedi puan gerileyerek, 2015 yılında %38'den 2022 yılında yaklaşık %31'e düşmüştür. Aynı dönemde kamu sermayeli mevduat bankalarının sektör payı 2015 yılında %30,1 iken on bir puan artarak 2022 yılında %41,1'e yükselmiştir. Yine aynı dönemde kalkınma ve yatırım bankalarının piyasa payı yaklaşık 1,5 puan artarak 2015 yılında %4,8'den 2022 yılında %6,2'ye yükselmiştir. Toplam krediler ve alacaklara göre Türk Bankacılık Sektöründe faaliyet gösteren mevduat bankalarının sektör payları incelendiğinde; aktiflere göre sektör paylarındaki gelişmeye benzer şekilde gelişme göstermektedir. Yabancı sermayeli mevduat bankalarının krediler ve alacaklara göre sektördeki payı 2015 yılında %26,4 iken yıllar itibariyle gerilemiş ve 2022 yılında %22'ye kadar düşmüştür. Yabancı mevduat bankalarının sektör payındaki 4,4 puanlık gerilemeye karşın özel sermayeli mevduat bankalarının sektör payı 8,4 puan gerileyerek, 2015 yılında %38'den 2022 yılında yaklaşık %29,6'ya düşmüştür. Aynı dönemde kamu sermayeli mevduat bankalarının krediler ve alacaklara göre sektör payı 2015 yılında %30 iken 11,3 puan artarak 2022 yılında %41,3'e yükselmiştir. Yine aynı dönemde kalkınma ve yatırım bankalarının piyasa payı 1,5 puan artarak 2015 yılında %5,5'ten 2022 yılında %7'ye yükselmiştir. İlgili dönem içerisinde yabancı sermayeli ve özel sermayeli mevduat bankalarının gerileyen payı çoğunlukla kamu sermayeli mevduat bankalarına gitmiştir.

Özkaynak karlılığı aktif karlılığı ile özkaynak çarpanı çarpımı bileşeninde oluşmaktadır. Yabancı sermayeli mevduat bankalarının durumu incelendiğinde; 2016, 2017 ve 2020 yıllarında sektör ortalamasının altında özkaynak karlılığına sahip olduğu görülmektedir. Özkaynak karlılığının aktif karlılığı ile özkaynak çarpanı çarpımı bileşenlerinden oluştuğu dikkate alındığında yabancı sermayeli mevduat bankalarının aktif karlılığının sadece 2016 yılında sektör ortalamasından düşük olduğu, bununla birlikte özkaynak çarpanının da 2015 yılı hariç incelenen dönem boyunca sektör ortalamasının altında kaldığı görülmektedir. Bu çerçevede yabancı sermayeli mevduat bankalarının 2016, 2017 ve 2020 yıllarında özkaynak karlılığının sektör ortalamasından düşük olmasının nedeni özkaynak çarpanının sektör ortalamasının altında kalmasının yanında 2016 yılı için esas neden aktif karlılığının düşük olmasıdır. 2015 yılı hariç incelenen yıllarda özkaynak çarpanı sektör ortalamasının altında kalmasına rağmen sadece üç yılda özkaynak karlılığı sektör ortalamasının altında kalmıştır. 2017 yılında yabancı sermayeli mevduat bankalarının aktif karlılığı sektör ortalaması ile aynı olmasına, 2020 yılında sektör ortalamasından yüksek olmasına rağmen özkaynak çarpanının sektör ortalamasının altında kalması nedeniyle 2017 ve 2020 yıllarında özkaynak karlılığı sektör ortalamasının altında kalmıştır. Bu durum bankaların kullandığı kredi miktarının özkaynak karlılığını etkileyebileceğini göstermektedir. Yabancı sermayeli mevduat bankalarının kar marjı ile aktif verimliliğinin çarpımından oluşan aktif karlılığı incelendiğinde; 2016 yılında aktif karlılığının sektör ortalamasının altında kaldığı görülmektedir. 2016 yılında yabancı sermayeli mevduat

bankalarının toplam gelirlerin toplam aktiflere oranından oluşan aktif verimliliği sektör ortalamasının üzerinde olmasına rağmen net karın toplam gelire oranından oluşan kar marjının sektör ortalamasının altında kalması sebebiyle 2016 yılında aktif karlılığı sektör ortalamasının altında kalmıştır. 2015 ve 2017 yıllarında da kar marjının sektör ortalamasının altında olmasına rağmen aktif karlılığının sektör ortalaması ile aynı olmasının nedeni, bu yılları da kapsayan incelenen dönem boyunca aktif verimliliğinin sektör ortalamasının üzerinde olmasıdır.

Çalışma sonucunda yabancı sermayeli mevduat bankalarının özkaynak karlılığını olumsuz etkileyen iki değişken ortaya konmuştur. Bunlardan birincisi özkaynak çarpanı, ikincisi kar marjıdır. Yabancı sermayeli mevduat bankaları incelenen dönem boyunca sektör ortalamasının üzerinde aktif verimliliği elde etmiş ancak özellikle kredilere bağlı olarak düşük özkaynak çarpanı kullanmış, incelenen dönemde özellikle 2016 ve 2017 yıllarında düşük özkaynak çarpanı ile birlikte düşük kar marjı bu yıllardaki özkaynak karlılığını düşürmüştür. Ayrıca 2020 yılında sadece düşük özkaynak çarpanı bu yıldaki özkaynak karlılığını sektör ortalamasının altında kalmasına yol açmıştır. Bankaların yapmış olduğu gelir getirici yatırımların özellikle vermiş olduğu kredilerin miktarı ile birlikte bu kredilerden elde ettikleri gelir de önemlidir. Elde edilen gelirin toplam aktiflere oranı tek başına özkaynak karlılığını yükseltmeye yeterli olmadığı durumda kar marjının da yüksek olması gerekmektedir.

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Münazara Etkinliğinin Üniversite Öğrencilerinin Psikolojik Dayanıklılık Düzeylerine Etkisinin İncelenmesi¹

Doç. Dr. Gökhan KERSE¹

Dr. Öğr. Üyesi Onur OKTAYSOY²

¹ Kafkas Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, Yönetim Bilişim Sistemleri Bölümü,
gokhankerse@hotmail.com, ORCID: 0000-0002-1565-9110

²Kafkas Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, Yönetim Bilişim Sistemleri Bölümü,
onurkavak@kafkas.edu.tr, ORCID: 0000-0002-8623-614X

Özet: Bu çalışma münazara etkinliğinin üniversite öğrencilerinin psikolojik dayanıklılık düzeylerinde farklılık ortaya çıkıp çıkarmadığını incelemeyi amaçlamıştır. Çalışmada bu amaç için bir devlet üniversitesinin fakültesindeki bir bölümden 20 deney ve 20 kontrol grubu olmak üzere toplamda 40 öğrenci çalışmaya dahil edilmiştir. Ancak bunun yanında deney grubunu izlemek ve gruptaki öğrencileri değerlendirmek için 20 kişi de izleyici grup oluşturulmuştur. Bu öğrencilere münazara etkinliği öncesi gerekli bilgilendirme yapılmış ve çalışmanın 10 hafta süreceği belirtilmiştir. Sonrasında etkinlik öncesinde kendilerine anket dağıtılmış ve doldurmaları istenmiştir. Münazara etkinliği için deney grubunun altında iki alt grup oluşturulmuştur. Bu gruplara tartışma konuları verilmiştir. Tartışma konusu için grubun birisi olumlu yönleriyle diğeri ise olumsuz yönleriyle konuları tartışmıştır. Bu etkinlik bir moderatör eşliğinde devam etmiştir. 10 haftanın sonunda öğrencilere anket yeniden yapılmış ve psikolojik dayanıklılık düzeylerinde farklılığın olup olmadığı belirlenmeye çalışılmıştır. Bunun için öncelikle veriler SPSS programına aktarılmıştır. Sonrasında kontrol ve deney grubunun ön test ortalamaları arasında farklılığın olup olmadığına bakılmış ve farklılık bulunmadığı görülmüştür. Daha sonrasında kontrol grubunun ön test-son test ortalamalarının farklılık göstermediği belirlenmiştir. Son olarak deney grubunda ön test-son test ortalamalarının farklılık gösterip göstermediği incelenmiş ve anlamlı düzeyde farklılığın olduğu tespit edilmiştir. Dolayısıyla da münazara etkinliğinin öğrencilerin psikolojik dayanıklılık düzeylerini etkilediği ve bu etkinin artış yönünde gerçekleştiği gözlenmiştir.

Anahtar Kelimeler: Münazara, Psikolojik Dayanıklılık, Üniversite Öğrencileri

Investigating the Effect of Debate Activity on University Students' Psychological Resilience Levels

Abstract: This study aimed to examine whether the debate activity makes a difference in the psychological resilience levels of university students. For this purpose, a total of 40 students, 20 experimental and 20 control groups, from a department in the faculty of a state university were included in the study. However, an audience group of 20 students was also formed to monitor the experimental group and evaluate the students in the group. These students were informed before the debate activity and it was stated that the study would last for 10 weeks. Afterwards, a questionnaire was distributed to them before the activity and they were asked to fill it out. Two subgroups were formed under the experimental group for the debate activity. These groups were given discussion topics. For the discussion topic, one group discussed the positive aspects and the other group discussed the negative aspects. This activity continued under the supervision of a moderator. At the end of 10 weeks, the questionnaire form was filled out again and it was tried to determine whether there was a difference in psychological resilience levels. For this purpose, the data were first entered into the SPSS program. Afterwards, it was checked whether there was a difference between the pre-test averages of the control and experimental groups, and it was seen that there was no difference. Afterward, it was determined that the pretest-posttest averages of the control group did not differ. Finally, it was examined whether the pretest-posttest averages differed in the experimental group, and it was determined that there was a significant difference. Therefore, it was observed that the debate activity effected the psychological resilience levels of the students, and this effect was observed to increase.

Keywords: Debate, Psychological Resilience, University Students

1. GİRİŞ

Münazara faaliyetinin Sokrates'in eleştirel düşünerek "gerçeği" arayıp bulma sürecine dayandığı, bu sürecin belirli bir konudaki ifadelerin veya önermelerin güçlü ve zayıf yönlerinin mantıksal olarak değerlendirilmesi ve bu konudaki görüşlerin karşılaştırılması yoluyla tamamlandığı öne sürülmektedir (Çabuk ve Yeni, 2016). Dolayısıyla da münazara belirli bir konuda farklı görüşe sahip iki grubun görüşlerini savunması ve karşı tarafa mantıksal gerekçelerle bu görüşleri sunmasıdır (Freeley ve Steinberg, 2013). Bir eğitim modeli olarak da ele alınabilen münazara kritik düşünmeyi, muhakeme etmeyi ve akıl yürütmeyi sağlayarak bireylerin

¹ Gökhan KERSE'nin yürütücülüğünü yaptığı Kafkas Üniversitesi Bilimsel Araştırma Projeleri Biriminin desteklediği proje (Proje No: 2023-SB-01) verilerinden elde edilmiştir.

yetiştirilebilmesinde etkin bir araç olarak kullanılabilmekte (Oktaysoy ve Kerse, 2023) ve bireyleri farklı şekillerde etkileyebilmektedir. Örneğin; Yusop ve Sumari (2015) yaptıkları dersteki konuyu öğrenmeye ilişkin en kolay yöntemlerden birisinin sınıf-ıçi münazara etkinliği olduğunu belirlemişlerdir. Çabuk ve Yeni (2016) okul öncesi eğitimde sınıf içindeki münazara uygulamalarının bilişsel, sosyo-duygusal ve dil gelişiminde olumlu yönde değişimlerin ortaya çıkmasını sağladığını tespit etmişlerdir. Oktaysoy ve Kerse, (2023) yaptıkları çalışmada üniversite öğrencilerinin yaptıkları münazara etkinliğinin onların mental iyi oluş düzeylerini arttırdığını bulgulamıştır. Karatay ve Demirel (2020) münazara etkinliklerinin öğretmen adaylarının hem konuşma kaygılarını azalttığını hem de birbirleri ile olan sınıf içi iletişimlerini artırdığını belirlemişlerdir. Chen ve arkadaşları (2022) münazara etkinliğinin öğrencilerin genel eleştirel düşünme derinliğini arttırdığını tespit ederken, Goodwin (2003) iletişimi ve ders konularına ilişkin farklı bakış açılarını teşvik etmek için münazaranın önemli olduğunu öne sürmüştür. Tüm bu bulgular münazara etkinliğinin bireyler üzerinde önemli düzeyde bir etkisinin olduğunu açıkça göstermektedir. Bu çalışmada ise bu etkinliğin psikolojik dayanıklılık üzerinde etkisinin olabileceği düşünülmüştür.

Psikolojik dayanıklılık, bireylerin gerek özel hayat gerekse iş hayatında karşılaştıkları engeller ve güçlükler karşısında yılmamalarını ve bunların üstesinden gelebilme yeteneklerini ifade etmektedir (Çetin vd., 2015). Bu yetenek yapılan çalışmalarda başlangıçta belirli bir sorunla karşılaşılması durumunda bireyi koruyan psikolojik özelliklerle sınırlandırılırken sonraki dönemlerde sosyal deneyimleri de içerdiği öne sürülmüştür (Çetin ve Anuk, 2020). Çalışmalarda psikolojik dayanıklılığın kendini toparlama gücü olarak ifade edildiği (Garmezy, 1993), bu güce sahip bireylerin stresli durumlar karşısında sakinliklerini korudukları, zorluklara meydan okudukları, ortaya çıkan değişimlere uyum sağlayabildikleri, etkili bir şekilde iletişim kurabildikleri ve yaşamlarından daha fazla memnun oldukları belirtilmiştir (Kaba ve Keklik, 2016). Bu nedenle de psikolojik dayanıklılığın bireylerin yaşamlarında önemli olduğu ve öğrenilip uygulanması gerektiği belirtilmiş (Richardson, 2002), dolayısıyla psikolojik dayanıklılık düzeyinin artırılmasının mümkün olduğu öne sürülmüştür. İşte bu çalışmada da psikolojik dayanıklılığın mümkün olabileceği görüşü benimsenerek münazara etkinliğinin bu dayanıklılık düzeyini etkileyebileceği düşünülmüştür. Bu doğrultuda aşağıdaki hipotezler test esilmeye çalışılmıştır.

1. H_0 : Kontrol ve deney grubunun ön test ortalamaları arasında psikolojik dayanıklılık düzeyi açısından farklılık yoktur.

H_1 : Kontrol ve deney grubunun ön test ortalamaları arasında psikolojik dayanıklılık düzeyi açısından farklılık vardır.

2. H_0 : Kontrol grubunun ön test-son test ortalamaları arasında psikolojik dayanıklılık düzeyi açısından farklılık yoktur.

H_1 : Kontrol grubunun ön test-son test ortalamaları arasında psikolojik dayanıklılık düzeyi açısından farklılık vardır.

3. H_0 : Deney grubunun ön test-son test ortalamaları arasında psikolojik dayanıklılık düzeyi açısından farklılık yoktur.

H_1 : Deney grubunun ön test-son test ortalamaları arasında psikolojik dayanıklılık düzeyi açısından farklılık vardır.

2. YÖNTEM

Bu çalışmada ön-son testin yapıldığı yarı deneysel yöntem kullanılmıştır. Bunun için önce kontrol ve deney grupları oluşturulmuş ve bu gruplara ön test ve son test yapılarak ilgili analizler gerçekleştirilmiştir. Öncelikle katılımcılar 20 kontrol grubu, 20 deney grubu ve 20 izleyici grup olmak üzere üçe ayrılmıştır. İzleyici grup deney grubunu izleyen ve grupların performansını değerlendiren öğrencilerden oluşmuştur. Ayrıca haftanın yıldızı olarak her iki alt gruptan iki kişi seçmeleri istenmiştir. Bu gruplar gönüllülüğe dayalı olarak oluşturulmuş ve ön test uygulanmıştır. Sonrasında 10 haftalık bir tartışma konusu planlanmış ve 10 haftalık sürecin sonucunda son test yapılarak bulgular karşılaştırılmıştır. 10 haftalık süreçte deney grubunda iki ayrı grup oluşturulmuştur. Tartışılacak konu olumlu ve olumsuz yönüyle bu gruplara dönüşümlü olarak verilmiştir. Münazara esnasında bir moderatör süreci yönetmiş ve her iki grubun da eşit sürede söz hakkı elde etmesini sağlamıştır. Anket sürecinde ise verilen bilgilerin bilimsel amaçla kullanılacağı belirtilmiştir. Anket için isim-soy isim yazılmaması gerektiği, kendilerinin belirleyeceği bir kodlamanın yapılması gerektiği belirtilmiştir. Bunun yanında anketi cevaplamak istemeyen katılımcıların istedikleri an bırakabilecekleri söylenilmiştir.

2.1. Örneklem ve Ölçek

Çalışmada Kafkas Üniversitesi İktisadi ve İdari Bilimler Fakültesi bünyesindeki bir bölümde öğrenim gören 40 öğrenci bulunmaktadır. Bu öğrenciler gönüllüğü dayalı olarak deney ve kontrol grubu olarak bölünmüştür. Bu 20 deney ve 20 öğrenciye ait demografik bilgiler Tablo 1’de verilmiştir.

Tablo 1: Çalışma Grubuna Ait Bilgiler

	Değişken	Kontrol	Deney
		Frekans	Frekans
Cinsiyet	Kadın	2	7
	Erkek	18	13
Memleket	Doğu Anadolu	8	7
	Güneydoğu Anadolu	3	3
	Karadeniz	2	3
	İç Anadolu	-	1
	Akdeniz	1	3
	Ege	1	1
	Marmara	3	2
	Yabancı Öğrenci	2	-
Aile Geliri	5.500 ve altı	3	5
	5.501-10.000	13	10
	10.001-15.000	1	1
	15001-20.000	1	2
	20001 ve üzeri	1	2
	Kayıp Veri	1	-
Kardeş Sayısı	1	2	2
	2	6	6
	3	7	2
	4	3	4
	5	-	4
	6 ve üzeri	2	2
Anne Eğitim	İlkokul	7	10
	Ortaokul	4	5
	Lise	4	3
	Önlisans/Lisans	2	-
	Lisansüstü	-	-
	Hiçbiri	3	2
Baba Eğitim	İlkokul	6	6
	Ortaokul	5	2
	Lise	4	7
	Önlisans/Lisans	3	2
	Lisansüstü	2	-
	Hiçbiri	-	3

Öğrencilerin ön test-son test karşılaştırması için Psikolojik Dayanıklılık Ölçeği kullanılmıştır. Bu ölçek Smith ve arkadaşları (2008) tarafından geliştirilmiştir. Ölçekte 6 madde bulunmakta ve maddeler Likert tipi 1-Kesinlikle Katılmıyorum...5-Kesinlikle Katılıyorum cevaplanmaktadır.

3. BULGULAR

Çalışmada öncelikle veriler için normallik dağılım testi yapılmıştır. Bu doğrultuda Shapiro-Wilk tercih edilmiş ve aşağıdaki bulgular elde edilmiştir. Bu bulgulara ön test ve son testte deney ve kontrol grubunun p (sig.) değerleri > 0,05 olması nedeniyle normal dağılımın bulunduğu görülmüştür.

Tablo 2: Normallik Testi Bulguları

Tests of Normality				
Grup		Shapiro-Wilk		
		İstatistik	Serbestlik Derecesi	Sig. (p)
Ön test	Kontrol	,945	20	,301
	Deney	,929	20	,149
Son test	Kontrol	,961	20	,568
	Deney	,948	20	,334

Çalışmada normallik varsayımı belirlendikten sonra deney ve kontrol grubunun ön test ortalamaları belirlenmiş ve bu ortalamalar arasında farkın olup olmadığı incelenmiştir. Bunun için bağımsız örneklem t testi yapılmış ve bulgular Tablo 3'e aktarılmıştır.

Tablo 3: Ön Test Ortalama Karşılaştırması

Gruplar	Ortalama	Std. Sapma	t	Sig. (p)
Kontrol	3,333	,763	1,469	,150
Deney	3,000	,669		

Tablodaki bulgular deney ve kontrol grubu öğrencilerinin psikolojik dayanıklılık düzeylerinin sırasıyla 3,000 ve 3,333 ortalamaya sahip olduğunu göstermektedir. Bu ortalamalara ilişkin fark bulguları anlamlı düzeyde farklılığın olmadığını ($p > ,05$) göstermiştir. Bu nedenle “1. H_0 : Kontrol ve deney grubunun ön test ortalamaları arasında psikolojik dayanıklılık düzeyi açısından farklılık yoktur.” kabul edilmiştir.

Münazara etkinliğinin psikolojik dayanıklılığı etkileyip etkilemediğini belirlemek için hem deney ve kontrol grubunun ön test-son test ortalamaları karşılaştırılmıştır. Bu doğrultuda kontrol grubuna yapılan bağımsız örneklem t testi bulguları Tablo 4'de verilmiştir.

Tablo 4: Kontrol Grubu Ön Test-Son Test Ortalama Karşılaştırması

Gruplar	Ortalama	Std. Sapma	t	Sig. (p)
Kontrol Ön test	3,333	,763	-,418	,679
Kontrol Son test	3,425	,618		

Tablo 4'te yer alan bulgular kontrol grubunda ön test ve son test ortalamalarında anlamlı düzeyde farklılığın bulunmadığını ($p > ,05$) göstermektedir. Dolayısıyla “2. H_0 : Kontrol grubunun ön test-son test ortalamaları arasında psikolojik dayanıklılık düzeyi açısından farklılık yoktur.” Hipotezi kabul edilmiştir.

Deney grubunda psikolojik dayanıklılık bağlamında farklılığın belirlenmesi için yapılan bağımsız örneklem t testi bulguları Tablo 5'de verilmiştir.

Tablo 5: Deney Grubu Ön Test-Son Test Ortalama Karşılaştırması

Gruplar	Ortalama	Std. Sapma	t	Sig. (p)
Kontrol Ön test	3,000	,669	-4,719	,000
Kontrol Son test	3,850	,449		

Tablodaki bulgular deney grubunda psikolojik dayanıklılık ön test ortalamaları ile son test puan ortalamaları arasında anlamlı düzeyde farklılığın olduğunu ($p < ,05$) göstermektedir. Son testte elde edilen ortalama (3,850) ön testte elde edilen ortalamadan (3,000) daha yüksektir. Dolayısıyla “3. H₁: Deney grubunun ön test-son test ortalamaları arasında psikolojik dayanıklılık düzeyi açısından farklılık vardır” kabul edilmiştir.

4. SONUÇ

Münazaranın birey üzerindeki etkisinin incelendiği bu çalışmada münazara etkinliği ile üniversite öğrencilerinin psikolojik dayanıklılık düzeyinin arttığı belirlenmiştir. Çalışmada kontrol grubunda beklediği gibi herhangi bir farklılık bulunmazken deney grubunun psikolojik dayanıklılık düzeyi münazara öncesine göre artış göstermiştir. Dolayısıyla 10 haftalık münazara etkinliği öğrencilerin yaşamlarında karşılaştıkları engelleri ve zorlukları aşma düzeylerini artırmıştır. Bu nedenle de münazara etkinliğinin birey üzerinde olumlu etkisinin olduğunu öne süren literatürdeki çalışma bulguları (Oktaysoy ve Kerse, 2023; Çabuk ve Yeni, 2016; Karatay ve Demirel, 2020; Chen vd., 2022) desteklenmiştir.

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Seller Karşısında Dirençli Kentler: Sünger Kent ve Uygulamaları

Dr. Öğretim Üyesi. Gökhan ZENGİN¹

¹Trakya Üniversitesi, İİBF, SBKY, gokhanzengin@trakya.edu.tr, ORCID: 0000-0001-8726-4604

Özet: İklim değişikliği en yakıcı etkilerini kentler üzerinde göstermektedir. Sıcaklık artışının yarattığı yağış düzensizliği her yıl sel ve yangı gibi afetlere sebep olmaktadır. Yağış rejiminin değişmesi hem kuraklığa hem de sel ve taşkınlara sebep olmaktadır. Yeryüzüne salınan karbon emisyon miktarı çok büyük oranda düşürülmedikçe iklim değişikliğinin yakıcı etkilerinin artarak devam edeceği inkâr edilemez bir gerçektir. Bu aşamadan sonra merkezi ve yerel yönetimlerin yapabileceği şey kent yapısını afetlere karşı daha dirençli hale getirebilmektir. Sel ve taşkın gibi afetlere karşı kentlerin dirençli hale getirilmesinde; yeşil-mavi altyapı, yeşil-mavi koridor, sünger kent, yağmur bahçeleri, yağmur hasadı gibi farklı altyapı çözümleri bulunarak uygulama geçilmiştir. Avrupa’da yeşil altyapı olarak adlandırılan “sünger kent” düşüncesi ilk kez İngiltere ve Avustralya’da ortaya çıkmıştır. Günümüzde bu düşüncüyü bütüncül bir kentsel altyapı projesine dönüştüren ise Çin olmuştur. Sünger kent yapısının ortaya çıkışı düzensiz yağış rejiminin yarattığı sel ve kuraklık gibi afetlere karşı bir çözüm olarak görülmektedir. Bunun yanında tatlı su kaynaklarını korumaya yönelik çalışmalarda da sünger kent yapısından faydalanılmaktadır. Ana düşüncesi, taşan suyun toprak tarafından emilmesi veya kanallar aracılığıyla deşarj edilmesi olan. sünger kent yaklaşımı çalışmada öncelikle teorik düzeyde ele alınmıştır. Sonrasında, Dünya ve Türkiye’den uygulama örnekleri kentsel dirençlilik perspektifinde değerlendirilmiştir. Sünger kent modeli iklim değişikliğinin yarattığı sel gibi afetlere karşısında olabildiğince insan hayatının sürdürülmesine odaklanmıştır. Ancak var olan kentlerin morfolojik ve yerleşim yapısının bu modele göre değiştirilmesi çok maliyetli olacağından politika yapıcılar ve kent yöneticileri olası felaketlere karşı risk analizi yaparak yerleşim yerlerinin plan kararlarını bu doğrultuda almalıdırlar. .

Anahtar Kelimeler: Dirençli Kent, Afet Yönetimi, Sünger Kent, Sel

1. GİRİŞ

Eylül 2015’te gerçekleştirilen Birleşmiş Milletler Sürdürülebilir Kalkınma Zirvesi’nde Sürdürülebilir Kalkınma için 2030 Gündemi kabul edilmiş ve Gündem kapsamında, toplam 17 Sürdürülebilir Kalkınma Amacı (SKA) ve 169 hedef tanımlanmıştır. SKA 13 İklim Değişikliği ile Mücadele amacı için belirlenen tüm ülkelerde iklim değişikliğiyle ilgili tehlikeler ile doğal afetlere karşı dayanıklılık ve uyum kapasitesinin güçlendirilmesi hedefi ile risk azaltma faaliyetlerine ağırlık verilerek afetlere karşı dayanıklılığın artırılmasının önemi vurgulanmıştır. Söz konusu hedefler açısından bakıldığında taşkın afetinde risk yönetimi ve dayanıklılığın artırılması için yerleşim yerlerinin planlanmasında taşkın riskinin dikkate alınması önem taşımaktadır. İklim değişikliği insan ve doğal yaşam döngüsü üzerinde ciddi riskler oluştururken, kentsel altyapı ve sistemlerin dengesini bozarak kentsel yaşam kalitesini de düşürmektedir. İklim krizine negatif anlamda katkıda bulunan kentler, çözümünde önemli bir parçası olmak zorundadırlar. Dünya nüfusunun yarısından fazlası artık kentsel alanlarda yaşamaktadır. İklim değişikliğinin yarattığı yıkıcı etkilere karşı kentlerin de sahip olduğu bir takım fırsatlar ve potansiyeller vardır. Kentsel enerji sistemleri kullanımı, ulaşım planlaması ve yeşil alan yönetimi kentlerin sahip olduğu finansal imkanlar ve politikalar özelinde farklılaşmaktadır. Özellikle yenilenebilir enerji kullanımı, karbon emisyonlarını sıfıra indirebilmek açısından en etkili araçtır. REN 21’in 2021 ve 2022 yıllarındaki Küresel Durum raporları kentlerin iklim krizine karşı bir dönüşüm içinde olduğunu göstermektedir. Raporlara göre 2021 sonu itibariyle 1500 kentin (Dünya kentsel alan nüfusunun yaklaşık %30’u) yenilenebilir enerji hedefi ve politikası bulunmaktadır. Yine 2021 sonu itibariyle 1100 kent “net sıfır” hedefi açıklamış, 270 kentte düşük salım bölgeleri oluşturulmuş, bu bölgelerdeki 20 kentte ise fosil yakıtlı araçların kullanımına yasaklar ve sınırlamalar getirilmiştir. Yine 2021 sonu itibariyle 59 kent doğal gaz, benzin ve kömürün kullanımını önemli ölçüde sınırlamıştır (REN21, 2022: 207-219).

Kent yönetimleri yenilenebilir enerji kullanımını teşvik edebilir, bedelsiz arazi kiralayabilir ancak bu yönetimler üretim biçimini değiştirecek güce ve yaptırımlara sahip değillerdir. Bırakalım kent yönetimlerini, Dünyadaki karbon salınımına en çok katkı veren ülke yönetimleri bile fosil yakıt kullanımını azaltacak politikaları uygulamakta son derece gönülsüz davranmaktadırlar. Dolayısıyla kent yönetimlerinin belki de yapılacağı en etkili şey afetlere karşı dirençli kentler yaratabilmektir. Kent yönetimleri kentsel ve komşu alanların altyapıları için risk değerlendirmesi yaparak mevcut yapıyı dönüştürebilme potansiyeline sahiptirler. İklim değişikliğinin arttırdığı kuraklık, yağış rejimindeki düzensizlik ve seller, rüzgâr yoğunluğu, nem, bitki örtüsünün yapısındaki değişimler, uzun vadede su kaynaklarının azalmasına neden olmaktadır (Olmstead, 2014: 2). Dünya üzerinde yüzey sıcaklığının artışı daha fazla suyun buharlaşarak atmosferde birikmesine sebep olurken, hidrolojik döngünün hızlanmasıyla yağış rejimi ve biçimi de değişmektedir. Sıcak hava daha fazla buhar tutma kapasitesi

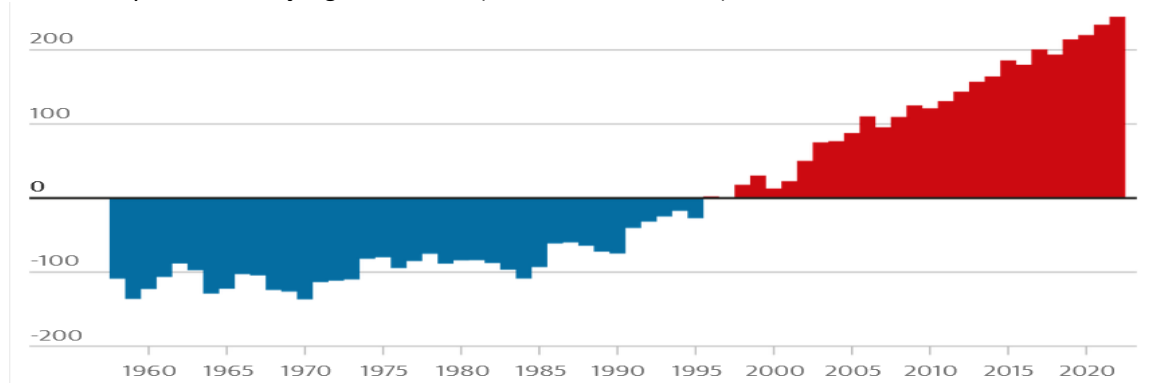
yarattığı için yağış rejimi de değişiyor, yağışlar çok daha kuvvetli, ani seller şeklinde yıkıcı olarak gerçekleşmektedir. Ülkemizdeki ve Dünya'daki kentlerin mevcut yapısı bu yoğun yağış ve selleri absorbe edebilecek, birikmesine engelleyebilecek morfoloji ve toprak yapısına sahip değildir. Şehir taşkınlarında yaklaşık olarak 100 mm yağmur suyunun 70-80 milimetresinin geçirimli yüzeylerden toprağa karışıp emilmesi gerekirken, doğal bitki örtüsünün olmadığı çok yoğun betonlaşmanın olduğu kentlerde bu miktarda yağmur yüzey üzerinden gitmektedir (Türkeş, 2021: 92). Ancak 1980'lerden sonra kent içinde yüzey akışına geçen suyu yer altından giden kanalizasyon sistemi tahliye etmeyi önceleyen gri altyapı yaklaşımı yerine yağmur suyunu bir kaynak olarak gören yeşil altyapı yaklaşımı daha öne çıkmaktadır. Hem yağmur suyundan daha fazla faydalanmak hem de şiddetli taşkın ve sellere engel olmak amacıyla yeşil altyapı yaklaşımından geliştirilen "sünger kent" peyzaj ve tasarımı günümüzde sellerin yarattığı tahribatı azaltmada en etkin çözüm yolu olarak öne çıkmaktadır.

2. KÜRESEL SICAKLIK ARTIŞI VE SELLER

İklim değişikliğinin yarattığı önemli afetlerden biri de sellerdir. Sellerin hem Dünyada hem de ülkemizde görülme sıklığı artmıştır. IPCC'nin 6. Küresel Değerlendirme Raporu verilerini güncelleyerek yayınladığı "İklim Değişikliği Sentez Raporu 2023"e göre 3,3 ila 3,6 milyar insan iklim değişikliğine karşı oldukça hassas koşullarda yaşamaktadır. 2010 ve 2020 yılında sel, kuraklık ve fırtınalardan kaynaklanan insan ölümleri kırılgan yerleşim yerlerinde 15 kat artmıştır. Bu konuda en kırılgan bölgeler Okyanuslardaki adalar ve Güney Doğu Asya'dır (ipcc.ch/report/ar6, 2023). İç kesimlerdeki taşkınlar için erken uyarı sistemleri, doğal su tutma özelliğinin artırılması, sulak alanların ve nehirlerin restore edilmesi ve yapılaşmaya izin verilmemesi gibi yapısal olmayan önlemlerin kombinasyonları taşkın riskini azaltabilirken kıyı yerleşimleri ve adalarda sel felaketlerini önlemenin yolu küresel sıcaklık artışını engelleyerek, okyanusların ısınmasını engellemektir (ipcc.ch/report/ar6, 2023). Okyanusların sera etkisi ve fosil yakıtları yakmamız nedeniyle hapsolan ekstra ısının %93'ünü emmektedir. Eğer okyanuslar gezegenimizin %70 kaplamasaydı, ortalama sıcaklığı yaklaşık 50 C dereceye çıkacağına ilişkin güçlü tahminler vardır. Uzun yıllardır iklim bilimi üzerine çalışan Mc Kibben'in (Mc Kibben, 2023) derleme makalesine göre geçtiğimiz 150 yılda okyanusların ortalama olarak her bir buçuk saniyede bir Hiroşima büyüklüğünde bir nükleer bombaya eşdeğer ısı emmesini sağlarken; son yıllarda bu oran saniyede beş ya da altı Hiroşima'ya yükselmiştir. Günümüzde deniz seviyesindeki yükselmenin 1/3'ünden fazlası, deniz suyunun ısındığında genişlemesinden kaynaklanmaktadır. Yaz ortasında, Dünya okyanuslarının %44'ü bir "sıcak deniz dalgası" içindeydi. Bu ısı, kayıtların tutulmaya başlandığı 1851 yılından bu yana büyük bir kasırganın vurmadığı bir kara parçası olan Florida'nın Apalachee Körfezi'ne İdalia Kasırgası'nın (Ağustos 2023) vurmasına güç vermiştir (Mc Kibben, 2023).

Dünya okyanusları 2022 yılında şimdiye kadar kaydedilen en sıcak seviyeye ulaşarak, insan kaynaklı emisyonların gezegenin ikliminde yarattığı derin ve yaygın değişiklikleri ortaya koymuştur. 1958'de başlayan kayıtlar, 1990'dan sonra ısınmanın hızlanmasıyla birlikte okyanus sıcaklığında önlenemez bir artış olduğunu göstermektedir. Sıcak okyanuslar özellikle kıyı kentlerini ve adaları vuran kasırgaların sebebidir. Güvenilir ölçümler 1940 yılından sonra başlamaktadır ancak yapılan ölçümlere (Grafik 1) göre okyanuslar son 1.000 yılın en sıcak seviyesinde olması ve 2000 yılından itibaren sürekli artış göstermesi çok önemli tehdittir. Cheng ve diğer Oşinagrofi uzmanları tarafından yapılan çok kapsamlı çalışmanın verilerine göre okyanuslar 2022 yılında 2021 yılına kıyasla yaklaşık 10 zettajoule daha fazla ısı emmiştir. Yine aynı araştırmanın önemli bir sonucuna göre okyanuslardaki tuzlanma giderek artmaktadır (Cheng, L. vd, 2023: 965).

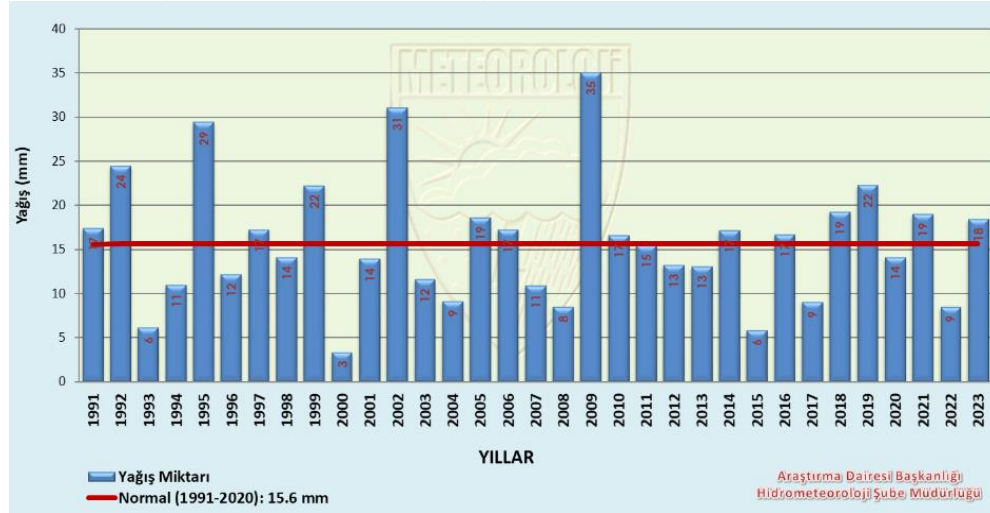
Grafik I: Okyanusların Isı İçeriği 1981-2010 (2000 m. üzeri derinlik)



Kaynak: Cheng, L. vd, 2023: 966-967

Türkiye bazı bölgelerde yakıcı kuraklığı yaşarken bazı bölgelerde de sellerin yarattığı afetlere maruz kalmaktadır. T.C. Çevre, Şehircilik ve İklim Değişikliği Bakanlığı-Meteoroloji Genel Müdürlüğü tarafından yayımlanan Temmuz 2023 zirai meteoroloji bültenine göre ülke geneli Temmuz ayı yağışları (18,4 mm) mevsim normalinin (Temmuz 1991- Temmuz 2020, 15,6 mm) %18 ve 2022 yılı Temmuz ayı yağışlarının (8.5 mm) %100'ün üzerinde gerçekleşmiştir. Ancak bu yüksek yağış yalnızca Karadeniz Bölgesinde görülürken, kalan 6 bölgede çok büyük ölçüde kuraklık çekilmiştir. Özellikle sıcaklığın olağan olarak da çok yüksek görüldüğü Akdeniz ve Güneydoğu Anadolu Bölgesinde %50'den fazla azalmıştır (mgm.gov.tr. 07/2023).

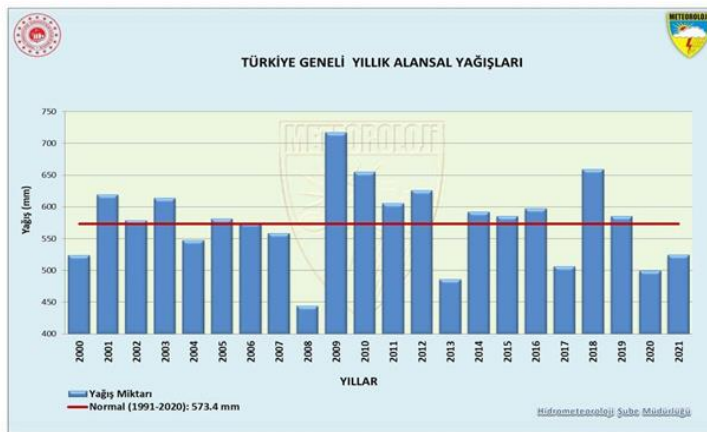
Grafik II: Türkiye Geneli Temmuz Alansal Yağışları



Kaynak: (Devlet Meteoroloji İşleri Genel Müdürlüğü, 07/2023).

TC Tarım ve Orman Bakanlığı tahminlerine göre 1970-2000 referans dönemine göre 2015-2040 yılları arasında bütün modellerin sonuçlarına göre ardışık kurak geçen gün sayılarının 4-15 gün arasında artacağı öngörülmektedir (suverimliliği.gov.tr, 2023). Sıcaklık artışı ve buharlaşma ve sulak alanların kuruması kentlerin barajlarında var olan su kapasitesini de giderek düşürmektedir. Tarım ve Orman Bakanlığı haberine göre 01.10.2022- 13.04.2023 tarihleri Türkiye genelinde kümülatif yağışlar ortalamasında, uzun yıllar ortalamalarına göre yüzde 16,6 azalma, 2022 göre de yüzde 16,6 oranında azalma meydana gelmiştir. Doğal göller hariç 428 depolama tesisinde 2022 yılında doluluk oranı 39,6'yken; 2023 yılının aynı tarihinde yüzde 46 aktif doluluk gözlemlendi, 428 barajda 137 milyar metreküp su ölçüldüğü kaydedilmiştir. 301 sulama maksatlı barajda aktif doluluk oranının yüzde 41, 113 içme suyu barajında aktif doluluk oranının yüzde 46, 149 enerji maksatlı barajda da aktif doluluk oranının yüzde 47,5 olarak açıklanmıştır (iha.com.tr, 2023).

Grafik III. Türkiye Geneli Yıllık Alansal Yağışlar



Kaynak: (DMİ Veri Değerlendirme, 2023).

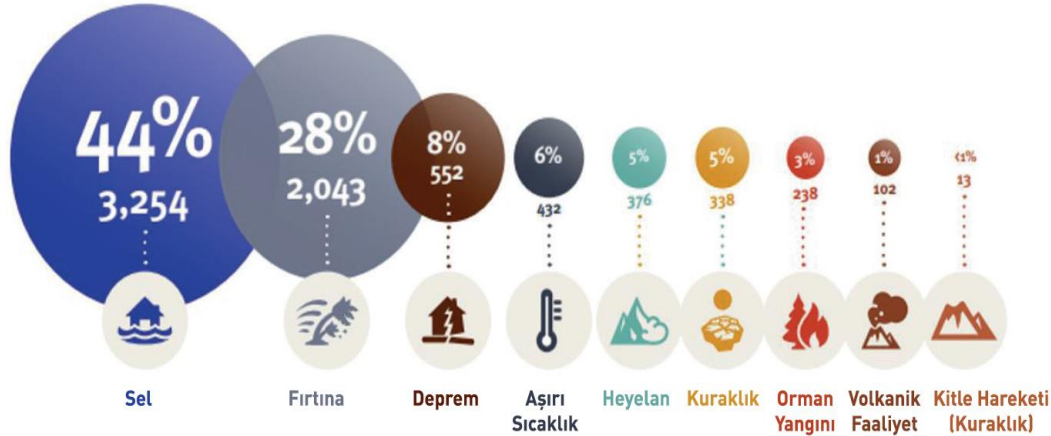
Kuraklık tahminlerini ve güncel haberleri de doğrulayacak şekilde (Grafik 2) ortalama 574 mm olan yıllık yağış miktarı 2018'den sonra önemli ölçüde ortalamanın altına gerilemiş durumdadır. Grafikte yer almasa da DMİ verilerine göre 2022 yılı ve 2023 yılının 8 aylık verilerine göre alansal yağışlar ortalamanın altında (545 mm)

kalmış durumdadır. İl geneli değerlendirmelere bakıldığında ise 01/10/2022-31/08/2023 periyodunda en fazla yağışı 1430 mm ile Rize, en az yağışı 264 mm ile Iğdır almıştır. Yine bu periyotta Samsun, Ordu ve Giresun illeri son 63 yılın en yüksek yağışını alırken Tekirdağ son 60 yılın, Edirne ise son 59 yılın en düşük yağışını almıştır (mgm.gov.tr/veridegerlendirme, 2023). Grafiktende anlaşılabileceği gibi kuraklık yönünde en uç değerlere Batı bölgelerinde ulaşılmış durumdayken Orta ve Doğu Karadeniz’de artan yağışların ve kentlerin yapısal sorunları nedeniyle önemli sel olayları can kaybına sebep olmaktadır. Sel tanım olarak bir toprağı ya da alanı belirli bir süre zarfında tamamen veya kısmen su altında bırakan, büyük ve düzensiz su akıntılarının genel adıdır (mgm.gov.tr). TÜBA Türkçe Bilim Terimleri Sözlüğünde; sel “aşırı yağış, hızlı kar erimesi, şiddetli fırtına ve fırtına kabarması, sed veya barajların tepe noktasının aşılması, heyelan ile akarsuyun yatak değiştirmesi, kanalizasyon taşması gibi nedenlerle yüzey akışıyla gelen suların, normalde su altında olmayan alanları geçici bir süre için kaplaması veya o alanlarda birikmesidir”. Sellerin özel bir hali olan taşkın ise “bir akarsuyun, sağanak yağışlar, kar örtüsünün erime ve/veya ergimesi, mevcut barajlardan kontrolsüz su bırakılması, nehir yatak kesitinin yetersiz olması gibi nedenlerle; yatağından taşarak, çevresindeki arazilere, yerleşim yerlerine, alt yapı tesislerine ve canlılara zarar vermek suretiyle etki bölgesindeki doğal yaşamı olumsuz etkileyerek normal hayatı kesintiye uğratabilecek ve yerel imkanlarla baş edilemeyecek düzeyde bir akış büyüklüğü oluşturması” olarak tanımlanır (terim.tuba.gov). Seller, oluşum yerlerine göre literatürde 5 türe ayrılmaktadır (Burn, and Whitfield, 2017: 2644):

1. Dere ve Nehir Selleri-Taşkınlar
2. Dağlık Alan-Kuru Vadi Selleri
3. Kent Selleri
4. Kıyı Selleri
5. Baraj Selleri

Önlem ve tedbirler de her sel çeşidine göre ayrı ayrı ele alınır. Kent selleri de hem Dünya’da hem de Türkiye’de artık en çok görülen ve can kaybına sebep olan sel türü olarak ortaya çıkmaktadır. Türkiye kıyılarını şiddetli kasırgalar vurmasa da özellikle Antalya kıyılarında etkisi düşük de olsa tsunamiler ve hortumlar görülmektedir. Türkiye’de nehir debilerinde önemli bir artış gözlemlenmemesine karşın 1940-2012 döneminde önceki döneme göre iki katı sel olayı meydana gelmiştir. 2003 yılından günümüze kadar olan dönemde ise sel olaylarındaki artış daha da fazlalaşmıştır (Kadioğlu, 2012). Devlet Meteoroloji İşleri Genel Müdürlüğü (DMI) verilerine göre Türkiye’de sellerin yarattığı taşkınlar, depremden sonra en büyük can ve mal kaybına sebep olan afet türüdür. 2010-2021 periyodunda sellere sebep olabilecek şiddetli yağış Antalya, İzmir ve Balıkesir illerinde meydana gelmiştir. Akdeniz havzasında yer alan bu iller IPCC’nin küresel sıcaklık artışının en yıkıcı olarak Akdeniz havzasında olacağını tahminin de adeta sağlaması gibidir. Ayrıca, Batı Akdeniz’de son 10 yılda yüzey suyu sıcaklığı 0.2 C derece artmıştır. Ülkemizde görülen sellerin ana sebebi kuvvetli yağış sonucu drenaj sistemlerindeki yetersizlik sonucu ana nehir ya da su tahliye kanallarının tamamen dolu olması ile meydana gelen taşmalardır (mgm.gov.tr, 2022). 2010-2021 periyodunda en çok sel 2018 ve 2019 yıllarında her yıl 300 sel afeti görülürken, 2019 ve 2021 arasında yaklaşık 200 sel afeti görülmüştür (mgm.gov.tr/veridegerlendirme). Dünyada da hidro-meteorolojik karakterli doğal afet sayısında sürekli artış görülmektedir. Hızlı endüstrileşme, nüfus artışı, çarpık kentleşme ve iklim değişikliği bu artışların temel nedenleri arasındadır. Uluslararası afet veri tabanı bilgilerine göre 2000-2019 yılları arasında gerçekleşen afet sayılarında sel ve fırtına sayısının ilk iki sırada yer alması oldukça dikkat çekmektedir (Şekil 1). Dünya üzerinde kaydedilmiş afet verilerinin yaklaşık 1/2’sinin sellerden kaynaklanması, küresel sıcaklık artışının hidrolojik döngüyü ne kadar bozduğunu da ispatlar niteliktedir.

Şekil I: 2000-2019 Yılları Arası Türlerine Göre Afet Sayıları



Kaynak: Human Cost of Disasters An overview of the last 20 years 2000-2019, Afetlerin Epidemiyolojisi Araştırma Merkezi (CRED),

3. SELLERE KARŞI AFET YÖNETİMİ

Günümüzde afetlere karşı mücadele de risk yönetimi, kriz yönetiminin yerini almıştır. Bu anlayışın yerleşmesi 2005-2015 kapsayan Hyogo Protokolü ve 2015-2030 kapsayan Sendai Sözleşmesi ile olmuştur. Taşkınlarla etkili bir risk yönetimi için risklerin havza ölçeğinde planlanması ve buna uygun bir organizasyon yapısının oluşturulması gerekmektedir. Buna göre risklerin havza ölçeğinde planlanmasını sağlayan Taşkın Yönetim Planları'nın hazırlanması önemli bir adım olarak görülmektedir. Taşkınlarla etkin bir risk yönetiminin gerçekleştirilebilmesi için planlamanın havza düzeyinde ele alınması gerekmektedir. Bu kapsamda AB tarafından 20 Kasım 2007 tarihinde "2007/60/EC sayılı Taşkın Risklerinin Değerlendirilmesi ve Yönetimi Direktifi" yürürlüğe konulmuştur. Bu AB direktifi ile uyumlu olarak Türkiye'de 12.05.2016 tarihli ve 29710 sayılı "Taşkın Yönetim Planlarının Hazırlanması, Uygulanması ve İzlenmesi Hakkında Yönetmelik" yürürlüğe konularak uygulama çalışmaları başlanmıştır. Çalışmaların en önemlisi de Tarım ve Orman Bakanlığı-Su Yönetimi Genel Müdürlüğü tarafından hazırlanan "Taşkın Yönetim Planları"dır. Türkiye'de 23 su havzasını içeren planlar hazırlanmıştır (tarimorman.gov.tr. 2023). Su kaynaklarının bütüncül havza yönetimi anlayışı çerçevesinde yönetilmesi ve kurumlar arasında koordinasyonu sağlamaya yönelik olarak ulusal ve yerel düzeydeki kurullar ve heyetler şeklinde kademeli bir yapılanma teşkil edilmiştir. Bu yapılanma, ulusal düzeyde Su Yönetimi Koordinasyon Kurulu (SYKK) ve Havza Yönetimi Merkez Kurulu (HYMK), havza düzeyinde Havza Yönetim Heyeti (HYH) ve il düzeyinde İl Su Yönetimi Koordinasyon Kurulu (İSYKK) şeklindedir. Ancak Sayıştay'ın "Sel ve Taşkın Raporu"nda dere ıslahı projelerinde ihtilafsız yer teslimlerine ilişkin etkin bir kaynak planlaması yapılmaması nedeniyle projeler havza bazında bütüncül olarak planlanamamakta ve gerçekleştirilemediği defaten vurgulanmaktadır (sayistay.gov.tr/reports, 2022).

Sayıştay tarafından 2021 ve 2022 yılına ilişkin tespitlerin yer aldığı iki ayrı "Taşkın ve Sel Risk Raporunda" can ve mal kaybına neden olan taşkınların üç temel olduğu tespiti yapılmıştır, buna göre (sayistay.gov.tr/reports, 2022):

1. Dere yataklarına bina inşa edilmesi,
2. Menfez ve köprülerin uygunsuz yapılması
3. Dere yataklarına hafriyat dökülmesidir.

2021 yılına ait taşkın ve sel raporunda; 7 şehirde 4.805 bina dere yatağına yapılırken, 10 ilde uygunsuz yapılan köprü sayısı ise 885'dir. Büyükşehir Belediyeleri tarafından son 5 yılda inşa edilen köprü ve menfezlerin 665'inin projesi DSİ'den hidrolik kesit onayı alındığı, 2 bin 53 köprü ve menfez projesinin ise DSİ'den onay alınmaksızın uygulamaya konulduğu tespit edilmiştir. 2022 yılındaki tespitlerde ise (sayistay.gov.tr/reports, 2022):

1. 4373 sayılı Taşkın Sulara ve Su Baskınlarına Karşı Korunma Kanunu kapsamında ilan edilen taşkın koruma alanlarında yapılaşmaların devam ettiği ve zirai faaliyetlerin yürütüldüğü
2. Yerleşim alanlarının fiziki olarak planlanmasında taşkın riskinin yeterince dikkate alınmadığı

3. Dere yataklarının üzeri taşkın riskini artıracak şekilde kapatılmadığı gibi 2021 yılına benzer tespitler yapılmıştır.
4. İllere göre dere yatağı ve benzeri elverişsiz alanlara yapılan yapıların risk durumuna göre Düzce (2438), Rize (611), Sinop (462) Samsun (424), taşkın riskine uğraması en riskli şehirlerdir.
5. Büyükşehir belediyeleri tarafından son 5 yılda inşa edilen köprü ve menfezlerin 665'inin projesi için DSİ'den hidrolik kesit onayı alınmış, 2053 köprü ve menfez projesi ise DSİ'den onay alınmaksızın uygulamaya konulmuştur. 884 köprü sel ve taşkın yönetmeliklerine uygun değildir.

Taşkın ve su yönetiminde risk yönetimi anlayışı perspektifinden kurumsal yapılar geliştirilmesine karşın bürokratik döngü aşılamadığı çeşitli raporlarda da belirtilmektedir. Plansız alanlardaki yapılaşmanın üzerindeki kontrol ve denetim eksikliği mevcut riskli yapıların varlığını sürdürmesine ve yenilerinin de yapılmasına yol açmaktadır. Aslında yerleşim alanlarının planlanmasında taşkın riskinin değerlendirilmesi için imar mevzuatında öngörülmüş kontrol süreçleri bulunmaktadır. Ama yürürlükteki imar mevzuatına göre istisna tutulmuş birçok yapı mevcuttur. Ayrıca idareler, taşkın riski konusunda DSİ'den görüş alma zorunluluğuna uymadan veya verilen görüşe aykırı olarak imar planı hazırlayabilmektedir. Dere yataklarına yapılan izinsiz yapılaşmayı kaldırmak kademeli ve uzun süren bürokratik izin süreçlerine bağlanmıştır. Örneğin, DSİ personeline dere yatağında taşkın riskini artıran bir yapı tespit edildiğinde gereği yapılmak üzere konu DSİ Bölge Müdürlüklerince mülki amirlere ve varsa ilgili belediyeye yazılmaktadır. 3091 ve 775 sayılı Kanunlar ile imar mevzuatına göre kaldırılması gereken yapı hakkında belediyeler ve mülki amirler tarafından konu bir diğer kuruma yazılmaktadır. Yine çeşitli rapor ve basında yer alan haberlerde dere ve nehir kanallarının bakımı ve temizliğini mutlaka düzenli yapılmadığı, kollektörlerin tıkanması ve drenajın sağlanamadığı gibi sonuçlar ortaya çıkmaktadır.

Ülkemizde taşkın yönetiminde çok sayıda kurum ve kuruluşu görev ve sorumluluk verilmiştir. Ancak ülke düzeyinde taşkın ve sel yönetiminden sorumlu temel kurum Tarım ve Orman Bakanlığı'dır. Bakanlık bu faaliyetlerini Su Yönetimi Genel Müdürlüğü (SYGM), Devlet Su İşleri Genel Müdürlüğü (DSİ) ve Orman Genel Müdürlüğü (OGM) bünyesinde yürütmektedir. Ancak son iki bir takım kurumsal değişiklik olmuştur. Buna göre; 29.10.2021 tarih ve 31643 sayılı R.G.'de yayımlanan 85 sayılı CBK ile Tarım ve Orman Bakanlığı hizmet birimleri arasında yer alan "Çölleşme ve Erozyonla Mücadele Genel Müdürlüğü, Çevre, Şehircilik ve İklim Değişikliği Bakanlığı bünyesine alınmıştır. Bunun yanı sıra, Tarım ve Orman Bakanlığına bağlı olan Meteoroloji Genel Müdürlüğü'nün Çevre, Şehircilik ve İklim Değişikliği Bakanlığına bağlanmasıyla bu Bakanlığın da taşkın yönetimine ilişkin görevi olmuştur. Ayrıca 5216 sayılı Büyükşehir Belediyesi Kanunu ile büyükşehir belediyelerine de dere ıslahı yapma görevi verilmiştir. Bu görev daha önce DSİ teşkilatındaydı. Taşkın Yönetim Planları'nın yanı sıra tüm afetlerin koordinasyonundan sorumlu AFAD'ın koordinasyonunda hazırlanan İl Afet Risk Azaltma Planları mevcuttur (afad.gov.tr/il-planlari, 2023).

T.C. İçişleri Afet ve Acil Durum Yönetimi Başkanlığı (AFAD), sellere karşı alınması gereken önlemleri en önemlilerini şöyle sırlamıştır (afad.gov.tr, 2021):

1. Yağış yoğunluklarının belirlenebilmesi için radar ve uydu verileri ile desteklenen erken uyarı birimleri kurulmalıdır.
2. Uyarı birimi ile koordineli il ve ilçe kurtarma birimleri oluşturulmalıdır.
3. Yerel yönetimler dere yataklarına yeni imar vermemelidir.
4. Yerleşim yerleri içerisindeki dere yatakları ve drenaj kanalları kontrol edilmeli varsa denizle birleştikleri yerler tıkanma ihtimaline karşı sürekli temizlenmelidir.
5. Yeşil alanlar korunarak artırılmalı, eğimli arazilerde ağaçlama ve teraslama yapılmalıdır.
6. Çukur alanlarda yer alan binalarda bodrum yapılmamalı, su basman kotu yüksek tutulmalıdır.
7. Şehir içinde yağmur suyu kanalları olmalıdır.

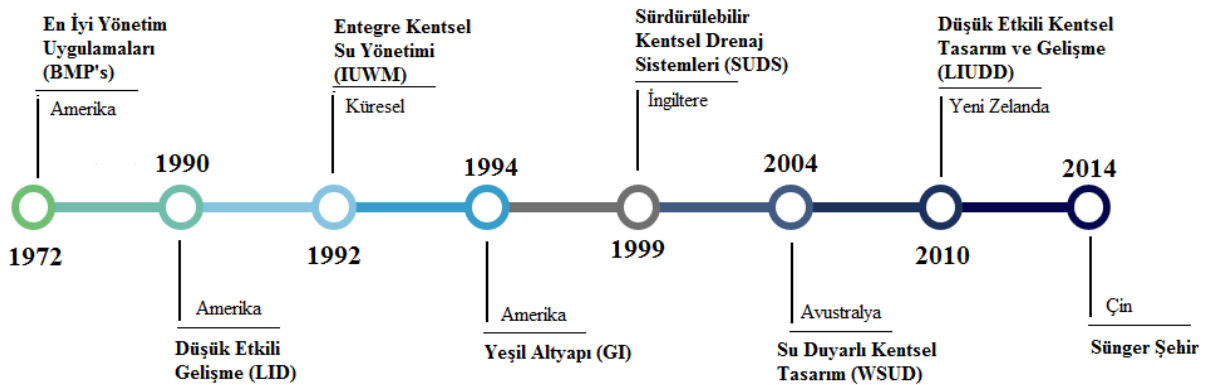
Yine AFAD tarafında deprem, sel, heyelan gibi tehlikelere ilişkin alınacak acil önlemlere ilişkin acil planların yer aldığı İl Afet Risk Azaltma Planlarına (IRAP) ek olarak kırmızı eylemler hazırlanmıştır (afad.gov.tr/kurumlar/afad.gov, 2022). Bu planlar içinde İzmir ili Tire ilçesine ait plan taşkınla geleneksel yöntemle müdahale yönteminden farklıdır. Ekosistem tabanlı afet risk azaltma çalışmalarını yaygınlaştırmak hedefiyle yağmur nedeniyle yaşanabilecek su baskınlarının önlenmesi için kavşak noktalarına Tire Belediyesi tarafından 2022-2023 dönemi için sünger park sisteminin yapılması planlanmıştır (izmir.afad.gov.tr). Yine Sayıştay'ın 2022 yılı tespitlerine göre taşkın yönetim planlarının hazırlanmasında kamulaştırma yapılması şehir merkezlerinde ortaya taşkın sorunun çözümü için artık kaçınılmaz görünmektedir.

4. TAŞKINLARA EKOLOJİK TABANLI BİR YAKLAŞIM OLARAK SÜNGER KENT

Risk yönetimi yaklaşımıyla taşkın sorununun çözümüne yaklaşıldığında hem yapısal hem de yapısal olmayan tedbirlerin karışımı bir yol izlenmesi gerekmektedir. Bu karışım aslında dengeli bir yaklaşımın izlenmesini salık vermektedir. Dengeli bir yaklaşımın 3 temel yöntemi içermektedir. Bunlar, “gri altyapı”, yeşil altyapı” ve “hassas tedbirlerdir” (EEA, 2013). Gri altyapı geleneksel yöntemler dediğimiz su akışını durdurmaya veya yavaşlatmaya yönelik olarak barajlar, setler, taşkın duvarları, kanal değişiklikleri ve ıslahları, yükseltmelerdir. Afet yönetim ve taşkın yönetim planları incelendiğinde Türkiye’deki taşkın yönetim sisteminin gri altyapı çözümlerini benimsediği anlaşılmaktadır. Ancak Sayıştay’ın raporlarında ve yaşanan olaylarda da görüldüğü gibi kontrol eksikliği, gerekli tedbirleri almama gibi sebeplerden dolayı seller karşısında birçok can ve mal kaybı yaşanmaktadır. Yeşil altyapı çözümlerinin temel amacı ekosistem dirençliliğini artırmaktır. Bu yaklaşım aynı zamanda bio-çeşitlilik kayıplarını ve ekosistem bozulmalarını azaltma, su döngüsünü canlandırmanın yanı sıra etkin maliyet ve uygulanabilir adaptasyon çözümleri üretmeye yaramaktadırlar. Sünger kent ve peyzaj, yeşil çatı ve duvarlar gibi bitkilendirilen elemanlarla akarsulara daha fazla alan kazandırmak amaçlanır (iklimgazetesi.com/bir-selle, 2022). Hassas tedbirler ise gri ve yeşil altyapının uygulanmasını kolaylaştıracak politiklardır. Yönetişim politikaları, arazi kullanım plan ve programları, yol haritaları, bilgi yayımı, mali teşvikler, kapasite artırımı gibi eylemler bu kapsamdadır. Türkiye’de su yönetimi afetlerden sorumlu kuruluşların yaklaşımlarına bakıldığında hassas tedbirler yöntemini benimsediği de anlaşılmaktadır. Suyun toprakla kavuşmasını sağlayacak açık ve yeşil alanları kent bütününde sistemli bir biçimde artırmanın ve olanları korumak, sınırlı kaynakların etkin kullanımı için son yıllarda pek çok kentte tercih edilen bir yöntem olmaya başlamıştır.

Yeşil altyapı yaklaşımı ve tedbirleri bu alanda birden çok terminolojinin gelişmesine de sebep olmuştur. Terminolojide bazen uygulanan yöntem bazen de coğrafi alan öne çıkmıştır (Tunçay, 2022: 100). 1980’den sonra geliştirilen yaklaşımlar: Avusturalya ve Yeni Zelanda’da geliştirilen “İyi Yönetim Uygulamaları”, “Suya Duyarlı Kentsel Tasarım” (Li, vd, 2017). Daha sonra şehir yerleşimini daha geniş alan ele alan ABD ve Kanada’da, “Düşük Etkili Kalkınma ve İngiltere ve Kıta Avrupası’nda “Sürdürülebilir Kentsel Drenaj Sistemleri”dir (CIRIA, 2000) ve “Sünger Kent” (Sponge Cities) yaklaşımlarıdır. Dünyanın farklı ülkelerinde ortaya çıkan yaklaşım ve terimlerin temelinde amaç; sel baskınları ile mücadele etme, yeraltı su seviyesini koruma, yerel ve doğal su döngüsünün desteklenmesi ve bunun yanı sıra su kalitesinin iyileştirilmesidir. Tasarım kılavuzlarında ilk olarak yapısal olmayan uygulamaların hayata geçirilmesini savunarak sürdürülebilirliğin sağlanmasına odaklanılmıştır (Fletcher vd., 2015). Dünyada yağmur suyu yönetiminin tarihsel terminolojisi Şekil 2’deki gibidir.

Şekil II. Yağmur Suyu Yönetiminin Tarihsel Gelişimi



Kaynak: (Fletcher vd., 2015)

Sünger şehir kavramını ilk geliştiren kişi Prof. Kongjian Yu’dur. Kavram Çin’de çok sıklaşan sel felaketlerine çözüm olabilmek amacıyla 2013 yılında ortaya konmuştur. Bir kıta kadar büyük alana sahip olan Çin’in Okyanusa kıyı olan alanlarının %65’i sel ve taşkına maruz kalmaktadır. Sünger kent kavramının temelinde geçirirli peyzaja sahip şehirlerin geçirimsiz yüzeylerle kaplanmasının taşkına sebep olması vardır. Yu’ya göre su, şehirlerden kanallar, barajlar ve mazgallarla koparılmaz ve şehre entegre edilerek, şehir tarafından absorbe edilmelidir (Yu, 2012). Süngerimsi yüzeyler kullanmanın üç amacı vardır; akış kontrolünü sağlamak, yağmur suyunu kullanmak ve kirliliğin kontrolünü sağlamaktır (Wang vd, 2021). Sünger kent yapısının temeli sel anında hızla gelen suyun tahliyesi yerine emilmesini öneren yeşil mimari yapıların inşa edilmesine dayanmaktadır. Bu yapılar (ekolojika.com/sünger, 2023);

sünger araştırma odaklı şehir politikaları benimsenmiştir. Çin’de 2030 yılına kadar kentlerin %80’inin sünger şehir yapısı ile bütünleştirilmesi hedeflenmektedir (Thornett, 2023). Şangay şehrinde sünger şehir bileşenleri ile ilgili olarak biraz daha ayrıntılı bakmak bilgilendirici olacaktır. Şangay körfezi parkı mangrov ağaçlarının yanında sünger şehir tekniklerine iyi bir örneğidir. Parkın 13 km’lik kıyı şeridinde büyük yapılar bulunmuyor ayrıca da ana otoyollar, yapılar ve yerleşim alanları parkın arkasında, okyanustan uzakta ve sellerden korunuyor. Şangay Körfez Parkı geniş kıyı şeridi yolundaki kaldırımlarda, suyun yavaşça sızmasına ve daha sonra onu daha da yavaşlatan derin bir çakıl yatağından süzülmesine izin verecek yapıda inşa edilmiştir. Böylece su, alttaki geçirimsiz bir astara ulaştığında, yerçekimi onu hafif bir eğimle borulara yönlendiriyor ve bu da şehrin suyu depolamasına veya okyanusa yönlendirmesine de olanak tanımaktadır (Thornett, 2023). Yeşil yollar, sünger kentlerin yağmur suyu akış hacmini kontrol etmek için kullandığı başlıca araçlardan biridir. Yeşil yollar, rekreasyon ve ekolojik koruma için korunmuş yeşil alanların doğrusal koridorlarıdır (Austade, 2017).

Şangay Sünger Kent Programı sayesinde şehir, şu anda genişliği 3 metrenin altından 100 metrenin üzerine kadar değişen yeşil ulaşım koridorları, ormanlar ve parklar dahil olmak üzere toplam uzunluğu 2.300 kilometreyi aşan yüksek yoğunluklu bir yeşil yol ağına sahiptir (Thornett, 2023). Şangay sünger şehirler programında, 260 km’lik kıyı şeridi boyunca mangrov ağaçları ve diğer sulak alan bitki örtüsü dikilerek ve yeni inşaatlara kıyı şeridinden uzakta yer gösterilerek 12 milyonu aşan nüfusunu fırtına ve deniz dalgalarından korumuş olmaktadır.

Foto I: Şangay Körfez Parkı ve Yeşil Yollar



Kaynak: (thediplomat.com,2023)

Sünger Kent yapısını Türkiye’de ilk önemseyen yönetim İzmir Büyükşehir Belediyesi’dir. İzmir yağış rejimi olarak az yağış alan ve kurak iklime sahip bir yerleşimi olmasına karşın Akdeniz İkliminde kaldığı için küresel ısınmadan dolayı ani ve kuvvetli su baskınlarını da yaşamaktadır. Ayrıca İzmir’in çoğu yerleşimi deniz seviyesinin altında bir seviyede olduğu içinde sel riskine doğal olarak çok açıktır. Yağmur ile atık su bir arada toplanmaktadır. Ancak İzmir BŞB bunu ayırma yoluna gitmiştir. Kanalizasyon ve yağmur suyu taşıma kanalları ayrılmıştır. Tabi bunun içinde caddeler vb. alanlar kazılarak yeni borular döşenmiştir. Atık su tesislerine sadece kanalizasyon suyu gitmektedir. Bu yöntemin yatırım maliyeti büyüktür ancak getirisi yüksektir. Örneğin yağmurdan gelen su tarımda kullanılabilir. Türkiye’de tek “Sünger Kent Uygulama Yönetmeliği” olan şehir de İzmir’dir. Ayrıca İzmir BŞB, “Avrupa Kıyı Şehirlerinde Kentsel Kalite ve İklim Tarafsızlığına Yeniden Değer Vermek Projesi (Re-Value)” ortağı olarak, kentsel sel riskinin azaltılması için sünger bölge konseptini deneyerek mavi-yeşil altyapılarını güçlendirme taahhüyle 126.900 Avro hibe desteği almıştır. Proje Ufuk Avrupa Programı “2030 yılına kadar 100 İklim Nötr ve Akıllı Şehir” hibe programının bir bileşenidir (re-value-cities).

İzmir dışında Türkiye’de sünger şehir bileşenlerine ilişkin Eskişehir Çankaya Belediyesi ve Gaziantep’ ten küçük örnekler verilebilir. Çankaya Belediyesi ve İnsani Dünya Derneği ortaklığında IV. Çevre Hibe Programı tarafından 2017 yılında “Yağmur Hasadı Yoluyla İklim Değişikliğine Uyum Projesi” tamamlanmıştır. “Yağmur Hasadı Uygulamaları Giriş Rehberi” hazırlamıştır. Belediye tarafından 500’e yakın kent parkının yağmur suları ile sulanmasını sağlamak için çalışmalar yürütülmektedir. Eskişehir BŞB, 2003 yılında Porsuk Çayı’nın yerleşim içinde kalan bölümlerinin iyileştirilmesi, taşkın, deprem gibi afetlere dayanıklı hale gelmesi, sulama kanallarından kaynaklanan sızmaların önlenmesi amacıyla Çayı’nı ıslah ederek bir nevi yeşil koridor oluşturmuştur (Dereli, 2020: 101-102).

Foto II: Porsuk Çayı Islah Projesi ve Yeşil Koridor



Kaynak: Anonim.

Gaziantep'teki Allaben Deresi boyunca entegre edilen 18 tematik park ve boyunca yağmur suyu yüzey akış suyu kontrolü, sızdırma ve filtreleme işlevine sahip bitki şeridi bulunmaktadır. Bu parklardan Kavaklık Park'ta doğa tabanlı çözümler ve yeşil altyapı uygulamalarından geçirgen döşeme, dere kenarı boyunca yer alan 18 parkta ise yağmur suyu bitki şeridi bulunmaktadır (Dereli, 2020: 102).

5. SONUÇ

Küresel ısınmadan kaynaklanan aşırı yağış ve selleri artık 20 yılda bir görmeye başladık. Sünger Kent yapısının ortaya çıkışı düzensiz yağış rejiminin yarattığı sel ve kuraklık gibi afetlere karşı bir çözüm olarak düşünülmüştür. Bunun yanında tatlı su kaynağı ihtiyacını arttırmaya yönelik çalışmalarda da sünger kent modeli tasarlanmaktadır. Aslında sünger kent modeli çok yeni bir buluş değildir. Doğada var olan geleneksel toplumlardaki yerleşim yerleri ve köyler zaten bir nevi suyu emen yerleşim yerleridir. Sünger kent inşa edebilmek için kentlerdeki doğal alanlar korunmak zorundadır. Çünkü Türkiye'nin bu aşamada Çin Devleti kadar mali kaynak ayırarak, kamulaştırmalar, yeşil alanlar ve göller yapamayacağı da ortadadır Su havzaları kılcal damarlarla birbirine bağlıdır ancak kentlerde bu yapı bozulmuştur. Model anlamında yapılması gereken ilk şey küçük kılcal su kaynaklarını birbirine bağlamaktır. Nehirler, göller ve derelerin birbiri ile bağlantısı kent yapılaşmasıyla kopmuştur. Bu şekilde bir nevi "habitat köprüsü" oluşturulacaktır. Bunun için öncelikle de kent içindeki su kaynakları betondan ayrıştırılmalı ya da genişletilmeli ya da yeşillendirilmelidir. Bu da yapılamıyorsa bu alanda "sel hazneleri" denilen bir teknik kullanılmaktadır. Türkiye'de çoğu şehirde Delta'lar vardır. Büyük ve Küçük Çekmece, Çanakkale'de var olan bu deltalar sel hazneleri olarak kullanılabilir mi? Bu konuda bir etüd yapılmalıdır.

İkincisi ise yeşil çatılar yapmaktır. Yağmurla gelen suyu bir haznede toplayarak akıp gitmesini engellemektir. Anadolu'da kerpiç mimari de bu görülmektedir. Bu aynı zamanda evin içindeki sıcaklığı da belirli bir seviyede tutmaktadır. Yağmuru ve akışı yönetmektir. Geçirgen yüzeyler kullanmaktır. Amaç asfaltı ve toprağı geçirgen hale getirebilmektir. Yapı tekniği yanında tasarruf ve geri dönüşümde gereklidir. Bunlar bir kenti "sünger kent" yapmak için yapılacak yapılardır. T.C. Tarım ve Orman Bakanlığı 'da binalarda %25 su tasarrufu sağlanması hedefi ile "binalarda su verimliliği hedefi ve uygulama kılavuzu" hazırlayarak belediyeler ile işbirliği yapılması gerektiğini vurgulamıştır. Hedefin en somut araçlarından biri ise yağmur suyu ve gri su sistemleri kullanılarak

suyun yeniden kullanılması sağlanmasıdır (suverimliliği.gov.tr, 2023). Türkiye’de 2022 yılı sonu itibarıyla %4,75 olan arıtılmış atık suların yeniden kullanım oranının 2023 yılında %5’e, 2030 yılında ise %15’e çıkarılması hedeflenmektedir. Kentsel altyapıda yeşil ve sürdürülebilir binalardan, kendi enerjisini üreten binalara, yapı ve mahallelerden söz edebiliriz. Küçük de olsa dönüştürücü etkisi büyük olan çatı bahçeleri, bostanlar; yapı malzemelerinin seçiminde yerel üretime uygun malzemeler. Dünya sel ve taşkınlarla mücadelede daha ekolojik çözümler sunana ve örnek olan şehirler Kopenhag, Seul, Şangay, Philadelphia, Rotterdam örnek şehirlerdir. Bu kentlerde daha süngerimsi bir yapı için sert peyzaj unsurlarını yumuşatmaya ve kamulaştırmalara milyarlarca Dolar kaynak ayırmışlardır. Küresel ısınmayı sınırlamak belki de sellere karşı uzun vadeli çözüm karbon ayak izini azaltmak olmalıdır. Türkiye’deki sel afetlerinin etkileri özellikle büyükşehirlerimizde daha yıkıcı olmaktadır. Bunun sebebi dere ve nehir yataklarının konutlar ve ticari binalar yapılması, su geçirmez alanların büyük yer kaplaması (betonlaşma) ve periyodik bakımların aksatılması ile görülen yetersiz drenajdır. Yasal altyapı yeterli olmasına rağmen, uygulamada görülen eksikliklerden ötürü ani su baskınları çok büyük can ve mal kaybına mal olmaya devam etmektedir. Gri ev yeşil altyapının birlikte kullanıldığı etkili bir su yönetişimi uygulanması dışında bir çözüm de görünmemektedir.

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Yasama Dokunulmazlığının İstisnası Olarak Anayasanın 14. Maddesi ve Anayasa Mahkemesi Kararları Üzerine Bir Not

Dr. Öğr. Üys. Hakan Sabri Çelikyay¹

¹Trakya Üniversitesi / İktisadi ve İdari Bilimler Fakültesi, Siyaset Bilimi ve Kamu Yönetimi Bölümü,
hcelikyay@trakya.edu.tr, ORCID: 000-0003-3055-3805

Özet: Türkiye Cumhuriyeti Anayasasının 83. maddesi doktrinde “yasama bağışıklıkları” olarak adlandırılan “yasama sorumsuzluğu” ve “yasama dokunulmazlığı” kurumlarını birlikte düzenlemekte olup, bunlardan yasama dokunulmazlığı milletvekillerine bazı yargısal güvenceler sağlamaktadır. Ancak yasama dokunulmazlığının sağladığı yargısal güvenceler mutlak olmayıp, TBMM, milletvekilinin yasama dokunulmazlığının kaldırılmasına karar verebilmektedir. Keza, Anayasanın 83. maddesinde yasama dokunulmazlığına ilişkin iki istisnaya da yer verilmektedir. Bunlardan ilki ağır cezayı gerektiren suçüstü hali ve ikincisi de seçimden önce soruşturmasına başlanmış olmak kaydıyla Anayasanın 14. maddesindeki durumlardır. Bu çalışmada bahsi geçen istisnai hükümlerden ikincisini oluşturan Anayasanın 14. maddesinin yasama dokunulmazlığı statüsüne etkisi üzerinde durulmaktadır. Bu bağlamda öncelikle yasama dokunulmazlığı kurumu hakkında genel bilgi verildikten sonra, kısaca Anayasanın 14. maddesinin hukuki değerlendirilmesi yapılmaktadır. Diğer taraftan, uygulamada Anayasanın 14. maddesi kapsamına giren bir suçun işlendiğinin iddia edilmesi halinde yargılama makamları milletvekili hakkındaki yargılama işlemlerine devam edebilmekte, bu durum da somut olayda işlendiği iddia edilen suçun Anayasanın 14. maddesi kapsamında kalıp kalmadığı tartışmalarını beraberinde getirmektedir. Bu tartışmalar bireysel başvuru yoluyla Anayasa Mahkemesi önüne götürülebilmektedir. Anayasa Mahkemesi; bu konuda yapılan bireysel başvuruları, yargılama makamlarının milletvekiline yönelik suçlamaları Anayasanın 14. maddesi kapsamında görmelerine ilişkin kararlarını, milletvekilin anayasal güvence altında olan ve bireysel başvuru kapsamında kalan seçilme hakkı ve siyasi faaliyette bulunma hakkının ihlali yönünden değerlendirerek sonuca ulaşmaktadır. Anayasa Mahkemesi, bu konuya ilişkin bireysel başvuru kararlarında özellikle, Anayasanın 14. maddesinde sayılan durumların yasama dokunulmazlığının istisnası olarak uygulanmasına ilişkin derece mahkemeleri kararlarında önemli hukuksal sorunlar olduğu tespitinde bulunmaktadır.

Anahtar Kelimeler: Yasama Dokunulmazlığı, Anayasa md.14, Anayasa Mahkemesi Kararları

1. GİRİŞ

Yasama meclislerinin üyeleri olan parlamenterlerin hukuki statüleri ile ilgili konulardan biri de “yasama bağışıklıkları” olarak üst başlıkta toplanabilecek “yasama sorumsuzluğu” ve “yasama dokunulmazlığı” kurumlarıdır. Modern demokrasilerde, parlamenterlerin seçmenleri temsil kabiliyetini tam manası ile yerine getirebilmesi için genellikle her iki kuruma da yer verildiği görülmektedir.

Türkiye Cumhuriyeti Anayasası (AY) madde (md) 83 hükmünde de yasama sorumsuzluğu ve yasama dokunulmazlığı kurumlarının düzenlendiği görülmektedir. Bunlardan “kürsü dokunulmazlığı” olarak da anılan “yasama sorumsuzluğu” milletvekiline, parlamenter fonksiyonunu yerine getirirken kendini hiçbir baskı altında hissetmemesini sağlamak ve mutlak bir güvence tanımaktadır. Yasama dokunulmazlığı kurumu ise milletvekillerinin fiziki varlıklarını güvence altına almayı hedefleyerek, onların Meclis çalışmalarına katılmalarının engellenmesini önlemeye amaçlamaktadır.

Ancak Anayasa, yasama dokunulmazlığı kurumunu mutlak biçimde kabul etmemiş, bazı istisnalara da yer vermiştir. Bu çalışmada bahsi geçen istisnalardan birini oluşturan “AY.md.14’de belirtilen durumlar” ele alınmakta olup, öncelikle genel olarak yasama dokunulmazlığı kavramı hakkında bilgi verilmekte, daha sonra AY.md.14 hükmü kısaca değerlendirilmekte ve son olarak da Anayasa Mahkemesi (AYM)’nin konu ile ilgili emsal nitelikteki bazı kararları üzerinde durulmaktadır.

Belirtmek gerekir ki konu sadece anayasa hukuku ve ceza hukukunun değil, güncel siyasetinde zaman zaman gündemini oluşturmakta, ayrıca kamuoyunun da dikkatini çekmektedir. Son yapılan milletvekili genel seçimlerinin ardından bu konu yeniden güncel hale gelmiş ve milletvekili seçilmekle yasama dokunulmazlığı kazanan Can Atalay’ın yargılama sürecinde AY.md.14 hükmünün yasama dokunulmazlığının istisnası olarak uygulanmasının mümkün olup olmadığı tartışmaya başlanmıştır. Bu milletvekili ile ilgili ceza yargılaması sürecinde son olarak verilen Yargıtay kararı, tartışmaları yeniden güncel hale getirmiştir (<https://www.bbc.com/turkce/articles/cnd81k9r764o>, Erişim Tarihi 29.09.2023) Ayrıca, AYM’nin 05.10.2023 tarihli gündeminde Can Atalay tarafından yapılan bireysel başvurunun bulunduğu da ifade edilmektedir (<https://www.anayasa.gov.tr/tr/mahkeme-gundemi/ikinci-bolum/5-ekim-2023-bolum-toplantisi-gundem/>,

Erişim Tarihi 30.09.2023). Dolayısıyla, AYM'nin benzer olaylarda daha önce verdiği kararların incelenmesi önem taşımaktadır.

2. GENEL OLARAK YASAMA DOKUNULMAZLIĞI KAVRAMI

AY.md.83 hükmü her ne kadar “yasama dokunulmazlığı” başlığını taşısa da madde metninde “yasama bağımsızlıkları” üst başlığında toplanabilecek iki farklı kurum düzenlenmektedir: “Yasama sorumsuzluğu” ve “yasama dokunulmazlığı”. Yasama sorumsuzluğu maddenin ilk fıkrasında şu şekilde düzenlenmektedir: “Türkiye Büyük Millet Meclisi üyeleri, Meclis çalışmalarındaki oy ve sözlerinden, Mecliste ileri sürdükleri düşüncelerden, o oturumdaki Başkanlık Divanının teklifi üzerine Meclisce başka bir karar alınmadıkça bunları Meclis dışında tekrarlamak ve açığa vurmaktan sorumlu tutulamazlar”. Bu hükümden de anlaşılacağı üzere, “kürsü dokunulmazlığı olarak da isimlendirilen “yasama sorumsuzluğu” kurumu milletvekillerine mutlak bir güvence sağlamaktadır.

Çalışmanın asıl konusunu oluşturan “yasama dokunulmazlığı” ise AY.md.83/2-5’de düzenlenmektedir:

“Seçimden önce veya sonra bir suç işlediği ileri sürülen bir milletvekili, Meclisin kararı olmadıkça tutulamaz, sorguya çekilemez, tutuklanamaz ve yargılanamaz. Ağır cezayı gerektiren suçüstü hali ve seçimden önce soruşturmasına başlanılmış olmak kaydıyla Anayasanın 14 üncü maddesindeki durumlar bu hükmün dışındadır. Ancak, bu halde yetkili makam durumu hemen ve doğrudan doğruya Türkiye Büyük Millet Meclisine bildirmek zorundadır.

Türkiye Büyük Millet Meclisi üyesi hakkında, seçiminden önce veya sonra verilmiş bir ceza hükmünün yerine getirilmesi, üyelik sıfatının sona ermesine bırakılır; üyelik süresince zamanaşımı işlemez.

Tekrar seçilen milletvekili hakkında soruşturma ve kovuşturma, Meclisin yeniden dokunulmazlığını kaldırmasına bağlıdır.

Türkiye Büyük Millet Meclisindeki siyasi parti gruplarınca, yasama dokunulmazlığı ile ilgili görüşme yapılamaz ve karar alınamaz”.

Yasama dokunulmazlığı milletvekillerinin fiziki varlıklarını güvence altına almayı amaçlayan, dolayısıyla onların Meclis çalışmalarına katılmalarını sağlamaya yönelik bir kurumdur. Buna göre, milletvekillerinin yasama faaliyetleri dışındaki fiilleri nedeniyle Meclis çalışmalarına devam etmelerinin engellenmesini önlemeye yönelik bir amaç taşımaktadır (Gözler, 2011: 787-791; Bakırcı vd, 2020: 139-146; Teziç, 2009: 396-403; İba, 2009: 17; Neziroğlu, 2008: 440-443).

Anayasaya göre yasama dokunulmazlığı kurumu ceza yargılaması işlemleri yönünden milletvekillerine bazı güvenceler sağlamaktadır. Buna göre bir milletvekili seçimden önce ya da donra suç işlediği iddiası ile karşılaştığında, Meclis kararı olmadıkça tutulamaz, sorguya çekilemez, tutuklanamaz ve yargılanamaz. Milletvekilinin kişi hürriyetini sınırlandıracak ve onu özgürlüğünden yoksun bırakacak ceza yargılaması işlemleri, dokunulmazlık statüsü nedeniyle uygulanamayacaktır.

Ancak yasama sorumsuzluğundan farklı olarak yasama dokunulmazlığı mutlak bir güvence sağlamamaktadır (Kaboğlu, 2021: 131). Gerçekten de Meclis kararı ile bir milletvekilinin dokunulmazlığı kaldırılabilen, bu durumda yukarıda sayılan ceza yargılaması işlemlerinin uygulanması mümkün hale gelmektedir. Bu nedenle, yasama dokunulmazlığını ceza yargılamasının özel bir işleyiş türü olarak görmek mümkündür (Odyakmaz-Kaymak, 2021: 136). Belirtmek gerekir ki, yasama dokunulmazlığının kaldırılmasına ilişkin Meclis kararlarına karşı AY.md.85 gereğince AYM’de iptal davası açılabilir (Bakırcı vd, 2020: 147-15; Gözler, 2020: 206-208).

Diğer taraftan, AY.md.83/2’de yasama dokunulmazlığının istisnalarına da yer verilmektedir. Buna göre ilk olarak “ağır cezayı gerektiren suçüstü hali” yasama dokunulmazlığının istisnası olarak düzenlenmiştir. Bu durumda milletvekiline yönelik suç isnadının ciddiliği konusunda ortada somut deliller olduğu düşünülerek böyle bir istisnaya yer verildiği söylenebilir.

Aynı hükümde yer alan ikinci istisna ise şu şekilde ifade edilmiştir: “Seçimden önce soruşturmasına başlanılmış olmak kaydıyla Anayasanın 14 üncü maddesindeki durumlar bu hükmün dışındadır”. Bildirinin ana konusunu oluşturan bu istisna hükmü incelendiğinde iki bölümden oluştuğu görülmektedir. İlk olarak, işlendiği iddia edilen suçun soruşturulmasına seçimden önce başlanmış olması gerekir. Bu hüküm nispeten somut nitelikte olup, uygulamada önemli tartışmalara neden olması pek mümkün değildir. Uygulama açısından asıl sorun yaratan ise hükmün ikinci bölümünde yer alan “Anayasanın 14 üncü maddesindeki durumlar” ibaresidir. Zira bu

hüküm ceza yargılaması makamlarına oldukça geniş bir takdir alanı bırakmakta, hangi suçların “Anayasanın 14 üncü maddesindeki durumlar” ibaresinin kapsamında kaldığını uygulamada ceza yargılaması makamları belirlemektedir. AY.md.14’de herhangi bir suç tipine doğrudan değinilmediğinden, hangi suçların AY.md.14 ile bağlantılı olduğu uygulamada bir çok tartışmaya neden olabilmektedir. Bu nedenle, kısaca AY.md.14’ün hukuki değerlendirilmesi üzerinde durmak faydalı olacaktır.

3. ANAYASANIN 14. MADDESİNİN HUKUKİ NİTELİĞİ

AY.md.14 hükmü Anayasanın “Temel haklar ve Ödevler” başlıklı ikinci kısmının “Genel Hükümler” başlıklı birinci bölümünde yer almaktadır. Görüldüğü üzere hüküm, Anayasanın yasama dokunulmazlığının düzenlendiği “Yasama” bölümünde yer almamaktadır. AY.md.14 hükmü “temel hak ve hürriyetlerin kötüye kullanılmaması” başlığını taşımakta olup, 2001 yılında yapılan Anayasa değişikliği ile yeniden düzenlenmiştir. Maddenin son hali şu şekildedir:

“Anayasada yer alan hak ve hürriyetlerden hiçbirisi, Devletin ülkesi ve milletiyle bölünmez bütünlüğünü bozmayı ve insan haklarına dayanan demokratik ve lâik Cumhuriyeti ortadan kaldırmayı amaçlayan faaliyetler biçiminde kullanılamaz.

Anayasa hükümlerinden hiçbirisi, Devlete veya kişilere, Anayasayla tanınan temel hak ve hürriyetlerin yok edilmesini veya Anayasada belirtilenden daha geniş şekilde sınırlandırılmasını amaçlayan bir faaliyette bulunmayı mümkün kılacak şekilde yorumlanamaz.

Bu hükümlere aykırı faaliyette bulunanlar hakkında uygulanacak müeyyideler, kanunla düzenlenir”.

Söz konusu hükmün temel hak ve özgürlükler açısından bir “genel yasaklama” kuralı olduğu söylenebilir (Tanör-Yüzbaşıoğlu, 2019: 156; Uygun, 1992: 71). Zira maddenin ilk fıkrasından temel hak ve özgürlüklerin bazı amaçlarla kullanılması “hakkın kötüye kullanılması” olarak kabul edilmekte ve yasaklanmaktadır. Madde, temel hak ve özgürlüklerle ilgili genel hükümler arasında yer aldığından, kural olarak, bu hükmün getirdiği yasakların “genel” olduğu ve tüm hak ve özgürlükleri etkilediği sonucuna varılabilir. Diğer taraftan maddenin 2001 yılında yapılan Anayasa değişikliğinden önceki halinde yer alan ve kötüye kullanma olarak kabul edilen amaçlar daha geniş kapsamlı iken, maddenin son halinde bunlar daraltılmıştır. Ayrıca maddenin son halinde yasaklanan düşünce ya da ifade değil, eylemler olduğuna yönelik bir yaklaşım da getirilmiştir. Zira maddenin ikinci fıkrasında “faaliyetler” ibaresi yer almaktadır. Ayrıca maddenin ikinci fıkrasındaki yasaklar sadece “kişilere” değil, “devlete” yönelik olarak da hüküm ifade etmektedir ve devlet de kötüye kullanmama yükümlülüğü altındadır.

Maddenin son fıkrasında ise söz konusu yasaklara aykırı eylemde bulunanlar hakkında uygulanacak yaptırımların kanunla düzenlenmesini hükme bağlamaktadır. Bu düzenleme nedeniyle de hükmün “soyut” bir yasaklama kuralı olduğu söylenebilir. Zira madde sayılan yasaklara aykırı faaliyette bulunanlar hakkında kanunla bir yaptırım getirilmediği müddetçe maddenin doğrudan uygulanması mümkün değildir. Maddenin önceki halinde “bu yasaklara aykırı hareket eden veya başkalarını bu yolda teşvik veya tahrik edenler hakkında uygulanacak müeyyideler kanunla düzenlenir” ibaresi yer almakta iken, söz konusu yaptırımların daha ziyade “ceza” şeklinde olacağını söylemek mümkündür. Zira önceki metinde yer alan “teşvik veya tahrik” ifadesi ceza normlarını çağrıştıracak nitelikteydi. Yeni düzenleme ise sadece “müeyyide” ibaresine yer verdiğine göre, yaptırımların mutlaka “ceza” şeklinde olması gerekmez.

Netice olarak AY.md.14’ün yeni metninin, önceki metne nazaran, temel hak ve özgürlükler lehine yorum yapmaya müsait bir düzenlemeye kavuştuğunu, maddenin temel hak ve özgürlükler üzerindeki yasaklayıcı etkisinin zayıfladığını ve bu nedenle olumlu karşılanması gerektiğini söylemek mümkündür.

AY.md.83/2’de AY.md.14’e atıf yapılırken “Anayasanın 14 üncü maddesindeki durumlar” ibaresi kullanılmaktadır. Dolayısıyla herhangi bir “suça” değil, “duruma” atıf yapıldığı söylenebilir ve bu düzenleme eleştiriye açıktır. Gerçekten de ortada herhangi bir “suç” olmadan yasama dokunulmazlığının istisnasından söz etmek tutarlı bir yaklaşım değildir. Ancak AY.md.14 suçları değil, hakkın kötüye kullanılması olarak kabul edilen bazı “durumları” düzenlemektedir. Diğer taraftan, hakkın kötüye kullanılması mutlaka bir suçun oluşmasına neden olmaz. Zira suçta kanunilik ilkesi (AY.md.38/1) gereği kanunda açıkça suç olarak tanımlanmayan bir fiilden dolayı kimseye ceza verilemez. Bu durum şüphesiz milletvekilleri için de geçerlidir. Esasen, AY.md.14’ün son fıkrasında yaptırımların kanunla düzenleneceği ifade edildiğine göre, bunların mutlaka suç şeklinde olması gerekmez. Kısacası AY.md.83/2’de yasama dokunulmazlığının istisnası olarak AY.md.14’e atıfta bulunması anayasa teorisi açısından sorunludur (Gözler, 2020: 205-206).

Ancak AY.md.14'e yukarıda değinilen yasama dokunulmazlığı ile ilgili AY.md.83/2'de atıfta bulunulduğundan ve AY.md.83/2-5 hükümlerinde ceza yargılaması ile ilgili işlemlerden söz edildiğinden, uygulamada AY.md.14 hükmünün milletvekilleri açısından ceza yargılaması sırasında değerlendirme konusu yapılması mümkün olmaktadır. Ceza yargılaması makamlarının bu değerlendirmeleri de son aşamada bireysel başvuru (AY.md.148/3-5) yoluyla AYM tarafından denetlenmektedir.

4. ANAYASA MAHKEMESİ KARARLARI VE DEĞERLENDİRİLMESİ

AY.md.14 hükmü, diğer temel haklar gibi, özellikle AY.md.83/2'de yapılan atıf nedeniyle, AY.md.67'de düzenlenen "Seçme, seçilme ve siyasi faaliyette bulunma hakları" açısından da AYM'nin bireysel başvuru kararlarında milletvekillerinin "seçilme ve siyasi faaliyette" bulunma haklarının ihlali yönünden değerlendirilmektedir. AYM'nin milletvekilleri tarafından yapılan bireysel başvuruları incelediği kararlarında zaman zaman dokunulmazlığın istisnası olarak düzenlenen AY.md.14'de sayılan durumları değerlendirme konusu yaptığı görülmektedir. Bu kararlar arasında özellikle *Mustafa Ali Balbay* ve *Ömer Faruk Gergerlioğlu* kararları konuyu daha kapsamlı biçimde ele aldığından, aşağıda bu kararlar üzerinde durulmaktadır.

AYM, milletvekili Mustafa Ali Balbay'ın bireysel başvurusunu incelediği *Mustafa Ali Balbay* kararında (Başvuru No 2012/1272, Karar Tarihi 04.12.2013) öncelikle ceza yargılaması devam ederken milletvekili seçilen Mustafa Ali Balbay hakkındaki yargılama sürecini özetlemektedir: "Başvurucunun 12/6/2011 tarihinde yapılan genel seçimlerde 24. Dönem milletvekili seçilmesi üzerine, bu durumun dikkate alınarak tahliyesine karar verilmesi talebine karşılık 13. Ağır Ceza Mahkemesi 23/6/2011 tarihinde vermiş olduğu ret kararında, Anayasa'nın 83. ve 14. maddeleri ile Yargıtay 9. Ceza Dairesi'nin bu konudaki emsal kararları dikkate alınmak suretiyle başvuru hakkındaki soruşturmanın seçimlerden önce başlatıldığını ve durumunun Anayasa'nın 14. maddesine uyduğunu, milletvekili seçilmesinin başlı başına tahliye nedeni teşkil etmediğini belirterek, "sevk maddelerinin ağır cezalı ve CMK 250. maddesi kapsamında kalan suçlara ilişkin olduğu, isnatların kuvvetli suç şüphesini içerdiği, başvurunun milletvekili seçilmekle kaçma şüphesinin kalmadığı savının sübjektif bir değerlendirme olduğu, dosyadaki sanık sayısının çokluğu nedeniyle delillerin tamamının toplanamamış olduğu, iddianamede başvuruyla irtibatlı olduğu iddia edilen diğer sanıkların savunmalarının alınmasının tamamlanamamış olduğu, tanıkların dinlenmesine ise henüz geçilemediği" gerekçeleriyle tutukluluk halinin devamına karar vermiştir. Bu karara itiraz üzerine incelemeyi yapan İstanbul 14. Ağır Ceza Mahkemesi, 29/6/2011 tarihli kararla, 13. Ağır Ceza Mahkemesi'nin kararında usul ve yasaya aykırı herhangi bir isabetsizlik görülmediğini belirterek itirazın reddine karar vermiştir" (par. 109).

AYM, kararın devamında seçilme hakkına ilişkin genel açıklamalarda bulunmakta ve bu hakka ilişkin Avrupa İnsan Hakları Mahkemesi (AİHM) kararlarına atıf yapmaktadır: "Seçilme hakkı sadece seçimlerde aday olma hakkını değil, aynı zamanda seçildikten sonra milletvekili olarak parlamentoda bulunma hakkını da ihtiva etmektedir. Bu da hiç kuşkusuz, kişinin seçildikten sonra milletvekili sıfatıyla temsil yetkisini fiilen kullanabilmesini gerektirir. Bu bağlamda seçilmiş milletvekilinin yasama faaliyetine katılmasına yönelik müdahale, sadece onun seçilme hakkına değil, aynı zamanda seçmenlerinin serbest iradelerini açıklama hakkına da yönelik bir müdahale teşkil edebilir (aynı yöndeki AİHM kararı için bkz. *Sadak ve Diğerleri/Türkiye*, B.No. 25144/94, 26149/95, 26154/95, 27100/95, 27101/95, 11/6/2002, § 33, 40). AİHM, milletvekili-seçmen ilişkisinden hareketle, ifade özgürlüğünün halkın seçilmiş temsilcileri için özellikle önemli olduğunu, zira milletvekilinin seçmeni temsil ettiğini, onların taleplerine dikkat çekerek menfaatlerini savunduğunu, dolayısıyla bir muhalif milletvekilinin ifade özgürlüğüne yönelik müdahalenin daha sıkı bir denetimi gerektirdiğini vurgulamıştır (bkz. *Castells/İspanya*, B.No. 11798/85, 23/12/1992, § 42)" (par. 111).

AYM daha sonra yasama dokunulmazlığı kavramı hakkında genel bilgiler verip, AY.md.83'de yer alan istisnalar üzerinde durmakta, somut olayda başvuru hakkında derece mahkemelerinin AY.md.14'de yer alan istisnayı uyguladıkları tespitinde bulunmakta ve şu sonuca ulaşmaktadır: "Anayasa'nın 83. maddesinde **14. maddeye atıfla getirilen istisna, Anayasa'nın 67. maddesindeki seçilme hakkı da dikkate alındığında dar ve özgürlük lehine yorumlanmalıdır.** Bu nedenle tutukluluğunun devamı hakkında karar verilen kişi milletvekili olduğu takdirde, çatışan değerlere bir yenisi eklenmekte ve kişi hürriyeti ve güvenliği hakkının yanında, seçilmiş milletvekilinin tutuklu olması nedeniyle yasama faaliyetine katılamaması sonucu mahrum kalınan kamu yararının da dikkate alınması gerekmektedir. Bu çerçevede mahkemelerin milletvekili seçilen kişilerin tutukluluğunun devamına karar verirken hem kişi hürriyeti ve güvenliği hakkından hem de seçilme ve siyasi faaliyette bulunma hakkının kullanılmasından kaynaklanan yarardan çok daha ağır basan korunacak bir yararın varlığını somut olgulara dayanarak göstermeleri gerekir. Bunun sonucu olarak makul sürenin aşılp aşılmadığı incelenirken, başvurunun milletvekili seçilmesiyle birlikte ileri sürmüş olduğu iddiaların tutukluluğun

devamına ilişkin kararlarda gerektiği gibi değerlendirilip değerlendirilmediğine de bakılmalıdır. Dolayısıyla, başvurunun seçilmiş bir milletvekili olarak siyasi faaliyette bulunma ve temsil hakkı ile davanın tutuklu sürdürülmesindeki kamu yararı arasında ölçülü bir denge kurulduğu takdirde, tutukluluğun devamına ilişkin gerekçelerin ilgili ve yeterli oldukları sonucuna varılabilir. Bu nedenle, seçimden önce soruşturmasına başlanılmış olmak kaydıyla **Anayasa'nın 14. maddesi kapsamındaki bir suç isnadıyla yargılanan bir milletvekilinin tutukluluk halinin incelenmesi sırasında, bu koruma tedbirinin seçilme hakkını işlevsiz hale getirebileceği göz ardı edilmemelidir.** Bütün Milleti temsil etmek üzere belli bir süre için seçilen milletvekilinin, şayet varsa, bu hakkını kullanmasına engel olmayacak koruma tedbirlerinin uygulanabilirliği üzerinde özenle durulmalıdır. 5271 sayılı Kanun'un 109. maddesinin (3) numaralı fıkrasında buna imkân tanıyan hükümlere yer verildiği, maddede 6352 sayılı Kanun'la yapılan değişiklikler sonucunda bunların sayısının artırıldığı görülmektedir. Tutuklamanın devamına karar verilirken, davanın genel durumu yanında, tahliyesini talep eden kişinin özel durumunun dikkate alınması ve bu anlamda tutukluluk gerekçelerinin kişiselleştirilmesi bir zorunluluktur. Başvurucunun tahliye taleplerini inceleyen mahkemeler, bu talepleri reddederken gerekçelerini yeterince kişiselleştirmemiş, aynı zamanda milletvekili seçilmiş olan başvurunun kaçacağına ya da delilleri karartacağına dair inandırıcı somut olgular ortaya koyamamıştır" (par.114-116). Sonuç olarak AYM, AY.md.67/1 ile bağlantılı olarak AY.md.19/1 hükmünün ihlal edildiğine hükmetmiştir.

Kararda da benimsendiği üzere, Anayasaya göre yasama dokunulmazlığının istisnası olarak kabul edilen AY.md.14'de sayılan durumlar dar biçimde yorumlanmalıdır. Zira özgürlükleri sınırlayan hükümlerin dar olarak yorumlanması genel kabul gören bir yorum ilkesidir. Bu şekilde yapılacak bir yorumla, milletvekillerinin seçilme ve siyasi faaliyette bulunma özgürlükleri ve seçmenlerin de seçme hakkı aşırı biçimde sınırlandırılmamış olur. Bu sınırlandırmayı meşru kılacak daha üstün bir kamusal yarar somut olarak ortaya konulmadıkça özgürlüğün sınırlandırılmasına yönelik müdahaleler milletvekilinin seçilme ve siyasi faaliyet bulunma özgürlüğü yanında kişi hürriyet ve güvenliği hakkının (AY.md.19) da ihlaline yol açabilecektir. Bu nedenle AYM'nin ulaştığı sonuç genel olarak olumlu görülmelidir.

AYM, *Ömer Faruk Gergerlioğlu* kararında (Başvuru No:2019/10634, Karar Tarihi 01.07.2021) ise yasama dokunulmazlığının istisnası olarak kabul edilen AY.md.14 hükmünün temel hak ve özgürlüklerin sınırlandırılmasının kanunla yapılmasını öngören ve AY.md.13'de düzenlenen "kanunilik" ilkesinin bünyesinde yer alan "belirlilik" ve "öngörülebilirlik" ilkelerine uygun olmadığını şu şekilde değerlendirmektedir: "Tüm bu hususlar birlikte değerlendirildiğinde Anayasa'nın 14. maddesinin üçüncü fıkrasından ve Anayasa'nın seçme, seçilme ve siyasi faaliyette bulunma hakkını düzenleyen 67. maddesinin üçüncü fıkrası hükümlerinden hareketle Anayasa'nın 83. maddesinin ikinci fıkrasında yer alan "**Anayasanın 14 üncü maddesindeki durumlar**" ibaresinin kapsamına hangi suçların girdiği konusunda **kanun koyucunun düzenlemesi dışında yargı organlarınca yapılan yorumlarla belirlilik ve öngörülebilirliği sağlamanın mümkün olmadığı sonucuna ulaşılmıştır**" (par.103).

Aynı kararda AYM Anayasanın 14. maddesindeki durumların varlığı hâlinde yasama dokunulmazlığının bulunmadığının tespiti bakımından ise şu önemli değerlendirmelerde bulunmuştur: "Yasama dokunulmazlığının Meclisçe kaldırılması yönteminde uyulması gereken ve Anayasa Mahkemesince belirlenen ilkelerin başvuruya konu Anayasa'nın 14. maddesindeki durumlar kapsamında görülen bir suç soruşturması ve kovuşturması nedeniyle bulunmadığının tespiti yöntemi bakımından da -niteliğine uygun düştüğü ölçüde- dikkate alınması gerekir. Zira yasama dokunulmazlıklarının Anayasa'nın 14. maddesindeki durumlar kapsamında görülen bir suç soruşturması ve kovuşturması nedeniyle bulunmadığının tespiti yönteminde Anayasa Mahkemesinin Anayasa'dan hareketle geliştirdiği ilkelerin geçerli olmadığını ileri sürülmesi bu alanı anayasal korumadan yoksun bırakır. Yasama dokunulmazlığının Meclis kararıyla kaldırılması kuralının iki istisnasından biri olarak düzenlenmiş bulunan ve eldeki bireysel başvuruya konu olan, milletvekilinin **seçimden önce soruşturmasına başlanılmış olmak kaydıyla Anayasa'nın 14. maddesindeki durumlardan biri kapsamında işlediği suç nedeniyle yargılanmasına ilişkin olarak Anayasa'da, kanunlarda veya TBMM İçtüzüğü'nde esasa ve usule yönelik güvenceler içeren hükümlere yer verilmemiştir**" (par. 113-114).

Kararın devamında AYM, AY.md.14 hükmünün yasama dokunulmazlığının istisnası olarak uygulanmasına ilişkin pratik hakkında ise kapsamlı bir değerlendirmede bulunmuştur: "...Bu durumda soruşturmanın seçimden önce başlatılmış olması koşulunun *Anayasa'nın 14. maddesindeki durumların* belirsizliğine yönelik olarak yukarıda yer alan tespitler karşısında asıl amacı milletvekillerinin demokratik işlevlerini gereği gibi yerine getirmesi olan yasama dokunulmazlığının korunması bağlamında **seçilme ve siyasi faaliyette bulunma hakkına yönelik müdahaleler yönünden yeterli bir güvence oluşturduğunu söylemek mümkün görünmemektedir.** Anayasa'nın 83. maddesinin ikinci fıkrasının "*Ancak, bu halde yetkili makam durumu hemen ve doğrudan doğruya Türkiye Büyük Millet Meclisine bildirmek zorundadır.*" biçimindeki son cümlesinde yer verilen zorunluluğun ise dokunulmazlığın bulunmadığının tespit edilmesinde kurucu bir etkisi yoktur. Dolayısıyla bu hüküm yargı

makamlarınca dokunulmazlığın bulunmadığının tespiti yönteminde bir güvence değildir. Bunlardan başka bahsi geçen ve durumu TBMM'ye bildirmekle yükümlü olan *yetkili makamın* kim olduğu da açıklanmamıştır. Söz konusu yetkili makamın ceza soruşturması yapmaya yetkili herhangi bir Cumhuriyet savcısı veya kovuşturma yapmaya yetkili herhangi bir mahkeme hâkimi olabileceği anlaşılmaktadır. Yetkili hâkim veya savcının bu konuda alacağı bir karar ile Meclisin iznine gerek kalmaksızın bir milletvekili tutuklanıp kovuşturulabilecek, halkın oylarıyla seçilmiş bir milletvekilinin geçici bir süre için bile olsa yasama çalışmalarını yapmaktan alıkonulabilmesinin önü açılacaktır” (par.116-118).

Yine **AYM, AY.md.14 hükmünün yasama dokunulmazlığı bağlamında somutlaştırılması açısından ceza yargılaması makamlarının dikkat etmesi gereken hususları da şu şekilde sıralamaktadır:** “Öte yandan Anayasa Mahkemesi, Anayasa'nın 67. ve 83. maddelerini birlikte yorumladığında yetkili hâkim veya Cumhuriyet savcısının dokunulmazlığın bulunmadığına ilişkin böyle bir kararı verebilmesi için en azından şu değerlendirmeleri yapmasını beklemektedir:

- i. Anayasa'nın 83. maddesinin ikinci fıkrasında yer alan "*Anayasanın 14. maddesindeki durumlar*" ibaresinin kapsamını ortaya koyan bir kanunun bulunup bulunmadığı,
- ii. Anayasa Mahkemesinin içtihatlarında ortaya koyduğu gibi suç isnadının milletvekilinin yasama dokunulmazlığından faydalanmasını engelleyecek derecede ciddi olup olmadığı, milletvekilinin görevini tam olarak yerine getirmesini engelleyecek gereksiz suçlamalardan olup olmadığı,
- iii. Yasama dokunulmazlığının bulunmadığının tespitine konu olan suçlamaların sırf siyasi amaçlarla yapılmış olup olmadığı ve özellikle suçlamanın gerçek amacının bir milletvekiline adil olmayan bir şekilde müdahale etmek ve görevini yerini getirirken özgürlük ve bağımsızlığını tehdit etmek amacı taşıyıp taşımadığı,
- iv. Bu kapsamda suçlamaya temel teşkil eden gerekçelerin ciddiye alınması gerektiğini ortaya koyan ve olguları doğrulayan uygun bir soruşturma yapılıp yapılmadığı,
- v. Yasama dokunulmazlığının bulunmadığının tespitine karar verilen eylemin yasama sorumsuzluğu kapsamına girip girmediği,
- vi. Söz konusu eylemin başta ifade özgürlüğü olmak üzere Anayasa'da koruma altında bulunan temel hak ve özgürlüklerin kapsamı içinde olup olmadığı ve hangi sebeplerle demokratik sisteme yönelik bir tehdit ve dolayısıyla bir hakkın kötüye kullanılması olarak nitelendirildiği,
- vii. Anayasa'nın 14. maddesinde 2001 yılında yapılan değişiklikle, Anayasa'da yer alan hak ve özgürlüklerin bu hak ve özgürlükleri yıkmak "*amacıyla kullanılamayacağı*" hükmü yerine bu hak ve özgürlükleri yıkmayı "*amaçlayan faaliyetler*" olarak kullanılamayacağı hükmü getirilmiştir. Dolayısıyla isnat edilen suçlarda fiil, düşüncelerin açıklanması ve yayılması biçimindeyse bunların demokratik yaşam için doğrudan açık ve yakın tehlike oluşturup oluşturmadığı, gerçek bir zarara sebebiyet verip vermediği ve son olarak başvurucunun amacının başkalarının haklarını yok etmek olup olmadığı,
- viii. Yasama dokunulmazlığının bulunmadığının tespitinin milletvekilinin şeref ve haysiyetinin korunması ile parlamentonun çalışmalarını aksatmaması yönünden gerekli olup olmadığı, dokunulmazlık kapsamında kalan soruşturma ve kovuşturma işlemlerinin -özellikle de koruma tedbirlerinin- uygulanmasının milletvekilliği süresinin sonuna kadar veya Meclisin dokunulmazlığın kaldırılması kararı vermesine kadar ertelenip ertelenemeyeceği,
- ix. Yasama dokunulmazlığının bulunmadığının tespiti hâlinde isnat edilen suçlamaların hukuki nitelendirmelerinin sonradan değişme ihtimalinin yüksek olup olmadığı ve bu anlamda muhtemel yeni nitelendirmelerin de "*Anayasanın 14. maddesindeki durumlar*"dan birinin kapsamında kalıp kalmayacağı,
- x. Anayasa'nın 14. maddesinin devlete verdiği yetki "*demokratik sisteme yönelik tehdidin ağırlığı ve süresi ile sıkı sıkıya orantılı bir şekilde*" kullanılmalıdır. Dolayısıyla bir milletvekilinin eylemlerinin "*Anayasanın 14. maddesindeki durumlar*"dan birinin kapsamında kaldığından bahisle yasama dokunulmazlığının bulunmadığının tespitinin başvurulabilecek en son çare olup olmadığı da değerlendirilmelidir” (par.119).

Bu kapsamlı değerlendirmenin ardından AYM somut olaya ilişkin olarak ise şu saptamalarda bulunmuştur: “Somut olayda ise derece mahkemelerinin ve Yargıtayın dokunulmazlığın bulunmadığının tespitine ilişkin meselenin esası hakkında yukarıda sayılan değerlendirmelerin hiçbirini yapmadığı anlaşılmaktadır. Bölge Adliye Mahkemesi ve Yargıtay yalnızca başvurucuya isnat edilen terör örgütü propagandası suçunun "*Anayasanın 14. maddesindeki durumlar*"dan birinin kapsamında kalan suçlardan olduğunu yukarıda yer alan ölçütler bakımından herhangi bir değerlendirme yapmadan kabul etmiştir. Mahkemeler dokunulmazlığın

bulunmadığının tespitine ilişkin olarak görevlerinin yalnızca isnat edilen suçun -Anayasa Mahkemesine göre kapsamı ve sınırları belli olmayan- "Anayasanın 14. maddesindeki durumlar"dan birinin kapsamında kalıp kalmadığını tespit etmekle sınırlı görmektedir. **Anayasa'nın 14. maddesi sebebiyle isnat edilecek herhangi bir suçun ağırlığı o isnadın ciddi olduğuna dair bir karine oluşturmamaktadır.** Hâlbuki yasama dokunulmazlığının Meclisçe kaldırılması usulünde isnadın ciddiliği gerek Meclis ve gerekse Anayasa Mahkemesince denetlenmektedir. Dokunulmazlığın Meclisçe kaldırılması usulünün iki istisnasından diğeri olan ağır cezayı gerektiren suçüstü hâlinde ise isnadın ciddiliği hakkında kuvvetli bir karine bulunmaktadır. O hâlde eldeki başvuruya konu olaylara benzer olaylarda da mahkemelerin görevi yargılamaya devam etmeden önce isnat edilen suçun "Anayasanın 14. maddesindeki durumlar"dan birinin kapsamında kalıp kalmadığını tespit etmekle sınırlı olmayıp Anayasa'nın yasama dokunulmazlığını kaldıran diğer iki hâl için öngördüğü isnadın ciddiyetinin bulunup bulunmadığını belirlemektir. Aksi bir tutum dokunulmazlık müessesesinin mantığı ve sağlamaya çalıştığı güvenceler ile bağdaşmadığı gibi mahkemelerin isnat edilen suçlamaların yeterince ciddi olup olmadığı, soruşturma ve kovuşturmanın siyasal amaçlar taşıyıp taşımadığı yahut yasama dokunulmazlığının önemi karşısında orantısız olup olmadığı gibi esasa ilişkin yapılması gereken değerlendirmelerin hiçbirini yapmamalarına yol açmaktadır. Bu da yargı makamları eliyle dokunulmazlığın bulunmadığının tespiti hâlinde yapılacak itirazlardan sonuç almanın imkânsız olduğunu göstermektedir. Dahası herhangi bir kanun, dokunulmazlığın bulunmadığının tespitine yapılacak itirazlarda itiraz makamına soruşturmayı yürüten savcı veya yargılamayı yürüten mahkemelerin yapmadıkları incelemeyi yapma görevi de yüklememektedir. Soruşturmaya veya kovuşturmaya devam etmeden önce bir milletvekilinin eylemi nedeniyle demokratik yaşam ve başkalarının hakları üzerinde meydana gelen zararın veya tehlikenin ağırlığını ölçen bağımsız yargısal bir mekanizma bulunmalıdır. Mevcut durumda ne böyle bir mekanizma ne de savcılıkların ve mahkemelerin milletvekilinin dokunulmazlığının bulunmadığını tespit yetkisini nasıl kullanacağını tarif eden, dahası değerlendirme yaparken yargı makamlarına milletvekillerinin dokunulmazlığının bulunmadığını tespit ederek seçilme ve siyasi faaliyette bulunma haklarına yaptıkları müdahalelerin Anayasa'ya uygun olup olmayacağını değerlendirmelerinde yardımcı olacak araçları sunan bir kanun bulunmaktadır. **Yetkili adli makamlar milletvekilleri hakkında yürüttükleri ceza soruşturma veya kovuşturmalarında niteliği, boyutu ve ciddiyetinden bağımsız olarak yalnızca isnadın "Anayasanın 14. maddesindeki durumlar"dan birinin kapsamında kalan suçlardan olup olmadığına odaklandıkları için mevcut uygulama milletvekillerinin yasama dokunulmazlıklarına bir ceza soruşturması veya kovuşturması ile yapılabilecek keyfî ve orantısız müdahaleleri önlemeye elverişli değildir.** Milletvekillerinin gereksiz müdahale kaygı ve baskısı taşımalarına neden olacak olan bu uygulama, seçilme ve siyasi faaliyette bulunma haklarına ağır bir müdahale biçimidir ve dokunulmazlığın Meclisçe kaldırılması veya yargılamanın milletvekilliği görevinin sonuna kadar bekletilmesi gibi daha güvenceli diğer başka usullere başvurulmamasını haklı kılan sebepler bulunmadığı müddetçe başvurulmaması gereken bir yöntemdir" (par. 120-125).

AYM başvuruyu şu şekilde sonuca bağlamıştır: "Şu ana kadar yapılan açıklamalar göstermektedir ki görevinin başında olan ve milletvekilliği sıfatı devam eden bir milletvekilinin *yetkili makamın* ve söz konusu yetkili makam olarak muhtemelen herhangi bir Cumhuriyet savcısının "Anayasanın 14. maddesindeki durumlar"dan birinin kapsamında kaldığını değerlendirdiği bir suç soruşturması nedeniyle *tutulabilmesi, sorguya çekilebilmesi* ve *tutuklanabilmesi* davasının bulunduğu ilk derece mahkemesi hâkiminin kararı ile *yargılanması* ve yargılanmasına bağlı yargısal işlemlere veya koruma tedbirlerine maruz kalması mümkün görünmektedir. Bahsi geçen ve sınırlı olarak sayılan her yargılama işleminin Anayasa'nın 83. maddesinde koruma altına alınan yasama dokunulmazlığından faydalanamaması nedeniyle milletvekillerinin aynı zamanda Anayasa'nın 67. maddesinde yer alan seçilme ve siyasi faaliyette bulunma haklarına müdahale oluşturduğu muhakkaktır. Buna karşın mevcut hâliyle söz konusu yöntem, ilk olarak yargı makamlarının takdir yetkisini düzenleyen ve keyfî davranışların önüne geçebilmek için gerekli usule ilişkin bütün güvenceleri içermemektedir. İkinci olarak ise mevcut yöntem yargı makamlarını yasama dokunulmazlığına müdahalenin zorunlu bir toplumsal ihtiyaca karşılık gelip gelmediğini ve orantılı olup olmayacağını değerlendirmeye zorlayan -dokunulmazlıkların Meclisçe kaldırılması usulünde sağlanan güvence düzeyinde- bir usul ihtiva etmemektedir. Yasama dokunulmazlığının sağlanması için yeterli güvencelerin olmadığı bir hukuk düzeninde seçmenini temsil eden ve onların taleplerine dikkat çekerek menfaatlerini savunan halkın seçilmiş temsilcilerinin kendileri için vazgeçilmez olan -başta ifade özgürlüğü ve siyasi faaliyetlere katılma hakkı olmak üzere- çok sayıda temel hak ve özgürlükleri üzerinde ciddi ve caydırıcı bir baskı oluşacak, söz konusu hak ve özgürlüklerden serbestçe yararlanmaları mümkün olmayacaktır. Oysa milletvekilliği görevi demokratik bir siyasal hayatın bahşettiği üstün bir kamusal yarar ve öneme sahiptir. Tam da bu sebeple milletvekilleri anayasal bir koruma alanına sahip kılınmıştır. Seçilmiş milletvekillerinin ifade özgürlüğünü veya milletvekilliği görevini yerine getirmek için kullandıkları diğer hak ve özgürlüklerine yapılacak ölçsüz müdahaleler halk iradesiyle oluşan siyasal temsil

yetkisini ortadan kaldıracak, seçmen iradesinin parlamentoya yansımaları önleyecektir (Mustafa Ali Balbay, § 129). Bu değerlendirmeler ışığında **yasama dokunulmazlığının sağlanması için yeterli güvenceler ihtiva etmeyen mevcut sistemin yasama organına seçilmiş milletvekillerinin halkın görüşlerini serbestçe açıklamalarını ve bu anlamda belli kişilerin veya grupların ülkenin siyasal hayatına katılımlarını engelleyici nitelikte olduğu, bu itibarla seçilme ve siyasi faaliyette bulunma haklarının etkisini ortadan kaldırdığı açıktır.** Nitekim somut olayda başvuru, PKK terör örgütünün Hükûmete yönelik yaptığı bir çağrısı Türkiye'deki PKK terör örgütüne yönelik yürüyen silahlı mücadele kapsamında meydana gelen çatışmaların sona erdirilmesi için bir fırsat olarak gören bir haberi sırf paylaştığı için cezalandırılmıştır. Derece mahkemeleri ne başvurunun açıklamalarının demokratik yaşam için doğrudan açık ve yakın tehlike oluşturduğuna (AYM, E.2002/1 (siyasi parti kapatma), K.2008/1, 29/1/2008), başvurunun amacının başkalarının Anayasa'da korunan haklarını yok etmek olduğuna ve dolayısıyla yasama dokunulmazlığına baskın gelen bir ihtiyacın somut olayda varlığına yönelik bir değerlendirme yapmış ne de bir milletvekilinin yasama dokunulmazlığının kaldırılması için yapılması gereken diğer asgari değerlendirmeleri yapma yükümlülüklerini yerine getirmiştir. Gerek yasama dokunulmazlığını koruma altına alan Anayasa'nın 83. maddesi ve gerekse temel hak ve hürriyetlerin kötüye kullanılmasını yasaklayan **Anayasa'nın 14. maddesi ancak demokrasinin korunması bağlamında ve hak eksenli yorumlandıkları takdirde işlevlerini tam olarak yerine getirebilir. Mahkemeler söz konusu anayasal hükümleri özgürlükler lehine yorumlamadıkları gibi onları böyle bir yorum yapmaya sevk edecek esasa ve usule ilişkin güvencelerin bulunduğu bir yasal sistem de bulunmamaktadır.** Netice olarak milletvekili seçilmesinden ve genel olarak yasama dokunulmazlığına sahip olmasından sonra yargılanmasına devam edilerek mahkûm edilmesinin başvurunun Anayasa'nın 67. maddesi ile korunan haklarını ihlal ettiği ve ihlalin yasama dokunulmazlığının, seçilme ve siyasi faaliyette bulunma haklarının korunmasına ilişkin temel güvencelere sahip, belirliliği ve öngörülebilirliği sağlayan anayasal veya yasal bir düzenlemenin bulunmamasından kaynaklandığı sonucuna ulaşılmıştır" (par.126-134). Sonuç olarak, oyçokluğuyla alınan bu kararda AYM, başvurunun AY.md.67'de güvence altına alınan seçilme ve siyasi faaliyette bulunma hakkının ihlal edildiğini hükme başlamıştır.

AYM *Ömer Faruk Gergerlioğlu* kararında; yasama dokunulmazlığının istisnası olarak kabul edilen AY.md.14 hükmünün ceza yargılamasına ilişkin uygulamada bir netlik sağlamadığını ve AY.md.13'de yer alan kanunilik ilkesinde bulunan "belirlilik" ve "öngörülebilirlik" koşullarını taşımadığını, uygulama açısından belirliliğin kanuni düzenleme ile sağlanabileceği sonucuna ulaşmıştır. Bu kararda AYM, yasama dokunulmazlığının istisnası olarak 14. maddenin uygulanmasına ilişkin olarak uygulayıcılara yol gösterici bazı ilklere de yer vermiştir. Karar oyçokluğuyla alınmış olsa da, AYM genel kurulu tarafından verildiğinden, AYM'nin yaklaşımının istikrara kavuşturulması açısından önem taşımaktadır.

AYM, *Figen Yüksekdağ Şenoğlu ve Diğerleri* kararında (Başvuru No:2016/39759, Karar Tarihi 30.03.2022) da yukarıda yer verilen *Ömer Faruk Gergerlioğlu* kararındaki içtihadını tekrar etmiş ve yine başvurunun seçilme ve siyasi faaliyette bulunma hakkının ihlal edildiği sonucuna ulaşmıştır.

5. SONUÇ

AY.md.83'de "yasama sorumsuzluğu" ile birlikte "yasama dokunulmazlığı" kurumu da düzenlenmektedir. Karşılaştırmalı hukuka bakıldığında "kürsü dokunulmazlığı" olarak da isimlendirilen "yasama sorumsuzluğu" kurumunun demokratik ülkelerde genel olarak kabul gördüğü söylenebilir. Buna karşılık yasama dokunulmazlığının gerekli olup olmadığı son yıllarda tartışma konusu olmaktadır. Ancak birçok demokratik ülkede yasama dokunulmazlığı kurumunun (kapsamı farklı olmakla beraber) benimsendiği ifade edilmektedir (Gözler, 2020: 210). Türkiye Cumhuriyeti Anayasası da yasama dokunulmazlığı kurumunu kabul etmekte, ancak istisnalarına da yer vermektedir. Bu istisnalardan biri olan "AY.md.14'deki durumlar" ibaresi, uygulamada bazı sorunların yaşanmasına neden olmaktadır.

Bu bağlamda ilk olarak "AY.md.14'de sayılan durumlar" ibaresi herhangi bir suç tipine göndermede bulunmadığından, ceza yargılaması sırasında hangi suçların bu kapsamda görülmesi gerektiği tartışmalarını da beraberinde getirmektedir. Ceza yargılamasında geçerli olan suçta kanunilik ilkesi de söz konusu istisnanın uygulanmasını güçleştirmektedir. Bu noktada AYM'nin, değindiğimiz bu sorunun giderilmesinin kanuni düzenleme ile olabileceğine yönelik yaklaşımı da üzerinde durulmayı gerektirmektedir. Gerçekten de ne yasama dokunulmazlığı kavramının düzenlendiği ne AY.md.83'te, ne de onun atıfta bulunduğu AY.md.14'de yasama dokunulmazlığının istisnalarının kanunla somutlaştırılmasını hükme bağlayan bir düzenleme yoktur. Bu durum, AYM'nin yaklaşımının Anayasaya uygun olup olmadığını düşündürmektedir. Zira kanunla düzenleme ilkesi temel haklar ve özgürlükler açısından AY.md.13'de yer almaktadır. Oysa yasama dokunulmazlığı kurumu ilk bakışta bir

temel hak ve özgürlük sorunu olarak görülmeyebilir. Ancak konu daha yakından ele alındığında, yasama dokunulmazlığının aslında milletvekilleri açısından seçilme ve siyasi faaliyet bulunma hakkı, seçmenler açısından ise seçme hakkı ile bağlantılı olduğu görülmektedir. Bu durumda AY.md.14 istisnasını bir temel hak ve özgürlük sorunu olarak ele almak mümkündür ve AYM de yukarıda değinilen bireysel başvuru kararlarında bu şekilde bir sonuca ulaşmıştır. Ayrıca, AY.md.14’de yer alan ve maddede sözü geçen yasaklara aykırılık halinde uygulanacak yaptırımların “kanunla” düzenlenmesine ilişkin hüküm de ulaşılan sonucu destekleyici niteliktedir. Keza, AY.md.14’ün yeni metni dikkate alındığında, hakkın kötüye kullanılması olarak görülüp yasaklananın eylemler olduğu sonucuna ulaşılmaktadır. Bu durumda da milletvekillerinin düşünce açıklamalarının kural olarak AY.md.14’ün norm alanına dahil olmadığı neticesine varılabilir.

Diğer taraftan, AYM’nin AY.md.14’deki istisnayı uygulamadaki yaklaşımı dikkate alarak öngörülebilir bulmaması ve konunun yasal düzenlemeye bağlanmasına yönelik yaklaşımına yönelik eleştiriler, AYM’nin özellikle *Ömer Faruk Gergerlioğlu* kararında yer verdiği, AY.md.14’deki istisnanın ne şekilde uygulanması gerektiğini açıklayan ilkelerin uygulamada dikkate alınması halinde, aşılabilecek ve sorun yasal düzenleme olmadan da çözüme kavuşabilecektir.

Aslında yasama dokunulmazlığının istisnası olarak kabul edilen AY.md.14’de sayılan durumlara yönelik tartışmalar, bir ölçüde Anayasada yer alan hukuk devleti (md.2) ve yargı bağımsızlığı (md.138) ile de ilgilidir. Anayasada yer alan bu ilkelere rağmen, ülkemizde uzun yıllardır hukuk devleti ve yargı bağımsızlığı ile ilgili birçok sorun yaşandığı görülmektedir. Çalışmanın konusu dışında kaldığı için bu konuya girmek mümkün olmamakla beraber, kısaca şu saptamada bulunulabilir. Hukuk devleti ilkesi ve yargı bağımsızlığının tam olarak işletilebildiği ülkelerde, zaman içinde yasama dokunulmazlığına ihtiyaç kalmamakta ya da kapsamı daraltılabilmektedir. Zira milletvekillerinin ceza yargılaması sırasında siyasi nitelikteki kararlarla karşılaşma olasılığı giderek azalmaktadır (Bakırcı vd, 2020: 143). Nitekim bazı ülkelerde “temiz toplum” özlemiyle yasama dokunulmazlığının daraltılmasına yönelik değişiklikler yapıldığı ifade edilmektedir (Teziç, 2009: 403-404). Ülkemizde de hukuk devleti ve yargı bağımsızlığı tam olarak işletilebildiğinde, yasama dokunulmazlığının daraltılmasına ve bu bağlamda yasama dokunulmazlığının istisnası olarak kabul edilen AY.md.14’de sayılan durumlara yönelik tartışmalar büyük ölçüde sonlanabilecektir.

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Büyükbaş Hayvansal Üretim ve Destekleme Politikalarına Genel Bir Bakış

Prof. Dr. Halil KIZILASLAN¹

Ziraat Mühendisi. Halenur GÜNEŞ²

¹ Tokat Gaziosmanpaşa Üniversitesi, Ziraat Fakültesi, Tarım Ekonomisi Bölümü Öğretim Üyesi,
halil.kizilaslan@gop.edu.tr, ORCID: 0000-0002-4642-0030

² Tokat Gaziosmanpaşa Üniversitesi, Lisansüstü Eğitim Enstitüsü, Tarım Ekonomisi Ana Bilim Dalı,
halenur.gunes7215@gop.edu.tr, ORCID: 0000-0002-7886-3442

Özet: Bu çalışmada büyükbaş hayvansal üretim destekleme politikaları incelenmiştir. Desteklemelerin üretime katkı sağlayıp sağlamadığından yola çıkılmıştır. Türkiye de zaman içerisinde değişim gösteren desteklemeler ve bundan faydalanma durumu, desteklemelerden yararlanan işletmelere sağladığı kâr marjı üzerine yapılan akademik çalışmaların incelenmesi yapılmıştır. Çalışmanın ana kaynağı ikincil kaynaklardan alınan veriler oluşturmaktadır. Uygulanan hayvancılık destekleme politikalarına bakıldığında, desteklemelerin hayvancılığın tarımsal üretim değeri içindeki payını artırmış olduğu gözlemlenmiştir. Güncel Literatür incelemeleri ve resmi rakamlar incelendiğinde destekleme miktarlarının yıllar içinde artması özellikle hayvancılık desteklerinin payının artması önemli bir gelişmedir. Fakat bir diğer yandan son yıllarda artan maliyetler karşısında yine de talebi karşılayamamaktadır. Özellikle yem maliyetlerinin artması kar oranını düşürmektedir. Desteklemeler, etkin ve geniş ölçekte işletmelere fayda sağlaması için yönetilebilir ve öngörülebilir (uzun vadeli) olmalıdır. Bu yüzden rekabet gücünün sağlanabildiği, üretimde teknolojinin etkili ve güncel olarak kullanılabildiği, sürdürülebilir ve kaliteli bir üretimin daim olduğu düzenlemelerin yapılması öncelikle üreticiye sonra Türkiye ekonomisine önemli katkı sağlayacaktır.

Anahtar Kelimeler: Tarım Politikaları, Üretim Politikası, Desteklemeler, Büyükbaş Hayvancılık.

1. GİRİŞ

Tarımsal destekleme politikaları, her ülkede o ülkenin ekonomik yapısı ile yakından ilgili olup, ülkenin kendine özgü sorunlarının çözümüne yöneliktir. Bu çerçevede tarımsal üretimde kendine yeterlilik sınırını aşmış ABD ve bazı Avrupa ülkeleri gibi gelişmiş ülkelerle tarımsal üretimde kendine yeterli hale gelememiş, üretimi nüfusunu beslemek için dahi yetersiz olan az gelişmiş ülkelerin izleyecekleri tarımsal destekleme politikaları kendi içinde farklılık arz etmektedir. Ancak tarımın evrensel özellikleri, tarımsal destekleme politikalarında benzerlikleri de beraberinde getirmektedir. Çünkü tarıma yapılan destekleme ve her türlü müdahalenin özünde gelirin toplumsal kesimler arasında yeniden dağıtımına yönelik uygulamalar içerir. (Aktaş vd., 2015:56)

Tarımsal üretimde fiyat istikrarsızlığı, tarımsal üretimde azalan verimler kanunu nedeniyle katma değer düşüklüğü, tarımsal ürünlerin organik yapı ve hammadde özelliğinden dolayı diğer üretim faaliyetleri karşısındaki durumu ve tarımsal ürünlerin beslenme gibi temel bir ihtiyacın karşılanmasındaki rolü nedeniyle devletin tarım sektörüne yönelik çeşitli müdahalelerine ve destekleme politikaları izlemesine sebep olmaktadır. (Kazgan, 2003, s. 21-23)

Ülkelerin tarımsal destekleme politikaları geliştirmelerinin temel amaçları tarım kesiminin gelir düzeyinin yükseltilmesi, üretimin ve fiyatların yönlendirilmesi, verimlilik ve kalite artışı sağlanması, doğal kaynakların dengeli kullanılması ve kırsal kalkınma olarak sıralanabilir. Tarım politikalarının diğer bir amacı da üretimin ve fiyatların yönlendirilmesidir. Tarımda ve hemen hemen tüm sektörlerde alıcı ve satıcının çıkarları birbirlerinin tamamen tersidir. Alıcı ürünü daha ucuza almak isterken satıcı ürünü daha yüksek fiyata satmak istemektedir. Burada A. Smith'in de dediği gibi denge fiyatı görünmez bir el sayesinde belirlenirken, Keynes'in dediği gibi devletin piyasa fiyatlarına müdahale etmesiyle de belirlenebilir. (Arslan ve SOLAK, 2019: 793)

Tarım sektöründe verimliliği ve sürekliliği sağlayabilmek adına çeşitli politikalar geliştirilmiş ve yürürlüğe konulmuştur. 2000 yılı sonrasında tarımsal politika araçlarında çeşitli değişikliklere gidilmiş ve bu politika değişiklikleriyle gelen farklı uygulamalarla tarım sektöründe yapısal dönüşümler gerçekleşmiştir. (Sayın vd., 2015)

Dünyada yaşanan gelişmeler Türkiye'de tarım politikalarındaki değişiklikleri de beraberinde getirmektedir. Çünkü Dünya Ticaret Örgütüne verilen taahhütler, AB ile yürütülen tam üyelik müzakereleri, ikili anlaşmalar, siyasi gelişmeler, Türkiye'nin kendi içinde yaşadığı mali disiplin ve fiyat istikrarı gibi makroekonomi politikaları, tarımsal yapıdaki sorunlar, iklim değişikliği, kırsal alanlardaki sosyal, kültürel ve ekonomik değişimler ve çevresel sorunlar Türkiye'de uygulanan tarım politikalarını büyük ölçüde şekillendirmektedir. (Ataseven vd., 2020:33)

Tarım politikaları belirlenirken, tarımın en önemli sorunu olan sürekliliğin sağlanabilmesi için tarım sektörünün gelir düzeyinin artırılması gerekmektedir. Aksi takdirde ikame etkisi oluşacak ve tarım sektöründe çalışan insanlar ikame etkisiyle birlikte başka sektörlere kayacaktır. Bu durum ülkenin otarşisi üzerinde olumsuz etkiler oluşturarak dışa bağımlılığı ve cari açığı arttıracaktır. (Arslan ve SOLAK, 2019: 793)

2. HAYVANCILIK ÜRETİMİ ve DESTEKLEMELERİNDEKİ GELİŞMELER

Türkiye sahip olduğu doğal kaynaklar ve ekolojik koşullar dikkate alındığında, büyükbaş ve küçükbaş hayvan yetiştiriciliği bakımından elverişli şartlara sahiptir. İşletmelerin başarısında; kullanılan hayvan materyalinin ırkı, yaşı ve verim düzeyi belirleyici bir role sahiptir. Hayvan materyali ve yönetim kalitesi sonucunda ortaya konulan faaliyet birimlerinin üretim değeri ve işletmenin tarımsal geliri önemli ekonomik başarı ölçütlerindendir. (Turan vd., 2017:64)

Gelişmiş ülkelerde tarımsal ekonominin lokomotifleri olan hayvancılık, iki açıdan son derece önemlidir. Bunlardan birincisi çok düşük maliyetli istihdam yaratması, ikincisi ise kalitesiz veya insan beslenmesine uygun olmayan yem kaynaklarının kaliteli insan gıdasına dönüştürmesidir. Hayvancılık sektörü, ülke ekonomisini geliştiren, birim yatırıma en yüksek katma değer oluşturan ve en düşük maliyetle istihdam imkânı sağlayan bir sektördür. (Görgülü vd., 2003:6)

Hayvancılık faaliyetlerinde ırk ıslahı, kaba yem üretiminin artırılması, verimliliğin artırılması, işletmelerin ihtisaslaşması, işletmelerde hijyen şartlarının sağlanması, hayvan sağlığı ve refahı, hayvan kimlik sisteminin teşviki, hayvansal ürünlerin işlenmesi ve pazarlanması ile bunlarla ilgili kontrol takip ve standartların iyileştirilmesi ve su ürünlerinin desteklenmesi amacıyla tedbirler alınmaktadır. (Tarım Kanunu, 2006:madde 19) Bu destekleme kapsamı her yıl çıkarılan tebliğler ile belirlenmektedir. Büyükbaş ve küçükbaş destekleri, arı kovani/kolonisi desteği, ipekböceği yaş koza desteği, sürü yöneticisi desteği, hayvan hastalığı tazminatı, hastalıktan ari işletme destekleri, onaylı süt çiftliği desteği gibi çeşitli destekler son yıllarda ağırlık kazanmıştır. (Güresinli, 2015)

Tablo 1: Türkiye’de Büyükbaş Hayvan Sayıları

YILLAR	SİĞİR	MANDA	BÜYÜKBAŞ TOPLAM
2007	11.036.753	84.705	11.121.458
2008	10.859.942	86.297	10.946.239
2009	10.723.958	87.207	10.811.165
2010	11.369.800	84.726	11.454.526
2011	12.386.337	97.632	12.483.969
2012	13.914.912	107.435	14.022.347
2013	14.415.257	117.591	14.532.848
2014	14.223.109	122.114	14.345.223
2015	13.994.071	133.766	14.127.837
2016	14.080.155	142.073	14.222.228
2017	15.943.586	161.439	16.105.025
2018	17.042.506	178.397	17.220.903
2019	17.688.139	184.192	17.872.331
2020	17.962.899	192.489	18.155.388
2021	17.850.543	185.574	18.036.117
2022	16.851.956	171.835	17.023.791

Kaynak: Anonim, 2022

Tablo 1’e bakıldığında manda sayısında 2007 yılından 2020 yılına kadar sürekli artışlar olmuştur. 2007 yılında toplam büyükbaş sayısında manda sayısının oranı %0,76 iken 2022 yılında %1,01 düzeyine ulaşmıştır. Siğir sayısında ise belli dalgalanmalar olsa da 2020 yılına kadar bir artış göstermiştir. Toplam büyükbaş sayısında payı 2007 yılında %99,24 iken 2022 yılında %98,99 olmuştur. Son 2 yılda ise siğir ve manda sayısında azalma eğilimi görülmektedir.

Tablo 2: Türkiye’de Kültür, Melez, Yerli Siğir Sayıları (Baş)

YILLAR	KÜLTÜR	%	MELEZ	%	YERLİ	%	TOPLAM
2007	3.295.678	29,86	4.465.350	40,46	3.275.725	29,68	11.036.753
2008	3.554.585	32,73	4.454.647	41,02	2.850.710	26,25	10.859.942

2009	3.723.583	34,70	4.406.041	41,10	2.594.334	24,20	10.723.958
2010	4.197.890	36,90	4.707.188	41,40	2.464.722	21,70	11.369.800
2011	4.836.547	39,05	5.120.621	41,34	2.429.169	19,61	12.386.337
2012	5.679.484	40,80	5.776.028	41,50	2.459.400	17,70	13.914.912
2013	5.954.333	41,30	6.112.437	42,39	2.348.487	16,29	14.415.257
2014	6.178.757	43,44	6.060.937	42,61	1.983.415	13,95	14.223.109
2015	6.385.343	45,63	5.733.803	40,97	1.874.925	13,40	13.994.071
2016	6.588.527	46,8	5.758.336	40,9	1.733.292	12,3	14.080.155
2017	7.804.588	48,9	6.536.073	40,9	1.602.925	10,1	15.943.586
2018	8.419.204	49,40	7.030.297	41,25	1.593.005	9,35	17.042.506
2019	8.559.855	48,39	7.554.625	42,71	1.573.659	8,90	17.688.139
2020	8.838.498	49,20	7.594.127	42,28	1.530.274	8,52	17.962.899
2021	8.824.784	49,44	7.641.100	42,81	1.384.659	7,76	17.850.543
2022	8.265.825	49,23	7.324.866	43,46	1.231.365	7,31	16.851.956

Kaynak: Anonim, 2022

Tablo 2'ye bakıldığında melez ırkında sürekli artışlar olmuş, toplam sığır sayısındaki oranı 2007 yılında %40,6 iken 2022 yılında 43,46'ya ulaşmıştır. Toplam sığır sayısı dağılımında kültür ırkı ve yerli ırk arasında ters orantılı ilişki görülmektedir. Kültür ırkı artarken yerli ırkın sayısı azalmıştır. Toplam sığır sayısının içinde kültür ırkı oranı 2007 yılında %29,86 iken 2022 yılında %49,23 seviyesine ulaşmış, yerli ırk oranı ise 2007 yılında %29,68'ken 2022 yılında %7,31'e düşmüştür. 2022 yılında toplam sığır sayısının yaklaşık %50'sini kültür ırkı oluşturmaktadır.

Tablo 3: Türkiye'de Sağılan Büyükbaş Hayvan Sayısı (Baş)

YILLAR	SIĞIR	MANDA	TOPLAM
2007	4.229.440	30.460	4.259.900
2008	4.080.243	32.610	4.112.853
2009	4.133.148	32.361	4.165.509
2010	4.384.130	35.726	4.419.856
2011	4.761.142	40.218	4.801.360
2012	5.431.400	38.205	5.469.605
2013	5.607.272	51.940	5.659.212
2014	5.567.176	54.795	5.621.971
2015	5.535.773	62.999	5.598.772
2016	5.431.714	63.329	5.495.043
2017	5.969.047	69.497	6.038.544
2018	6.337.906	75.879	6.413.785
2019	6.580.753	79.333	6.660.086

Kaynak: Anonim, 2022

Tablo 4: Türkiye'de Büyükbaş Hayvan Süt Üretimi (Ton)

YILLAR	SIĞIR	MANDA	TOPLAM
2007	11.279.340	30.375	12.329.789
2008	11.255.176	31.422	12.243.040
2009	11.583.313	32.443	12.542.186
2010	12.418.544	35.487	13.543.674
2011	13.802.428	40.372	15.056.211
2012	15.977.838	46.989	17.401.262
2013	16.655.009	51.947	18.223.712
2014	16.998.850	54.803	18.630.859
2015	16.933.520	62.751	18.654.682
2016	16.786.263	63.085	18.489.161

2017	18.762.319	69.401	20.699.894
2018	20.036.877	75.742	22.120.716
2019	20.782.374	70.341	22.960.379
2020	21.749.342	63.767	23.503.790
2021	21.370.116	63.643	23.200.306
2022	19.912.135	43.589	21.563.492

Kaynak: Anonim, 2022

Tabla 3 ve 4 incelendiğinde, sığır süt üretimi en düşük olduğu zaman 2008 yılı iken en yüksek üretim seviyesine 2020 yılında ulaşılmıştır. Manda da ise en düşük üretim 2007 yılında görülmüşken en yüksek üretim miktarına 2018 de ulaşılmıştır. Toplam süt üretimi 2020 yılında en yüksek miktara ulaşmıştır. 2007 yılındaki toplam üretim miktarı 2022 yılında yaklaşık 2 katına çıkmıştır. Sağılan hayvan sayısı süt miktarına oranlandığında yıllar içerisinde sığır süt veriminin artarak değişiminde kültür ırkının artması etkili olmuştur. Son 2 yılda süt üretiminin azalması da artan maliyetler sonucu dışı sığır kesimlerinin artmasının sonucudur.

Tablo 5: Türkiye’de Kesilen Büyükbaş Hayvan Sayısı (Baş)

YILLAR	SIĞIR	MANDA	TOPLAM
2007	2.713.989	22.916	2.736.905
2008	2.797.426	21.494	2.818.920
2009	2.826.190	20.111	2.846.301
2010	2.932.054	19.126	2.951.180
2011	3.126.378	19.127	3.145.505
2012	3.421.960	19.967	3.441.927
2013	3.457.477	21.465	3.478.942
2014	3.525.209	23.899	3.549.108
2015	3.706.346	25.713	3.732.059
2016	3.993.893	27.663	4.021.556
2017	4.334.034	29.476	4.363.510
2018	4.844.711	32.389	4.877.100
2019	4.856.517	35.695	4.892.212
2020	4.812.902	40.929	4.853.831
2021	5.134.441	51.925	5.186.366
2022	5.480.489	62.285	5.542.774

Kaynak: Anonim, 2022

Tablo 5’e bakıldığında toplam kesilen büyükbaş hayvan sayısı içerisinde dağılımı 2007 yılında kesilen sığır yüzdesi % 99,16 ve manda yüzdesi % 0,8 oranındadır. Aynı oransal dağılıma 2020 yılında tekrar ulaşılmıştır. Yıllar içerisinde oranlar değişse de toplam kesilen büyükbaş hayvan sayısı artmıştır. Sığırdaki yüzdesel olarak değişimin yüksek olduğu yıl %11,78 oranıyla 2018 yılı olurken aynı durum manda da ise %26,87 ile 2021 yılındadır. Toplamdaki değişim ise en çok %11,77 ile 2018 yılında olmuştur.

Tablo 6: Türkiye’de Büyükbaş Et Üretimi (Ton)

YILLAR	SIĞIR	MANDA	TOPLAM
2007	549.513	4.347	553.860
2008	581.497	4.128	585.625
2009	608.183	4.019	612.202
2010	647.067	3.785	650.852
2011	710.652	3.780	714.432
2012	790.034	4.027	794.061
2013	798.784	4.580	803.364
2014	815.674	5.004	820.678
2015	862.098	5.300	867.398
2016	956.180	5.470	961.650

2017	1.093.841	5.868	1.099.709
2018	1.281.234	6.515	1.287.749
2019	1.330.169	7.150	1.337.319
2020	1.341.446	8.424	1.349.870
2021	1.460.719	10.831	1.471.550
2022	1.572.747	13.586	1.586.333

Kaynak: TÜİK, 2022

Tablo 6 incelendiğinde 2007 yılında toplam büyükbaş et üretim miktarı içinde sığır eti üretim oranı %99,22 ve manda oranı %0,78'dir. 2022 yılında ise bu oran sığırlarda %99,14 ve mandada %0,86 olmuştur. 2007 yılında toplam 553.860 ton olan üretim 2022 yılında 1.586.333 ton olmuştur. 15 yılda üretim yaklaşık 3 kat artmıştır.

Tablo 7: Türkiye’de Suni Tohumlama Faaliyetleri

YILLAR	TOHURLAMA SAYISI	SPERMA ÜRETİMİ		
		ÖZEL SEKTÖR	KAMU	TOPLAM
2007	2.653.691	1.717.359	583.300	2.300.659
2008	2.090.679	1.500.850	713.065	2.213.915
2009	2.181.042	1.561.269	415.225	1.976.494
2010	2.800.846	1.353.039	345.975	1.699.014
2011	3.242.624	1.527.398	287.995	1.815.393
2012	3.671.526	902.430	434.280	1.336.710
2013	3.791.016	931.570	408.495	1.340.065
2014	3.950.781	1.077.755	367.550	1.445.375
2015	4.144.225	1.047.575	597.720	1.645.295
2016	3.632.125	1.175.375	1.165.260	2.340.635
2017	3.261.275	840.010	1.262.394	2.102.404
2018	3.138.154	1.254.400	861.210	2.115.610
2019	2.888.646	977.890	800.710	1.778.600
2020	3.413.995	1.264.070	857.500	2.121.570
2021	3.335.086	1.680.039	1.000.655	2.680.694
2022	2.942.736	1.817.083	1.023.285	2.840.368

Kaynak: Anonim, 2022

Tablo 7 incelendiğinde, tohumlama sayısı 2015 yılında 4 milyon seviyesine çıkmışken daha sonra 2022 ye kadar azalarak 2007'deki sayıya yaklaşmıştır. Sperma üretiminin en yüksek olduğu yıl 2022 yılıdır. Toplam üretimde özel sektörün payı %63,97 iken kamu sektörünün payı %36,06'dır.

Tablo 8: Türkiye’de Devlet Tarafından Verilen 2007 Yılı Büyükbaş Hayvancılık Destekleme Konuları

	2007 (TL)
Damızlık Düve	275-550
Suni Tohumlama	26-36
Suni Tohumlamadan Doğan Buzagı	80-140
Sağım Hijyeni Ve Süt Kalitesi	%40 (fatura bedelinin %40'ı)
Aşılama	0,50-1
Hayvan Kimlik Sistemi	2
Hastalıktan Ari İşletmeler	50
Süt Desteklemeleri	1,5-3
Et Desteği (28 İlde, Tarım Kredi Kooperatifleri ile sözleşme yapan ve Et Balık Kurumu kombinalarında kesim yapan üreticilere)	1

Kaynak: 2007/12624 Sayılı Kararnamenin Eki'ne (15.10.2007 tarih ve 26671 sayılı RG) göre

Tablo 9: Türkiye’de Devlet Tarafından Verilen 2022 Yılı Büyükbaş Hayvancılık Destekleme Konuları

Buzağı / Malak / Manda Desteği (baş)	2022 (TL)
4 ay ve üzeri buzağı	500
Döl kontrolü boğanın yavrusu	İlave 100
Bakanlıkça belirlenen iller	İlave 200
Anaç manda	500
Soy kütüğüne kayıtlı manda	İlave 300
Malak	500
Süt Teşvik Primi (litre)	
İnek sütü	Bakanlık
Manda sütü	Bakanlık
Örgütler Aracılığıyla Pazarlanan	Bakanlık
İslah Amaçlı Süt Kalitesi Desteği	100
Düve Alım Desteği (Mera Yetiştiriciliği Bölgesi)	%40 -%50 hibe
Besilik erkek sığır (baş)	500
Hastalıklardan ari işletme	
Hastalıktan ari (baş)	600
Onaylı Süt Çiftliği(baş)	İlave 100
Aşı ve Küpe Desteği	
Büyükbaş	2
Atık desteği	
Büyükbaş	1.400

Kaynak: Anonim, 2022

2007 ve 2022 desteklemeleri incelendiğinde, 2007 yılında suni tohumlama desteği ve suni tohumlamadan doğan buzağılara soy kütüğü (birlik üyesi) ve ön soy kütüğü (örgütsüz bireysel başvuru) olarak destek verilmiştir.

2022 yılında suni tohumlama desteği ve suni tohumlama şartı kaldırılmış olup, 4 ay ve üzeri işletmede kalma ve bakanlıkça belirlenen üreme parametrelerine uyma şartı ile buzağı/malak/dişi manda desteği getirilmiştir. Suni tohumlamadan doğan buzağılara ve yine bakanlıkça belirlenen illere ilave destek getirilmiştir.

2007 de et desteği adı altında verilen destek 28 ilde, tarım kredi kooperatifleri ile sözleşme imzalanan ve Et Balık Kurumu’nda kesim yapan üreticilere verilirken, 2022 yılında besilik erkek sığır desteği olarak tüm illerde Tarım ve Orman Bakanlığı tarafından ruhsatlandırılan kesimhanelerde kesilen ve Bakanlıkça belirlenen karkas ağırlık kriterlerine ulaşan erkek sığırlara verilmiştir.

2022 yılında Bakanlıkça programlanan aşı uygulamaları sonrasında oluşan atıklar için hayvan sahiplerine Atık desteği verilmiştir.

3. SONUÇ

Hayvan sayılarında yıllar içerisindeki değişim belli bir dönem artmış fakat bu artış beklenen talebi karşılamamıştır. Son yıllarda ise hayvan sayısında azalma olduğu gözlemlenmiştir. Süt gelirinin maliyeti karşılamaması üzerine hayvansal üretimin artmasının temel taşı olan dişi büyükbaş kesimine bu da doğrudan süt üretimin son yıllarda düşmesine, doğan buzağı sayısının azalmasına ve bunlara bağlı olarak üretimin sekteye uğramasına sebebiyet vermiştir.

Dişi hayvan kesimleri ile et üretiminde kısa vadede pozitif artış olsa da doğacak buzağı sayısının azalmasına müteakip besi amaçlı yapılan üretimi de etkileyeceğinden, uzun vadede et arz açığına sebebiyet verecektir.

Desteklemeler konusunda çalışma yaparken üretimin sürdürülebilir olduğu, destekleme kalemlerinin hayvancılığın gelişmiş ülkelerde olduğu gibi sene bazlı değil, 5 yıllık 10 yıllık programlar dâhilinde süreklilik arz eden; küçük, orta ve büyük işletmelere yönelik işletme bazında etkin, çözüm odaklı politikalar oluşturmalarıdır. Desteklemenin fazla kollara ayrılması ve yıllar içerisinde ödenen miktarının artması desteklemenin etkin kullanımını doğrudan etkilememektedir. Bu yüzden kâr marjını yükseltecek, çiftçiyi üretime teşvik edecek desteklemeler olması için girdi masraflarını düşürecek hedefler ve stratejiler belirlenmelidir.

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Covid 19 Salgınının Tüketicilerin Online Gıda Alışveriş Davranışlarına Etkisi: İzmir İli Örneği

Haluk GÜMÜŞ¹

Prof. Dr. Hakan ADANACIOĞLU²

¹ Ege Üniversitesi / Ziraat Fakültesi, Tarım Ekonomisi Bölümü, halukhaluk.gmm51@gmail.com, ORCID: 0000-0003-3743-1085

² Ege Üniversitesi / Ziraat Fakültesi, Tarım Ekonomisi Bölümü, hakan.adanacioglu@ege.edu.tr, ORCID: 0000-0002-8439-8524

Özet: Covid-19 salgını, 2020 yılında başta Çin olmak üzere dünyada küresel bir probleme dönüşmüş olan bulaşıcı bir hastalıktır. Bu hastalık insanların yaşam tarzı, sağlık konusundaki yaklaşımları, eğitim sistemleri, alışveriş biçimleri ve sağlıklı gıdaya erişim gibi birçok alanda etkisini göstermiştir. COVID-19 nedeniyle ortaya çıkan kısıtlamalar tüketicilerin satın alma alışkanlıklarını değiştirmeye zorlamıştır. Bu kısıtlama sürecinde tüketiciler alışverişlerinde online kanallara öncelik vermeye başlamıştır. Türkiye’de Covid-19 salgını öncesinde online alveriş harcamalarında gıdanın payının çok yüksek olmadığı, ancak salgın sonrası bu payın artış gösterdiği bilinmektedir. Diğer yandan, Covid-19 salgınının bu artışta ne derece etkili olduğu ve tüketicilerin online gıda alışveriş davranışlarını ne yönde değiştirdiği soruları yanıt beklemektedir. Bu çalışmada belirtilen temel sorulara yanıt verilmesi amaçlanmıştır. Çalışma kapsamında online alışveriş sıklığı, online gıda alışverişine yönelten başlıca faktörler, online gıda alışverişinde tercih edilen gıda ürünleri, salgın sonrasında online gıda alışverişine devam etme durumu, online gıda alışverişinin güvenilirliği ve kullanım kolaylığı gibi başlıca konular incelenmiştir. Çalışmanın birincil verileri İzmir (Buca, Bornova ve Karşıyaka) ilinde online gıda alışveriş yapan 100 tüketici ile yüz yüze gerçekleştirilen anketlerden elde edilmiştir.

Anahtar Kelimeler: Online Gıda Alışverişi, Covid-19, Tüketici Davranışları

The Effect of the Covid 19 Pandemic on Consumers' Online Food Shopping Behavior: A Case Study from Izmir

Abstract: The Covid-19 epidemic is an infectious disease that has become a global problem in the world, especially in China, in 2020. This disease has affected many areas such as people's lifestyles, approaches to health, education systems, shopping styles and access to healthy food. Restrictions arising from COVID-19 have forced consumers to change their purchasing habits. During this restriction period, consumers began to prioritize online channels for their shopping. It is known that the share of food in online shopping expenditures was not very high before the Covid-19 epidemic in Turkey, but this share increased after the epidemic. On the other hand, questions remain to be answered to what extent the Covid-19 epidemic is effective in this increase and in what way it has changed consumers' online food shopping behavior. This study aims to answer the basic questions stated. Within the scope of the study, main issues such as the frequency of online shopping, the main factors that lead to online food shopping, the food products preferred in online food shopping, the status of continuing online food shopping after the epidemic, the reliability and ease of use of online food shopping were examined. The primary data of the study was obtained from face-to-face surveys conducted with 100 consumers who shop for food online in Izmir (Buca, Bornova and Karşıyaka).

Keywords: Online Food Shopping, Covid-19, Consumer Behaviours

1.GİRİŞ

Günümüzdeki teknolojik değişikliklerle birlikte tüketicilerin satın alma davranışlarında farklılıklar oluşmuştur. Online alışveriş, teknoloji ve pazarlamanın ortaya çıkarmış olduğu en önemli satış kanalı olarak bilinmektedir. Teknolojik değişimler doğrudan bu alışveriş kanalını etkilemiştir (Li ve Zhang, 2002: 506). Online alışveriş; maliyet, işgücü, mekan ve zaman faktörlerinde önemli avantajlara sahiptir. Tüketiciler ürün alımından önce ürün hakkındaki yorumları okuyabilmekte ve ürünler hakkındaki şikayet talepleri kolaylıkla yapılabilmektedir. Bu satış kanalı ile zaman içerisinde tüketicilerin mal ve hizmet taleplerine hızlı bir şekilde karşılık verilebilmektedir (Kırcova, 2005: 144).

Üreticilere kolaylık sağlayan online alışveriş kanalı, tüketicilere ise tüm ürün satışı yapmakta olan sitelerin aynı anda kontrol edilmesini sağlamaktadır. Bu durum üreticilere tüketicilerin satın alma davranışlarını yakından izlemelerine imkan sağlamaktadır. Online alışveriş kanalı, tüketicilerin istediği ürünü istediği firmadan satın alma imkanı sağlamış ve pazarlama alanındaki mesafe-zaman faktörlerini kısaltmıştır (Pelenk, 2020: 220). İnternetteki gelişmelerin pazarlama ile birlikte kullanılması firmaların, farklı coğrafyalardaki tüketicilere ulaşmasına ve pazar alanını genişletmesine olanak sağlamıştır (Cengiz ve Algür, 2011: 3667). Online alışverişin sağlamış olduğu avantajlar neticesinde tüketiciler tarafından kabul görmesi ile tüm dünyada etkin olarak

kullanılmaktadır. Özellikle son on yılın online alışveriş verilerine bakıldığında, firmaların ve tüketicilerin sayılarındaki artışlar bu alandaki olumlu beklentileri yükseltmiştir.

Zaman ve mekan faktörlerindeki kısaltmalar sonucu, online alışveriş platformlarında tüketicilerin taleplerine kolay şekilde mal ve hizmet sağlanabilir noktasına gelinmiştir. Tüketimi ve alışverişini kolaylaştıran bu satış kanalı, zamanla ucuz ve güvenilir hizmetler sunmaktadır ve müşteri sayısını artırmaktadır. Teknolojik imkanların kullanılmasıyla online satış kanalı; pazarda araştırmaların kolayca yapılabilirdiği, tüketicilerin birbirlerini etkileyebildiği, zaman ve mekan faktörlerine tabi olunmayan, ürünler konusundaki talepleriyle firmalara yön verebilen bir hale gelmiştir. Online alışverişin ürün geliştirmeden başlayarak taşıma ve konumlandırma aşamalarına kadar etkileri görülmektedir (Enginkaya, 2006: 12).

Online alışveriş kanalındaki önemli gelişmelere rağmen tüketicilerde ise bazı endişeler vardır. Söz konusu endişelerden bazıları; kredi kartı bilgilerinin çalınması, siparişlerin kalitesiz ürünlerle değiştirilmesi ve iade konusunun firmaların kararlarına bırakılması gibi olumsuz nedenler şeklinde belirtilebilir. Bu endişeler, tüketicilerin bu kanalı sürekli kullanmalarına engel olan durumlardır (Belanger et al., 2002: 250).

Tüketiciler ve üreticiler arasındaki alışveriş kanallarında, teknolojik gelişmeler ve dünyada var olan küresel olaylar doğrudan birbiriyle ilişkilidir. Alışveriş kanallarını etkileyebilecek ve üreticileri bu konuda yeni çalışmalara sevk edecek önemli olay Covid-19'dur. Covid-19, 2020 yılında dünyada meydana gelmiş sağlık krizi olup, dünyadaki mevcut sağlık, ekonomik, toplumsal vb. tüm alanları etkisi altına alan küresel bir olaydır. Covid-19 sürecinde tüketicilere sokağa çıkma yasakları ve tüketicilerin sağlık konusundaki endişelerinden dolayı zincir marketlere olan ulaşım zorlukları ortaya çıkmıştır. Tüketicilerin taleplerine yetiştirilmesi ve firmaların satışlarını artırması için online alışveriş konusunda çalışmalar artırılmış ve bu alanda büyük firmalar satış miktarlarını artırmıştır. 2022 yılını kapsayan Ticaret Bakanlığı verilerine göre, Covid-19 süreci sonrası online alışverişte büyük satış miktarları kaydedilmiştir. 2019 yılında E-ticaret hacmi 136 milyar TL iken, bu değer 2022 yılında 800.7 milyar TL'ye yükselmiştir. Ticaret Bakanlığının 2019 yılı verilerine göre online alışverişin sektörlere göre dağılımı; 15.3 milyar TL havayolu, 13.8 milyar TL giyim-ayakkabı ve aksesuar, 13.3 milyar TL beyaz eşya ve küçük ev aletleri, 9.3 milyar TL seyahat, 8.5 milyar TL elektronik ve 5 milyar TL yemek şeklindedir. Ticaret Bakanlığının 2022 yılı E-ticaret hacminin sektörlere göre dağılımı yapıldığında ise; 96.7 milyar TL beyaz eşya ve küçük ev aletleri, 54 milyar TL giyim, ayakkabı ve aksesuar, 45.9 milyar TL elektronik, 45.1 milyar TL havayolları, 26.5 milyar TL gıda ve süpermarket, 24 milyar TL seyahat, taşımacılık ve depolama 19.6 milyar TL yemek ve 11.5 milyar TL konaklama şeklinde bir istatistiksel veri ortaya çıkmaktadır. Ticaret Bakanlığının verilerine göre, Covid-19 öncesi ve sonrası online gıda ve supermarket alışverişinde gıda sektörünün payında gözle görünür bir miktarda artış olduğu belirlenmiştir. Online gıda ve supermarket harcamaları 2021 yılında bir önceki yıl olan 2020 yılının aynı dönemine göre %162 artış göstermiştir (Ticaret Bakanlığı, 2022).

Online gıda alışverişini ile Covid-19 sürecini ilişkilendiren bazı çalışmalar bulunmaktadır. Özer vd. (2023) yapmış oldukları çalışmada, Covid-19 döneminde İstanbul'da online market alışverişinde tedarik zinciri yönetimini incelemiştir. Çalışmanın amacı, online alışveriş şirketlerinin nasıl daha iyi hizmet sunabileceğini ve müşteri memnuniyetini artıracak faktörlerin neler olduğunun belirlenmesidir. Çalışmada katılımcıların %60'ı her 3-4 günde bir online alışveriş yaptıkları ve online alışverişte müşteri memnuniyeti için ürünün teslimat süresi olduğu bulunmuştur (Özer et al., 2023: 1). Danışmaz (2020) yapmış olduğu çalışmada, 2020 yılı Covid-19 pandemi olayının online alışverişe olan etkisini incelemiştir. 200 katılımcı ile yapılan görüşmede online alışveriş tercihlerindeki değişiklikler tespit edilmiştir (Danışmaz, 2020: 83). Demirdöğmez vd. (2020) yapmış oldukları çalışmada, Covid-19 dönemindeki gelişmelerin online alışverişe olan etkilerini tespit etmeyi ve olabilecek gelişmeler hakkında farkındalık oluşturmaya amaçlamışlardır. Çalışmada, üretici ve tüketici davranışlarını inceleyerek ileriye yönelik faydalı perspektif geliştirilmiştir (Demirdöğmez vd., 2020: 1907). İmren ve Anbaroğlu'nun (2021) yapmış oldukları çalışmada, online alışverişin mekansal dağılımı hakkında Covid-19 öncesi ve sonrası yapılmış araştırmalar göz önüne alınarak Covid-19'un online alışveriş ve mekansal kullanımına olan etkisi bulunmuştur (İmren ve Anbaroğlu, 2021: 120). Öztürk vd. (2021) yapmış oldukları çalışmada, alışveriş merkezini ziyaret eden tüketicilerin Covid-19 pandemisi döneminde alışveriş davranışlarında meydana gelen değişimler belirlenmiştir. Türkiye ve Libya özelinde alışveriş yapan tüketicilerin davranışları tespit edilmiş ve karşılaştırılmıştır. Türkiye'deki kadın tüketicilerin tutumlarındaki değişimin yüksek olduğu ancak, Libya'da kadın ve erkek tüketicilerin davranışlarında önemli bir değişimin olmadığı ortaya çıkmıştır (Öztürk vd., 2021, 97). Erdaş ve Ecer'in (2022) yapmış oldukları çalışmada, online alışveriş çerçevesinde beş ana kriter ve yirmi üç alt kriterle online alışveriş platformlarının Covid-19 dönemindeki performansları AHP ve MAIRCA ile incelenmiştir. Uygun fiyat, karantina dönemi ve hasta olma korkusu kriterleri online alışveriş platformlarının performanslarının önemli belirleyicileri olarak bulunmuştur. Trendyol online alışveriş platformu ise en başarılı site veya online alışveriş platformu olarak tespit edilmiştir (Erdaş ve Ecer, 2022: 169). Kayabaşı'nın (2020)

yapmış olduğu çalışmada, pandeminin ülkeler ve tüketicilerin davranışlarındaki değişim tespit edilmiştir. Çalışmada, Covid-19'un piyasaları ve tüketici gelirlerini uzun dönem boyunca olumsuz etkileyeceği bulunmuştur. Ayrıca, üretim faktörlerinin tam kapasite çalışmaması sonucu; işsizlik, durgunluk ve daralma gibi ekonomik sorunların ortaya çıkacağı tespit saptanmıştır (Kayabasaşı, 2020: 15). Madalı'nın (2022) yapmış olduğu çalışmada, Covid-19 pandemi döneminde tüketicilerin gıda tercihleri ve beslenme satın alma alışkanlıklarındaki değişim değerlendirilmiştir. Tüketicilerin gıda alışveriş davranışlarının beslenme alışkanlıklarındaki değişimlerden etkilenmediği bulunmuştur (Madalı, 2022, 102). Özey'in (2021) yapmış olduğu çalışmada, Covid-19 pandemisi nedeniyle tüketicilerin davranışlarında değişiklikler tespit edilmiştir (Özey, 2021: 1). Shaw vd. (2022) yapmış oldukları çalışmada, Covid-19 pandemisi sonrası online alışverişin devam etme potansiyelini ifade eden kriterleri açıklamıştır. Bu kapsamda hedonik motivasyon, sosyal alışveriş ve sağlık duyarlılığı faktörleri dahil edilerek yeni bir model oluşturulmuştur. Çalışmanın verileri Kanada, Almanya ve ABD'den elde edilmiştir. Elde edilen bulgulara göre, bazı kadınlar için kolaylık ve verimliliğin yanı sıra güvenliğin de çevrimiçi alışverişin algılanan faydasına ve sonuçta çevrimiçi alışverişe devam etme niyetine katkıda bulunan önemli faktörler olduğu belirlenmiştir. Ayrıca keyifli bir çevrimiçi alışveriş deneyimi yaratmanın da bu devamlılık niyetlerine katkıda bulunduğu ortaya çıkarılmıştır (Shaw et al., 2022: 1).

Önceki çalışmalar Covid-19 salgınının tüketici davranışlarında değişiklik yaptığını ortaya koymaktadır. Türkiye'deki istatistik veriler de bunu doğrulamaktadır. Online gıda harcamaları özelinde bir değerlendirme yapıldığında, Covid-19 salgını öncesinde online alıveriş harcamalarında gıdanın payının çok yüksek olmadığı, ancak salgın sonrası bu payın arttığı görülmektedir Diğer yandan, Covid-19 salgınının bu artışta ne derece etkili olduğu ve tüketicilerin online gıda alışveriş davranışlarını ne yönde değiştirdiği soruları yanıt beklemektedir. Bu çalışmada belirtilen temel sorulara yanıt verilmesi amaçlanmıştır. Çalışma kapsamında online alışveriş sıklığı, online gıda alışverişine yönelten başlıca faktörler, online gıda alışverişinde tercih edilen gıda ürünleri, salgın sonrasında online gıda alışverişine devam etme durumu, online gıda alışverişinin güvenilirliği ve kullanım kolaylığı gibi başlıca konular incelenmiştir.

2. MATERYAL VE YÖNTEM

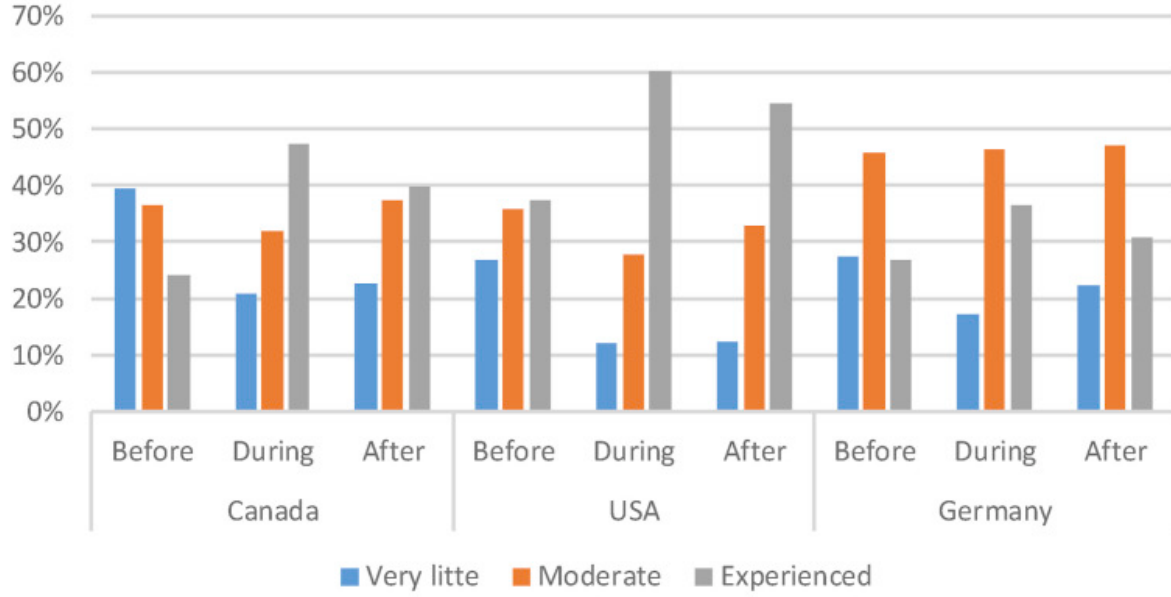
Bu çalışmanın ana materyali, gayeli olarak seçilmiş olan online gıda alışveriş yapan tüketiciler ile yüz yüze gerçekleştirilen anketlerden elde edilmiştir. Çalışmada kullanılan anket; 33'ü Bornova, 33'ü Buca ve 34'ü Karşıyaka ilçeleri olmak üzere İzmir ilindeki toplam 100 kişi ile yüz yüze yapılmıştır. Ayrıca çalışmada, anket yoluyla toplanan orijinal verilerin yanında, kurumların yayınladığı istatistikler, önceden yayınlanmış tezler, araştırmalar, makaleler, bildiriler, projeler vb. ikincil veri kaynaklarından yararlanılmıştır.

Çalışmada kullanılan veriler Excell programı aracılığıyla düzenlenmiş ve SPSS istatistik programı kullanılarak analiz edilmiştir. Toplanan verilerin güvenilirliğini test etmek amacıyla güvenilirlik analizi yapılmış, ardından temel amaçlara yönelik analizler gerçekleştirilmiştir. Ankete katılan katılımcıların online gıda alışveriş yapmasını etkileyen en önemli ve en önemsiz faktörleri tespit etmek amacıyla Best-Worst Analizi kullanılmıştır.

3. COVID-19 PANDEMİSİ SÜRECİ ÖNCESİ VE SONRASINDA DÜNYADA ONLINE ALIŞVERİŞ

Kanada, Almanya ve ABD'de yapılmış çalışmada katılımcılara Covid-19 pandemi öncesi, pandemi sürecinde ne sıklıkla online alışveriş yaptıkları ve sonrasında ne sıklıkla online alışveriş yaptıkları öğrenilmiştir. Üç ülkede de Covid-19 pandemi sırasında online alışverişte artış olmuştur. Kanada'da deneyimli online alışveriş yapan tüketicilerin alışveriş yapma sıklıkları Covid-19 pandemisi öncesi %24, pandemi sırasında %47 ve pandemi sonrası %40 olarak bulunmuştur. ABD'de deneyimli online alışveriş yapan tüketicilerin alışveriş yapma sıklıkları Covid-19 pandemisi öncesi %37, pandemi sırasında %60 ve pandemi sonrası %55 olarak belirlenmiştir. Almanya'da deneyimli online alışveriş yapan tüketicilerin alışveriş yapma sıklıkları Covid-19 pandemisi öncesi %27, pandemi sırasında %36 ve pandemi sonrası %31 olarak saptanmıştır. Bu verilere göre, birçok online alışveriş yapan katılımcının pandemi sonrasında pandemi öncesine göre fazla online alışveriş yaptığı değerlendirilmiştir (Şekil 1).

Şekil 1. Kanada, Almanya ve ABD’de Katılımcıların Online Alışveriş Yapma Sıklıkları

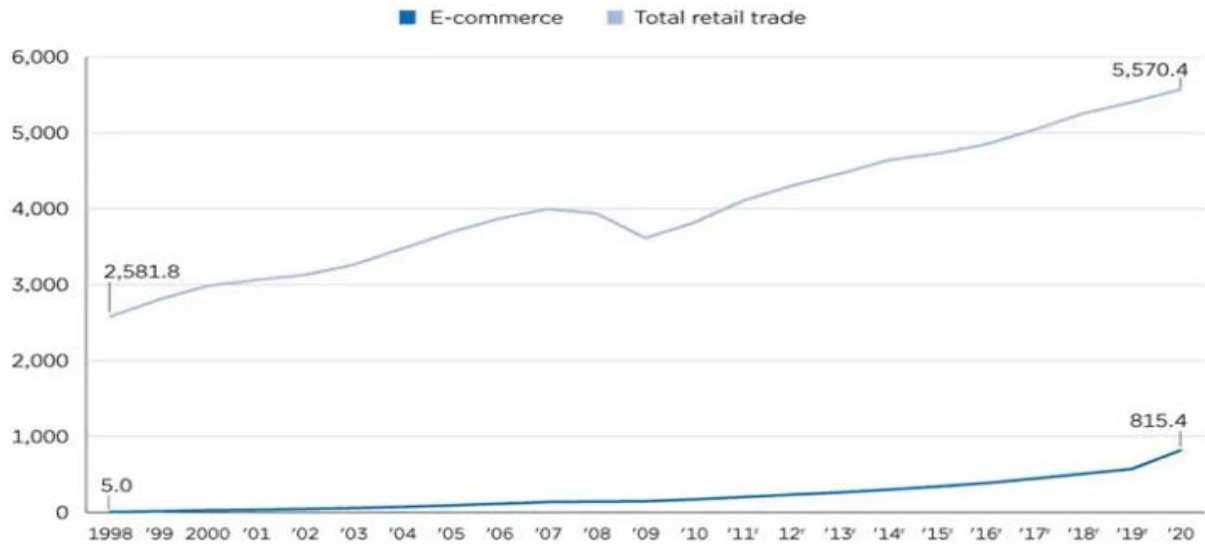


Kaynak: Shaw et al., 2022.

1998-2020 arasında yıllık ABD’de perakende ticaret satışları toplamında ve online ticaret satış miktarlarında önemli artışlar tespit edilmiştir. Toplam ticaret içerisindeki online satış miktarları teknolojik gelişmelerle yavaş artış oranlarıyla 2020 yılına kadar ilerlemiştir. Covid-19 pandemisinin etkisi ile 2020 yılına gelindiğinde online ticaret 815.4 milyar dolar ticaret hacmine ulaştığı tespit edilmiştir (Şekil 2).

Şekil 2. ABD’de Toplam Ticaretteki Online Ticaretin Yeri

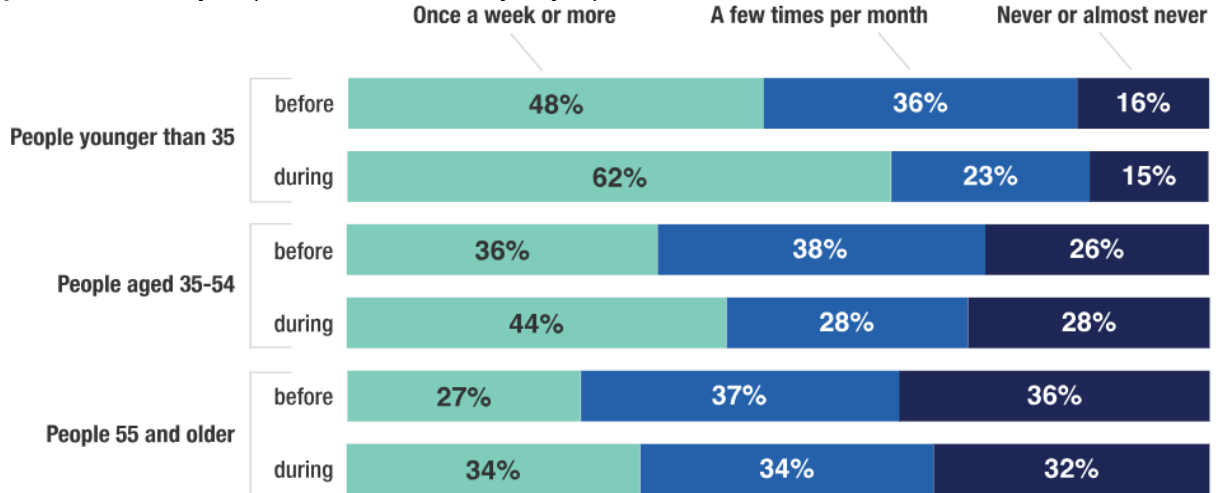
(In billions of dollars)



Kaynak: Annual Retail Trade Survey (ARTS), 2020.

ABD’de yapılmış bir çalışmada, tüketicilerin yaş gruplarına göre Covid-19 pandemisi öncesi ve sonrası online gıda alışveriş sıklıkları incelenmiştir. 35 ve altı yaşındaki tüketicilerin online alışveriş sıklıklarını %48’den %62’ye, 35 ve 54 yaş aralığındaki tüketicilerin %36’dan %44’e ve 55-üstü yaş aralığındaki tüketicilerin %27’den %34’e artırdıkları bulunmuştur. Genç tüketici grubunun online alışverişte fast food ürünlerini sıklıkla talep ettiği tahmin edilmektedir (Şekil 3).

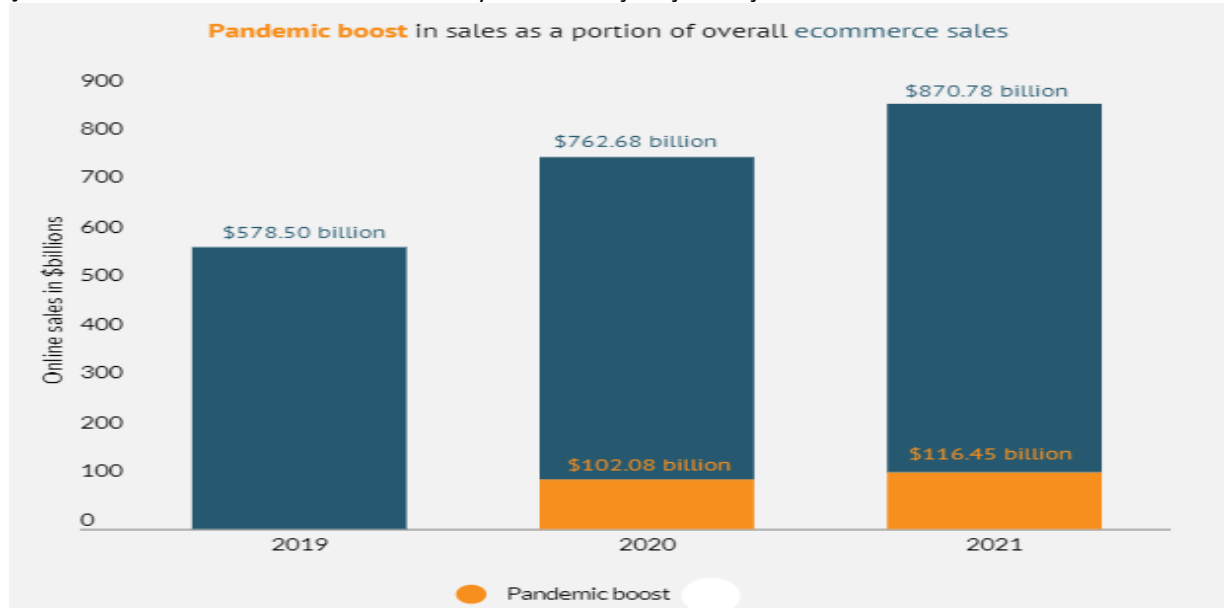
Şekil 3. ABD’de Yaş Gruplarına Göre Online Alışveriş Yapma Sıklıkları



Kaynak: Ecola et al, 2020.

Berthene’nin (2022) yapmış olduğu çalışmaya göre, Covid-19 pandemisi online ticaretin büyümesine önemli katkıda bulunmuştur. Karantina süreci ABD’deki tüketicileri evlerinden ihtiyaç duyduğu mal ve hizmetleri satın almaya yöneltmiştir. Digital Commerce 360’a göre, Covid-19 pandemisinin iki yılda online ticarete 218.53 milyar dolar (2020 yılında 102.08 ve 2021 yılında 116.45 milyar dolar) katkı sağladığı bulunmuştur. 2020 yılından 2021 yılına Covid-19 pandemisi nedeniyle %14.2 artış yaşandığı tespit edilmiştir. 2021 yılı online alışveriş miktarı 870.78 milyar dolardır. Covid-19 pandemisinin olmaması halinde 2021 yılı online alışveriş miktarının 754.33 milyar dolarda kalacağı tespit edilmiştir (Şekil 4).

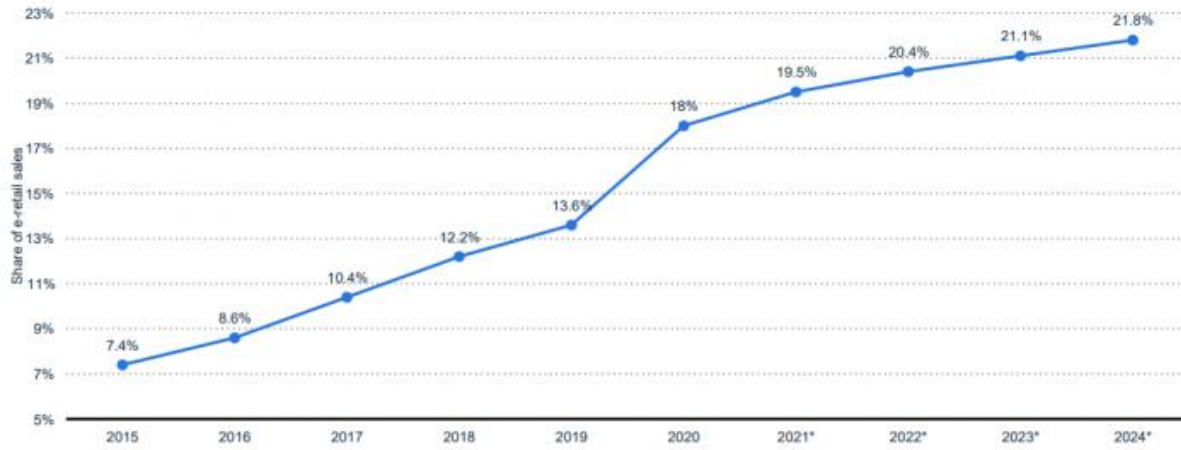
Şekil 4. ABD’de Covid-19 Pandemisi Nedeniyle Online Alışverişte Artış Miktarı



Kaynak: Berthene, 2022.

2019-2020 yıllarında dünyadaki toplam perakende satış miktarlarında önemli bir yükseliş vardır. 2024 yılına kadar dünya genelinde %8’lik devamlı bir büyüme olacağı öngörülmüştür. Bu artış Covid-19 pandemisinin neden olduğu değişimin sonucu olarak değerlendirilmektedir (Şekil 5).

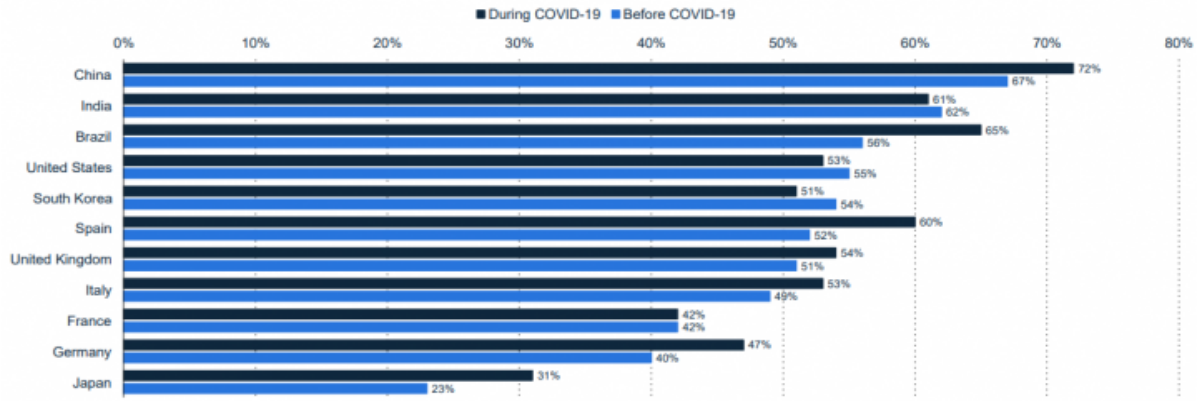
Şekil 5. 2015-2024 Dünya Toplam Perakende Satışlarında Online Ticaretin Payı



Kaynak: International Trade Administration (ITA), 2023.

Fiziki olarak serbest alışverişi engelleyen Covid-19 pandemisi, dünyada çeşitli engellemelerle ticareti online kanala yönlendirmiştir. Dünyadaki tüketiciler, online alışverişlerini en çok kullandıkları web siteleri-online alışveriş platformları aracılığıyla yapmaktadırlar. Covid-19 pandemisi sonucunda online alışverişte satış yapan firma sayılarında Brezilya, İspanya ve Japonya’da büyük artışlar olduğu tespit edilmiştir (Şekil 6).

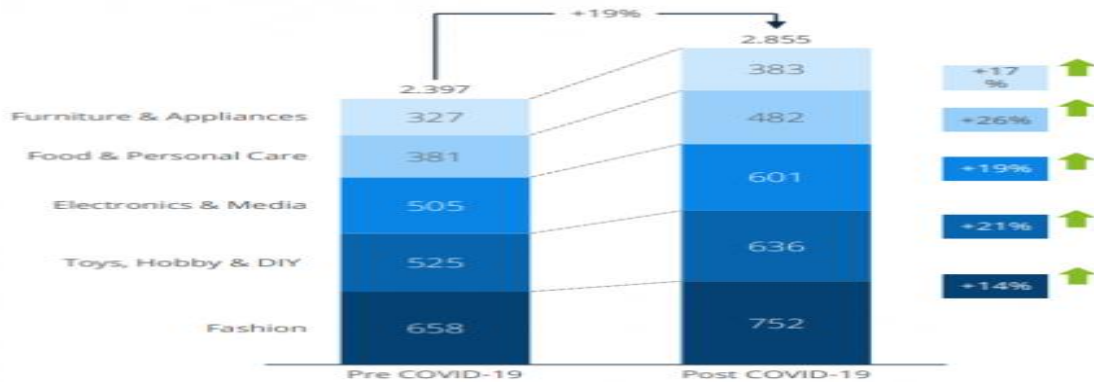
Şekil 6. Dünya’da Covid-19 Pandemisi Sonrası Online Satış Yapan İşletme Sayılarındaki Artış Miktarları



Kaynak: International Trade Administration (ITA), 2023.

2020 yılı Covid-19 pandemisi öncesi ve sonrası dönemlerinde dünya genelindeki online ticaret gelirlerinde %19’luk yükseliş tespit edilmiştir. Tüketicilerin online alışveriş kanalını kullanmalarıyla gıda ve kişisel bakım mallarında en çok büyüme gerçekleştiği bulunmuştur (Şekil 7).

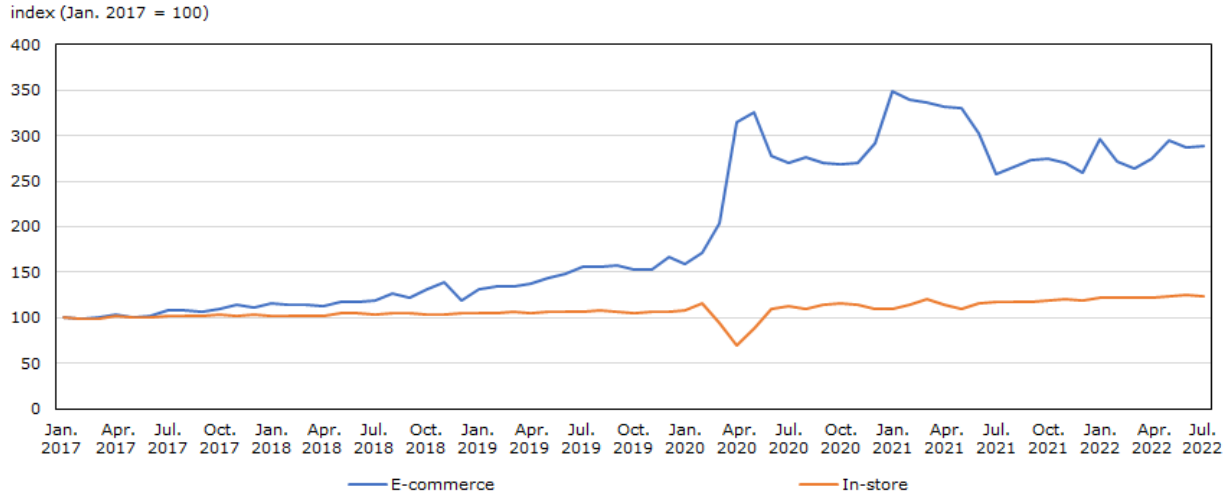
Şekil 7. 2020 Yılı Covid-19 Pandemisi Sonucu Online Ticaretteki Sektörlere Göre Artış Oranları



Kaynak: International Trade Administration (ITA), 2023.

Covid-19 pandemisi nedeni ile online ticaretteki artış pandemi sonrasında da tüketiciler için önemli bir satış kanalı olmaya devam etmektedir. 2020 yılının Şubat ayından Temmuz ayına kadarki dönemde online ticaret perakende satış miktarı %67.90 oranında artmıştır. Covid-19 pandemi döneminde uygulanmış olan karantina uygulamaları, online ticarete tüketici davranışlarında ve perakende sistemlerinde uzun dönemli değişikliklere neden olmuştur. Online ticaret satış miktarı toplam perakende satış miktarı içerisinde 2019 yılı %3.90'dan 2022 yılına %6.2'ye ilerlemiştir (Şekil 8).

Şekil 8. Kanada'da Perakende ve Online Ticaret Satış Miktarları



Kaynak: Statistics Canada, 2023.

Şekil 9'da dünya'da bazı ülkelerin perakende satış miktarları ve içerisindeki online ticaret satış miktarları incelenmiştir. Şekil 9'daki veriler Avustralya, Kanada, Çin, Kore, Singapur, İngiltere ve ABD ülkelerinin Covid-19 öncesi ve sonrası satış miktarları hakkında bir fikir vermektedir. Perakende satış miktarlarının toplamı 2018 yılındaki 12 752 milyar dolardan 2020 yılına 13 003 milyar dolara, online ticaret satış miktarı 2018 yılında 1 770 milyar dolardan 2020 yılına 2 038 milyar dolara ve online ticaret satış verilerinin toplam perakende satış verilerinden aldığı pay 2018 yılındaki %14'den 2020 yılına %19'a ulaşmıştır (Şekil 9).

Şekil 9. 2018-2020 Döneminde Çeşitli Ülkelerin Toplam Satış Miktarları İçerisindeki Online Satış Miktarı

Economy	Online retail sales (\$ billions)			Retail sales (\$ billions)			Online share (% of retail sales)		
	2018	2019	2020	2018	2019	2020	2018	2019	2020
Australia	13.5	14.4	22.9	239	229	242	5.6	6.3	9.4
Canada	13.9	16.5	28.1	467	462	452	3.0	3.6	6.2
China	1,060.4	1,233.6	1,414.3	5,755	5,957	5,681	18.4	20.7	24.9
Korea (Rep.)	76.8	84.3	104.4	423	406	403	18.2	20.8	25.9
Singapore	1.6	1.9	3.2	34	32	27	4.7	5.9	11.7
United Kingdom	84.0	89.0	130.6	565	564	560	14.9	15.8	23.3
United States	519.6	598.0	791.7	5,269	5,452	5,638	9.9	11.0	14.0
Economies above	1,770	2,038	2,495	12,752	13,102	13,003	14	16	19

Kaynak: United Nations Conference on Trade and Development (UNCTAD), 2020.

4. COVID-19 PANDEMİSİ SÜRECİ ÖNCESİ VE SONRASINDA TÜRKİYE’DE ONLINE ALIŞVERİŞ

Covi-19 pandemisi dönemi ve sonrası Türkiye’nin online alışveriş miktarlarında önemli bir artış olmuştur. 2021 yılının online alışveriş hacmi önceki yıla göre %69’luk artışla 381.5 milyar TL düzeyine ulaşmıştır. 2021 yılı sipariş adet miktarı önceki yıla göre %46 artışla 3 milyar 347 milyon adet olarak belirlenmiştir. 2021 yılında perakende online ticaret hacmi 234 milyar TL olup, online alışverişin genel ticarete oranı %17.7’dir. En yüksek oran ise online alışveriş kampanyalarının yapıldığı Kasım ayında %20.4 olarak gerçekleşmiştir (Tablo 1).

Tablo 1. 2020-2021 Yıllarında Online Ticaretin Genel Ticarete Oranları

Yıllar		Aylar	% Oranlar	
2020	2021	Ocak	11.7	18.0
2020	2021	Şubat	11.7	16.0
2020	2021	Mart	12.2	16.8
2020	2021	Nisan	16.4	19.3
2020	2021	Mayıs	18.4	19.9
2020	2021	Haziran	17.4	15.4
2020	2021	Temmuz	15.0	14.4
2020	2021	Ağustos	16.0	16.7
2020	2021	Eylül	16.7	18.4
2020	2021	Ekim	15.9	18.0
2020	2021	Kasım	19.0	20.4
2020	2021	Aralık	18.3	19.0

Kaynak: Ticaret Bakanlığı, 2022.

2020 ve 2021 yıllarının Türkiye online ticaret verilerine göre; online ticaretin gayrisafi yurtiçi hasılasındaki payı %4.1’den %5.1’e ve kişi başına düşen online ticaret harcama tutarı 2 808 TL’den 4 749 TL’ye yükselmiştir. İstanbul, İzmir ve Ankara illerinin online ticaret satış miktarlarının diğer illere oranı %72’den %68’e düşmüştür. Bu düşüş miktarı nedeni diğer illerdeki tüketicilerin online alışveriş miktarını artırmış olmalarıdır (Tablo 2).

Tablo 2. Türkiye’nin Online Ticaret Hacmindeki Değişiklikler

Kriterler	2020	2021
Online Ticaretin Gayrisafi Yurtiçi Hasılası İçindeki Payı	%4.1	%5.1
Kişi Başına Düşen Online Ticaret Harcama Tutarı	2 808 TL	4 749 TL
İstanbul, İzmir ve Ankara Online Ticaret Miktarlarının Diğer illere Oranı	%72	%68

Kaynak: Ticaret Bakanlığı, 2022.

Türkiye’de online ticaret satış miktarlarının sektörler göz önüne alınarak 2020 ve 2021 yılları (bir önceki yıla göre artışlar) arasındaki değişiklikler ve sektörlerin TL işlemleri incelenmiştir. Verilere göre; %175 konaklama, %162 gıda ve süpermarket, %113 seyahat, taşımacılık ve depolama, %98 havayolları, %78 yemek, %73 beyaz eşya ve küçük ev aletleri, %59 elektronik ve %26 giyim, ayakkabı ve aksesuar sektörlerinde önceki yıla göre artışlar ortaya çıkmıştır. 2021 yılı online ticaret verilerine göre; 14.0 milyar TL gıda ve süpermarket, 10.7 milyar TL seyahat, taşımacılık ve depolama, 18.3 milyar TL havayolları, 14.5 milyar TL yemek, 52.9 milyar TL beyaz eşya ve küçük ev aletleri, 21.4 milyar TL elektronik ve 24.2 milyar TL giyim, ayakkabı ve aksesuar satış değerleri gerçekleşmiştir (Tablo 3).

Tablo 3. Online Ticaretin Sektörlere Göre Artış Miktarları ve Sektörlerin Gelirleri

Sektörler	% Artış (2020-2021)	Milyar TL (2021)
Konaklama	175	-
Gıda ve Süpermarket	162	14.0

Seyahat, Taşımacılık ve Depolama	113	10.7
Havayolları	98	18.3
Yemek	78	14.5
Beyaz Eşya ve Küçük Ev Aletleri	73	52.9
Elektronik	59	21.4
Giyim, Ayakkabı ve Aksesuar	26	24.2

Kaynak: Ticaret Bakanlığı, 2022.

5. ARAŞTIRMA BULGULARI

5.1 Katılımcıların Demografik Özellikleri

Katılımcıların yaşlarının ortalaması 28.06 ve hane halkı sayısının ortalaması 1.83 olarak bulunmuştur. Katılımcılar, 89 kişi erkek ve 11 kişi kadından oluşmaktadır. Katılımcılardan 77'si bekar ve 23'ü evlidir. Katılımcılardan 17'si lise-ortaokul ve 83'ü lisans-lisans üstü eğitim düzeyindedir. Katılımcılardan 38'i 10 000 TL ve daha az ve 62'si 10 000-20 000 TL arası gelir elde etmektedir. Katılımcılardan 35'i öğrenci-yarı zamanlı çalışan ve 65'i işçi ve memurlardan oluşmaktadır.

5.2 Katılımcıların Online Gıda Alışverişine Başlama Zamanı ve Alışveriş Sıklıkları

Katılımcıların %39'unun Covid-19 pandemisi öncesi, %61'i ise Covid-19 pandemisi sonrası online gıda alışverişine başladıkları tespit edilmiştir.

Katılımcıların online gıda alışverişi yapma sıklığı incelendiğinde, %26'sının haftada bir kez, %37'sinin haftada iki-üç kez ve %37'sinin diğer zamanlarda online gıda alışverişi yaptıkları bulunmuştur. Katılımcıların online gıda sitelerini ziyaret etme sıklıkları incelendiğinde, %14'ünün her gün, %38'inin iki-üç günde bir defa ve %48'inin ise diğer zamanlarda belli aralıklarda ziyaret ettikleri saptanmıştır.

5.3 Katılımcıların Online Gıda Alışverişinde Ürün Tercihleri ve Aylık Harcamalarındaki Oranı

Katılımcıların online gıda alışverişlerindeki ürün tercihleri incelendiğinde, %80'inin atıştırmalık-hazır yemek vb. ürünler, %13'ünün tahıl ve mutfak ürünleri ve %7'sinin diğer ürünleri talep ettikleri bulunmuştur. Online gıda alışverişinde katılımcılardan bir kişinin meyve ve sebze ürünlerini tercih ettiği tespit edilmiştir. Katılımcıların çoğunluğunun online meyve ve sebzelerin tazelik ve paketlenme konularındaki endişelerinden dolayı bu ürünleri tercih etmedikleri öğrenilmiştir.

Katılımcıların aylık harcamalarındaki online gıda alışverişi yapma oranları incelendiğinde, Covid-19 öncesine göre belirgin bir artış olduğu belirlenmiştir. Online gıda alışverişi yapma oranı %10 ve daha az olanların sayısı Covid-19 öncesi 10 kişi iken, bu sayı Covid-19 sonrası 23 kişiye yükselmiştir. Online gıda alışverişi yapma oranı %50 ve üzeri olanların sayısı Covid-19 öncesi sadece 1 kişi iken, bu sayı Covid-19 sonrası 26 kişiye çıkmıştır (Tablo 4).

Tablo 4. Katılımcıların Covid-19 Öncesi ve Sonrası Online Gıda Alışverişi Oranları

Oranlar	Covid-19 Öncesi	Covid-19 Sonrası	Artış Farkı
%0-10	10	23	13
%10-20	14	19	5
%20-40	10	24	14
%40-50	4	8	4
%50 ve Üzeri	1	26	25
Toplam	39	100	61

5.4 Katılımcıların Online Gıda Alışverişine Başlama ve Devam Ettirme Nedenleri

Katılımcıların online gıda alışverişi başlama nedenleri incelendiğinde farklı nedenlerle karşılaşılmaktadır. Katılımcıların %38'i normal alışverişin çok zaman kaybettirdiği, %31'i normal alışverişin yorucu olduğu, %14'ü Covid-19 pandemi durumu, %11'i günümüzde yaygın şekilde kullanılması ve %6'sı markete ulaşım zorluğu olarak bu nedenleri ifade etmişlerdir (Tablo 5).

Tablo 5. Katılımcıların Online Gıda Alışverişine Başlama Nedenleri

Nedenler	Sayı	Yüzde (%)
Normal Alışverişin Çok Zaman Kaybettirmesi	38	38.00
Normal Alışverişin Yorucu Olması	31	31.00
Covid-19 Durumu	14	14.00
Günümüzde Yaygın Şekilde Kullanılması	11	11.00
Markete Ulaşım Zorluğu	6	6.00
Toplam	100	100.00

Katılımcıların online gıda alışverişini devam ettirme nedenleri de incelenmiştir. Elde edilen bulgulara göre, katılımcıların %67'si kolay kullanımının olması, %13'ü bazı ürünlerin indirimli olması, %12'si alışkanlık edinilmiş olunması, %7'si hızlı teslimat yapılması ve %1'i ürün ve paketlerde endişe duymaması olarak söz konusu nedenleri sıralamışlardır (Tablo 6).

Tablo 6. Katılımcıların Online Gıda Alışverişine Devam Etme Nedenleri

Nedenler	Sayı	Yüzde (%)
Kolay Kullanımının Olması	67	67.00
Bazı Ürünlerin İndirimli Olması	13	13.00
Alışkanlık Edinilmiş Olması	12	12.00
Hızlı Teslimat Yapılması	7	7.00
Ürün ve Paketlerde Endişe Duymamam	1	1.00
Toplam	100	100.00

5.5 Katılımcıların Online Gıda Alışverişi Hakkındaki Görüşleri

Katılımcıların online gıda alışverişi hakkındaki görüşleri kendilerine sunulan çeşitli önermelere vermiş oldukları cevaplarla ölçülmüştür. Bu görüşler tüketicilerin; kesinlikle katılmıyorum, az katılıyorum, kararsızım, önemli ölçüde katılıyorum ve kesinlikle katılıyorum şeklinde olan 5'li likert ölçeği aracılığıyla ortaya konulmuştur.

Katılımcılar online gıda alışverişinde dijital ödemenin güvenli olduğu ve kişi verilerinin yeterli düzeyde dikkat edildiğini konusundaki önermeye 4 (önemli ölçüde katılıyorum) şeklinde yanıt vermiştir.

Katılımcıların online gıda alışverişindeki sitelerin anlaşılır, bilgilendirici ve istenilen beğeni(görsel-şekiller) düzeyinde olduğu düşüncesi konusundaki görüşleri incelendiğinde, ortalaması 4.58 (kesinlikle katılıyorum) olarak bulunmuştur.

Katılımcıların online gıda alışverişi yapmasına ve kullanımını artırmasında Covid-19'un teşvik ettiği konusundaki görüşleri incelendiğinde, ortalaması 3.84 (önemli ölçüde katılıyorum) olarak belirlenmiştir.

Katılımcıların online gıda alışverişinin çok pratik ve zaman kaybını önlediği konusundaki görüşleri incelendiğinde, ortalaması 4.55 (kesinlikle katılıyorum) olarak saptanmıştır.

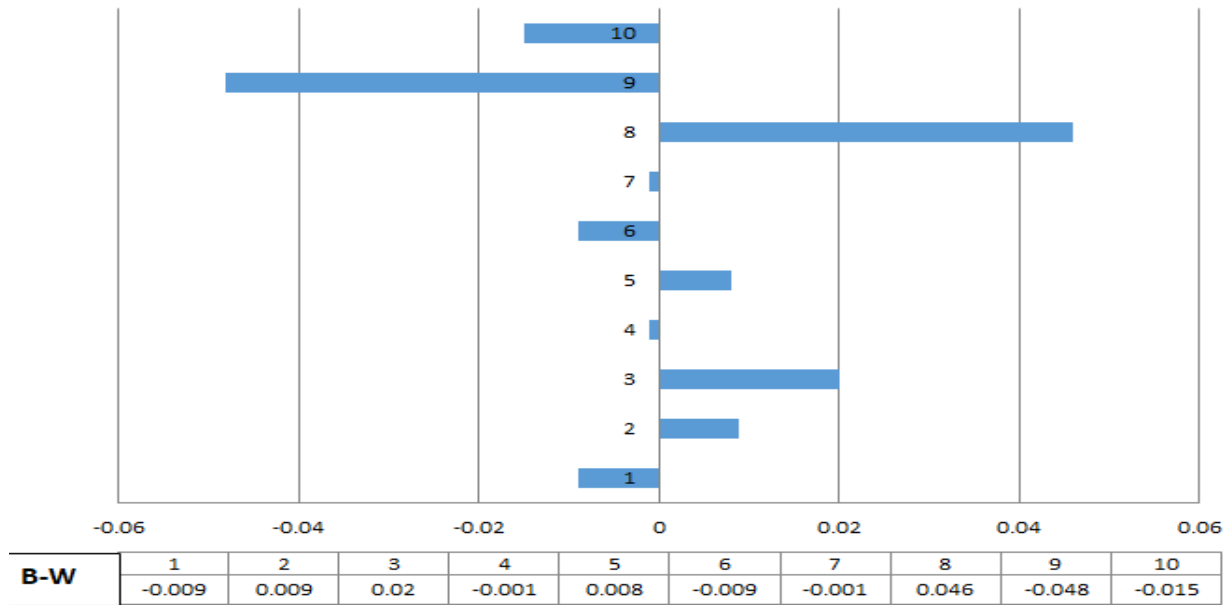
Katılımcıların online gıda alışverişinde endişe duymadan ve güven içinde alışveriş yapma konusundaki görüşleri incelendiğinde, ortalaması 4.27 (önemli ölçüde katılıyorum) olarak tespit edilmiştir.

Katılımcıların online gıda alışverişinde promosyonların (ürün fiyatında indirim, yeni ürün hediye, ana ürün yanında küçük ürün hediye vb.) olması kullanımı artırdığı konusundaki görüşleri incelendiğinde, ortalaması 4.03 (önemli ölçüde katılıyorum) olarak ortaya konulmuştur.

5.6 Katılımcıların Online Gıda Alışverişine Yönelmesinde En Önemli ve En Önemsiz Faktörler

Katılımcıların online gıda alışverişine yönelmesinde en önemli ve en önemsiz faktörler Best-Worst analizi ile 10 olası faktör çerçevesinde ortaya konulmuştur. Analiz sonuçları Şekil 10'da gösterilmiştir. Elde edilen analiz sonuçlarına göre, katılımcıları online gıda alışverişine yönelten en önemli faktör siparişin istenildiği adrese kısa sürede ulaştırılması, en önemsiz faktör ise online ürün reklamlarının etkileyici olması olarak bulunmuştur (Şekil 10). Bu noktada ürüne kolay erişim imkanı tüketicileri online alışverişe yönelten en önemli unsur olarak dikkati çekmektedir.

Şekil 10. Katılımcıların Online Gıda Alışverişine Yönelmesinde En Önemli ve En Önemsiz Faktörler



(Faktörler: 1: Hızlı katalog gezintisi, 2: Promosyonların olması (indirim-ürün iade-yeni ürün hediye), 3: 7/24 ulaşılabilir olması, 4: Ürün bilgilerini öğrenebilir olması, 5: İstenildiği zaman sipariş verilebilmesi, 6: Ürünlerin kontrol altında depolanması, 7: Ürünlerin iade ve şikayetlerinin yapılabilmesi, 8: Siparişin istenildiği adrese kısa sürede ulaştırılması, 9: Online ürün reklamlarının etkileyici olması ve 10: Diğer marka ürünleriyle aynı anda karşılaştırılabilir olması)

6. SONUÇ

Bu çalışmada Covid-19 salgınının tüketicilerin online gıda alışveriş davranışlarını ne yönde değiştirdiği temel sorusuna yanıt bulunmuştur. Katılımcıların çoğunluğunun online gıda alışverişine normal alışverişin çok zaman kaybettiği ve yorucu olmasından dolayı başladıkları tespit edilmiştir. Katılımcıların önemli bir kısmı (%61'i) pandemi sonrası online gıda alışverişine başlamalarına rağmen, öncelikle Covid-19 pandemisini başlama nedeni olarak söylememişlerdir. Tüketicilerin online gıda alışverişine devam etme nedenlerinin başında ise kolay kullanımının olması ve ürünlerde yapılan indirimler gelmektedir. Covid-19 pandemisi sürecince yapılan kısıtlama faaliyetleri tüketicilerin online gıda alışverişine kolaylık ve indirim gibi özelliklerle bağlı tutmuş, bir anlamda tüketicileri online gıda alışverişine yöneltmede önemli bir farkındalık sağlamıştır.

Çalışmadaki bir başka önemli bulguya göre, ürüne kolay erişim imkanı tüketicileri online alışverişe yönelten en önemli faktördür. Ancak özellikle gıda ürünlerinde ürüne kolay erişim imkanı tüketicileri online alışverişe yöneltmede tek başına yeterli olacak bir faktör olarak algılanmamalıdır. Tüketiciler açısından önemli olan bu faktörün gıda güvenliğine uygunluk, tazelik, kalite, etkin müşteri hizmetleri, şeffaflık ve dijital veri güvenliği açılarından da desteklenmesi önemli görülmektedir.

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Mediating Role of Trust in the Impact of Financial Tribalism and Narratives on Risky Investment Intention*

Res. Asst. Hatice Nayman Hamamcı¹

Prof. Dr. Selim Aren²

¹Yıldız Technical University, Faculty of Economics and Administrative Sciences, Business Department,
hnayman@yildiz.edu.tr, ORCID: 0000-0002-3044-3836

²Yıldız Technical University, Faculty of Economics and Administrative Sciences, Business Department,
saren@yildiz.edu.tr, ORCID: 0000-0003-1841-0270

Abstract: In this study, the mediating role of trust in the effect of financial tribalism and narratives on risky investment intention was investigated. Financial tribalism is social groups that individuals join to obtain financial information. Narratives, on the other hand, are the way people express themselves in a sense in logical harmony. The narratives were considered in two dimensions as belief in narratives and creation of narratives in this research. The data of the research were collected from Turkey between April-May 2023. A total of 191 participants were reached by using an online survey with convenience sampling. Scales related to financial tribalism and narratives, which are research variables, were developed within the scope of this study. In this context, while explanatory factor analysis and reliability analyzes were performed on these newly developed variables, confirmatory factor analysis was performed on other variables (trust and risky investment intention). According to the results of the reliability analysis, the newly developed scales ensured the reliability conditions. For other variables, fit index values were found above acceptable levels. Then, the research model was tested using structural equation modeling (SEM). The findings of the model shown that trust has a full mediator effect on the effect of financial tribalism on risky investment intention. On the other hand, while trust has a mediating role in the effect of creating a narrative, one of the sub-dimensions of the narrative, on risky investment intention, the mediating effect of trust in the relationship with the dimension of believing in narratives could not be determined.

Keywords: trust, financial tribalism, narratives, risky investment intention

1. INTRODUCTION

The investment decision process is a very important and depends on various factors that can vary between individuals (Zahwa and Soekarno 2023:3517). One of these factors is risk that inherent of markets. Risk is inevitable and individuals take risks at every moment of their lives (career choice, personal relationships, investment decisions, etc.) (Kandasamy et al., 2014: 3608). In fact, it is the focus of many scientific fields such as economics, finance, behavioral sciences (Kandasamy et al., 2014: 3608). Understanding the risk-taking attitude is of great importance in terms of both behavioral and traditional finance (Czerwonka, 2019:894).

Individuals' risky investment processes consist of two stages: to perceive the risk and to prefer whether to accept the risky asset or not (Duxbury and Summers, 2004:21). Risk preference expresses the attitude of individuals towards risk (Wen et al., 2014:1). Even Weber and Milliman (1997:264) define risk preference as a continuum from risk aversion to risk seeking. On the other hand, risk perception can be considered as a cognitive activity and includes the correct evaluation of external and internal situations (Roszkowski and Davey, 2010:43). It is also related to how individuals perceive a dangerous situation and how they evaluate their ability to control and cope with this situation (Krämer and Schindler, 2021:4). Risky investment intention is in a variable that is related to risk taking and risk perception but not exactly the same (Aren and Hamamcı, 2023:12). It defines the desire of individuals to invest in a risky asset or market (Aren and Hamamcı, 2020:2659). In addition to risk, there is uncertainty in the markets and decision processes involve uncertainty. Uncertainty is not a mathematically calculable concept like risk. For this reason, people have to trust themselves or others during the investment process (Masoud and Albaity, 2021:457). In this context, the belief that an event will result in a positive outcome is defined as trust (Cruwys et al., 2021). As investors' confidence increases, market participation also increases (Cui and Zhang, 2021:451). Trust is built through interaction (Reinikainen et al., 2020:284). In this direction, Xu (2018:5) states that social interaction increases trust and causes low risk perception and therefore more risky choices.

Another concept related to the uncertainty in the markets is narratives. The narratives trigger the investors' feeling that they can understand and manage the uncertainty in the markets (Tuckett and Nikolic, 2017:508). In

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this way, people perceive the risk lower (Pollack et al., 2012:18-19) and find the confidence to take action (Aren and Hamamcı, 2021:1257). At the same time, individuals sometimes get support from others through narratives (Tuckett and Nikolic, 2017:508-509). In other words, the social groups or tribes that people belong to come to the fore at this point. Tribes are social groups where people come together for common thought and passion. Individuals join these tribes to facilitate their decision-making processes and in this way gain support from group members. In this regard, financial tribalism can be defined as the groups that investors are involved in to obtain financial information and facilitate the decision process. Walby and Spencer (2018:63) stated that people joined these tribes to avoid risk. Even Erskine-Shaw et al. (2017:341) found that participation in a group increases risky behaviors.

In the study, the effect of financial tribalism and narratives on risky investment intention and the mediating role of trust in this effect were examined and empirical findings were provided for the specified relationships. In this framework, the second part of the study is the literature review, the third part is methodology, and the fourth part is analysis and findings. Finally, the results obtained are evaluated in the conclusion section.

2. LITERATURE REVIEW

Tribalism is a universal condition and people group themselves according to many different characteristics (Russomanno, 2019:543). In this context, tribal members are people who share a system of values, choose themselves, have similar passions and feelings, and desire harmony (Fyrberg-Yngfalk et al., 2013:326). When individuals join a group or tribe, they tend to exclude those who are not their own and reject ideas that are contrary to the views of the group (Clark et al., 2019:3-4). Even if it does not suit their own economic interests, they make choices in accordance with their belief systems (Russomanno, 2019:544). For this reason, social ties established within the tribe are very important (Sanz-Marcos, 2020:475).

While tribalism affects the feelings and thoughts of the individual, it also shapes the decision process (Russomanno, 2019:544). The complexity of financial markets makes decision processes difficult. For this reason, individual investors tend to join tribes with people with common values, passions and views to provide financial information. In this way, they both provide information and reduce the feeling of stress and anxiety caused by a complex and uncertain structure. Accordingly, financial tribalism are social groups that individuals can freely and voluntarily enter to provide financial information. When included in a tribe, individuals evaluate and make decisions according to the norms of this structure. At the same time, these tribes provide individuals with social status (Enke, 2018:42). However, on the contrary, it can sometimes negatively affect decision processes due to the biased information processing (Clark et al., 2019:587).

Another element that individual investors use to cope with market challenges is narratives. In the narratives, the events are designed in a different order and structure (Aren and Hamamcı, 2021:1257) and presented in a logical harmony (Eshraghi and Taffler, 2015:694). What matters here is persuasion rather than accuracy (Green and Sergeeva, 2019:644). At the same time, narratives help social evaluation and social acceptance (Green and Sergeeva, 2019:694-695). In this regard, Phillips et al. (2013:146) stated that the narratives told in the group support the members to feel similar. The narratives created with the group in this way support collaboration (Smart, 1999:259) and help the formation of common identity (Bange et al., 2020:72). Thanks to narratives, individuals have the opportunity to share common thoughts and passion with others (Aren and Hamamcı, 2021:1257). Just as with tribalism, narratives affect the way investors understand things (Dalpiaz et al., 2014:1382) and their decision-making processes (Wuillaume et al., 2019:245). Narratives reduce the perception of risk, information asymmetry (Pollack et al., 2012:18-19) and uncertainty (Allison et al., 2013:703). It even gives the feeling that the uncertain and unmanageable future is manageable (Tuckett and Nikolic, 2017:508). There are also various studies showing that narratives encourage risk taking (Mills and Pawson, 2012:598).

Another important actor in decision-making processes is trust. Trust can be defined as individuals' belief that the outcome of an event will be positive (Cruwys et al., 2021). It shapes the attitudes of individuals (Zeffane, 2015a:226), affects their behavior (Breuer et al., 2020:5), and causes them to make their choices with a positive expectation (Colquitt et al., 2007:909). Trust in a phenomenon increases when others trust the same thing (Reinikainen et al., 2020:290). In other words, individuals are affected by the preferences of other people around them. It is possible to explain this situation with the concept of tribal (Kapetanaki et al., 2019:3). Accordingly, Johnson et al. (2021:48) stated that individuals trust the advice of the tribes they belong to and make evaluations accordingly. Similarly, Cruwys et al. (2021) also pointed out that belonging to the group increases trust and leads to riskier investments. For this reason, it is expected that trust and financial tribalism

are related. At the same time, Phillips et al. (2013:148) stated that trust is a result of the identity formed by narratives.

3. METHODOLOGY

The data of the study was collected between April 3 and May 8, 2023 using an online survey on the basis of convenience sampling and volunteering. A total of 191 participant forms were filled in completely. 151 (79.1%) of the participants are male and 40 (20.9%) are female. 88 subjects (46.2%) were in the 20-30 age range, 67 subjects (35.1%) were in the 31-40 age group, 31 (16.2%) were in the 41-50 age group, and 5 (2.6%) were in the +51-age group. Only 1 (0.5%) of the participants were primary school graduates, 32 (16.8%) were high school graduates, 132 (69.1%) were undergraduates and 26 (13.6%) were graduates. Finally, 75 (39.3%) people are married and 116 (60.7%) are single. Looking at the general profile of the participants, a young, single and highly educated data was reached. Results regarding demographic variables are presented in Table 1.

Table 1: Demographic Variables

Variable	Category	Frequency	Percent
Marital Status	Married	75	39.3%
	Single	116	60.7%
Education	Primary School	1	0.5%
	High School	32	16.8%
	Undergraduate	132	69.1%
	Graduate	26	13.6%
Age	20–30	88	46.2%
	31–40	67	35.1%
	41–50	31	16.2%
	+51	5	2.6%
Gender	Male	151	79.1%
	Female	40	20.9%

Source: Authors own elaboration.

There are two independent variables (financial tribalism and narratives), a dependent variable (risky investment intention) and a mediator variable (trust) in the study. Scales belonging to both independent variables were newly developed within the scope of the study. From these variables, the narratives are handled in two dimensions as "the need to believe in the narratives" and "the need to create a narrative". Scale and item information of all variables are presented in Table 2. In addition, the research model created using these variables is shown in Figure 1.

Table 2: Scales

Variable	Item	Scale
Risky Investment Intention	4	Aren and Aydemir (2017)
Financial Tribalism	5	Developed by us
Trust	5	Aren and Hamamcı 2023
Narratives	10	Developed by us

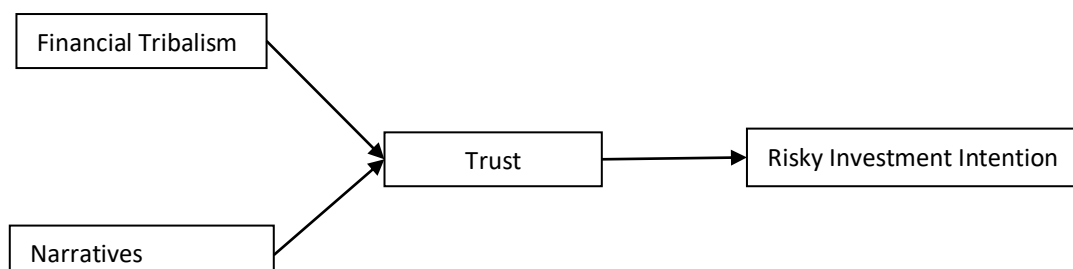


Figure 1: Research Model

4. ANALYSES

Since the newly developed narrative and financial tribalism scales were used for the first time in this study, explanatory factor analysis and reliability analysis were performed. The findings obtained as a result of the analyses are presented in Table 3.

Table 3: Exploratory Factor Analysis for Varimax Rotation

Items	1	2	3	
NB1: I impress by the success stories I hear while making an investment decision.			0.832	
NB2: Success stories give a sense of trust related investment.			0.835	
NB3: Investment instruments with a story interest me.			0.713	
NB4: I don't make my investment decision just by looking at the numbers.				
NB5: Investment instruments that nothing is told about don't give me trust.				
NC1: Whatever the results of my investment, I like to tell them in a way that include my emotions.		0.529		
NC2: Narratives are necessary to make my achievements valuable in the eyes of others.		0.816		
NC3: Narratives help others to understand that we are also “victim” in the event of failure.		0.862		
NC4: What I tell about my achievements and failures helps others understand whether I am a hero or a victim.		0.906		
NC5: Achievements without a story are not effective at all.				
FT1: There are people with whom I exchange ideas on financial matters.	0.823			
FT2: I would like to consult people whose thoughts I believe when making financial decisions.	0.821			
FT3: I would like to make financial decisions together with people with whom I have the same evaluation and thinking system on financial matters.	0.766			
FT4: When I need financial advice, I seek help from people I have consulted before.	0.854			
FT5: Making financial decisions together with people who have similar evaluation and mentality gives me confidence.	0.783			
	% of Variance	36.843	14.352	12.569
	Reliability Analysis (Cronbach Alpha)	0.905	0.801	0.841
	Bartlett's Test of Sphericity	1456.369 ^(0,000)		
	KMO	0.849		

¹ Financial Tribalism

² The need for narrative creation

³ The need to believe the narrative

In Table 3, according to the analysis results, KMO and Bartlett's Test of Sphericity values are at acceptable levels and statistically significant. In other words, we can say that the collected data are suitable for analysis. Accordingly, three of the five items belonging to the first dimension of the narrative variable, believing in narratives, were placed on a single factor, and the other two items (NB4 and NB5) were excluded due to their low factor loads. In addition, the Cronbach alpha reliability value for this variable was found to be 0.841. Four of the five items belonging to the second dimension, narrative creation, were placed on a single factor, but one (NC5) was excluded due to the low factor load. The reliability value of the narrative creation dimension was also found to be 0.801. The last variable, financial tribalism, loaded all five items on a single factor and the reliability value was found to be 0.905. Confirmatory factor analyzes were performed using structural equation modeling (SEM) for the other two variables in the research model. As a result of the analysis, it was seen that the goodness-of-fit index values in the two variables were within the threshold value ranges accepted in the literature. Detailed findings of the analysis are reported in Table 4. The reliability value of all variables was also above the threshold value of 0.70, thus the reliability condition was met.

Table 4: Confirmatory Analyses Results

Variable	CMIN/DF	RMSEA	GFI	AGFI	CFI	TLI	NFI	RFI
Trust	2.632	0.073	0.974	0.923	0.986	0.972	0.978	0.956
Risky Investment Intention	0.884	0.000	0.995	0.976	1.000	1.000	0.997	0.992

The mediating role of trust in the effect of financial tribalism and narratives on risky investment intention was tested using SEM and the findings are shown in Table 5.

Table 5: The Mediation Effect of Trust

Relationship	β	S.E.
Financial Tribalism \rightarrow Trust	0.404***	0.078
Trust \rightarrow Risky Investment Intention	0.259*	0.105
Financial Tribalism \rightarrow Risky Investment Intention	-0.109	0.099
Believe the Narratives \rightarrow Trust	0.019	0.106
Believe the Narratives \rightarrow Risky Investment Intention	0.174	0.133
Narrative Creation \rightarrow Trust	-0.155**	0.052
Narrative Creation \rightarrow Risky Investment Intention	-0.030	0.064
Indirect Effect ¹ (Financial Tribalism \rightarrow Risky Investment Intention)	0.092 (0.022 – 0.192)	
Indirect Effect ² (Believe the Narratives \rightarrow Risky Investment Intention)	0.006 ((-0.079) – 0.073)	
Indirect Effect ³ (Narrative Creation \rightarrow Risky Investment Intention)	-0.031 ((-0.080) – 0.001)	
CMIN/DF	RMSEA	GFI
1.782	0.064	0.867
AGFI	CFI	TLI
0.829	0.948	0.939
NFI	RFI	
0.890	0.871	

* <0.05 ; ** <0.10 ; *** <0.001 ;

(Note: β =Standardized regression estimate values were taken into account; 5000 bootstrap samples; Percentile confidence intervals = 95)

First of all, it should be checked whether the goodness-of-fit index values in Table 5 for the model are at acceptable levels. Accordingly, the CMIN/DF value was below 5 and the RMSEA was less than 0.008, and the acceptance condition was met. Other index values were found to be above the acceptable threshold values (e.g. Aren and Hamamcı, 2023:15). So we can say that the model is suitable for testing.

According to the results of the analysis, the effect of financial tribalism, one of the independent variables, on trust, which is the mediating variable, was found to be positive and statistically significant. Likewise, the effect of the trust on risky investment intention is positive and significant. In this case, it is possible to talk about the mediating effect of trust in the effect of financial tribalism on risky investment intention. Moreover, since the direct effect of financial tribalism on risky investment intention is not statistically significant, the mediation effect is full mediation. In addition, since the interval values (0.022 – 0.192) of the “Indirect Effect¹” do not contain zero (0), this mediation effect was found to be statistically significant.

The second independent variable, the narratives, was handled in two dimensions as "believing in the narratives" and "creating the narrative" and was tested separately in the mediation analysis. Accordingly, the effect of the narrative creation variable on trust was found to be statistically insignificant. Since the prerequisite that the relationship between the independent variable and the mediating variable should be significant is not provided, it is not possible to talk about the mediating effect of trust on the effect of believing in narratives on risky investment intention. The effect of narrative creation variable, which is the second dimension of narratives, on trust was found to be positive and statistically significant. The effect of trust on risky investment intention is also significant. In this respect, we can say that trust has a mediating role on the effect of the narrative creation variable on risky investment intention. In addition, since the direct effect of the narrative creation variable on risky investment intention is not significant, there is full mediation. However, since the interval values ((-0.080) – 0.001) for “Indirect Effect³” include zero (0), this mediation could not be found statistically significant.

5. CONCLUSION

In this study, the mediating effect of trust in the effect of financial tribalism and narratives on risky investment intention was examined. The narratives were handled in two dimensions as the need to believe in the narratives and the need to create a narrative, and the scale was newly developed within the scope of the study. Data were collected using an online questionnaire with convenience sampling. It was observed that the majority of the participants were single, highly educated and young individuals. Exploratory factor analysis were performed on the newly developed scales and confirmatory factor analysis for other variables. According to the findings obtained in the exploratory factor analysis, the reliability scores of the newly developed variables (narratives and financial tribalism) were found above the threshold values. Similarly, according to the results of the confirmatory factor analysis, the fit index values of the variables (trust and risky investment intention) were at acceptable levels. Then the research model was tested using SEM.

According to the findings related to the model, the effect of financial tribalism on trust was found to be significant. Likewise, the effect of trust, which is the mediating variable, on risky investment intention was found to be positive and significant. In this way, the necessary conditions have been provided to be able to talk about the mediation effect. In other words, the mediating role of trust on the effect of financial tribalism on risky investment intention was found. In addition, since financial tribalism does not have a direct effect on risky investment intention, this mediation effect is full mediation and was found to be statistically significant. In this case, we can say that individuals in financial tribes will increase their tendency towards risky investments with the trust they have in these people with whom they share a common vision and passion. Secondly, the mediating effect of trust in the effect of narratives on risky investment intention was investigated. In this direction, it was determined that the narrative creation has a significant effect on trust and that trust also affects risky investment intention. In other words, in this case, the mediating role of trust was found in the effect of narrative creation skill on risky investment intention. With trust, the narratives told by individuals will be strengthened and their credibility will increase, and thus, risky investment intentions will increase. Finally, it was determined that believing in narratives has no effect on trust. In this case, it is not possible to talk about the mediation effect. At the same time, no effect of believing narratives on risky investment intention was found.

As a result, we think that the empirical findings will contribute significantly to the understanding of the markets and investor behavior. Making decisions in markets dominated by uncertainty and risk is a very difficult and complex event for individuals. Insufficient knowledge makes this process even more difficult. In this case, individuals begin to belong to certain tribes and trust them. In this way, decision-making becomes more comfortable, and this positively affects the emotional state of individuals. Over time, the tendency to invest in risky assets also increases. In addition, the narratives told about the financial products in the market may affect the trade decision of the investors regarding the instruments. Because the important thing in narratives is credibility, not accuracy. Creating a highly believable narrative will trigger individuals' confidence in the asset, and even if it is a risky asset, people's risky investment intention will increase with the effect of the narratives. Academically, the newly developed scales within the scope of the study and their financial aspects will contribute to future research.

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Doğrudan Yabancı Sermayenin Ekonomik Büyümeye Etkisi Üzerine Teorik Bir İnceleme

Öğr. Gör. Havva ARABACI¹

¹Trakya Üniversitesi Edirne Sosyal Bilimler Meslek Yüksekokulu Muhasebe Vergi Bölümü, Edirne.

arabacih@hotmail.com Orcid: 0000-0003-0212-6590

Özet: Doğrudan yabancı yatırımlar, bir ülke başka bir ülkede bulunan herhangi bir firmayı satın alarak ya da yeni kurulan bir firmaya sermaye sağlayarak veya mevcut bir firmanın sermayesini artırarak yapılan yatırımlardır. Doğrudan yabancı sermaye yatırımlarının gittiği ülkenin sermaye birikimini artırmak, ülkeye teknoloji transferi sağlamak, ülkede üretim kapasitesini genişletmek, istihdamı arttırmak, yerli girişimleri eğitmek, ülkeye döviz girişi sağlamak gibi yararları vardır. Doğrudan yabancı yatırımlar, ekonomik büyüme üzerinde olumlu etkilere sahiptir. Ekonomik büyüme üzerindeki etkisi ülkeden ülkeye değişmekle birlikte, gelişmekte olan ülkelerde temel belirleyiciler; teknolojik gelişme, ihracat performansının iyileştirilmesi, yabancı sermaye girişinin artırılması, işsizliğin azaltılmasını sağlamaktadır. Bu amaçlar için, ülkeler sürekli olarak doğrudan yabancı yatırımları çekmek için farklı modeller ve politikalar geliştirmişlerdir. Doğrudan yabancı yatırımlar, yatırımda bulundukları ülkeler için sadece sermaye değil, aynı zamanda teknolojik yenilik ve istihdam yaratmanın kaynağı olarak görülmüştür. Doğrudan yabancı yatırımların sağladığı sermaye, yeni teknoloji ve istihdam artışından yararlanma isteği, hem gelişmiş hem de gelişmekte olan ülkeler doğrudan yabancı yatırımları kendi ülkelerine çekebilmek için yoğun çaba göstermektedirler. 1980'li yıllarla birlikte başlayan finansal serbestleşme uygulamaları, dış ticaretin gelişmesine ve onun bir parçası olarak sermaye hareketlerinin artmasına neden olup; dünyada doğrudan yabancı yatırımların bir artış eğilimine girmesini sağlamıştır.

Bu çalışma, doğrudan yabancı sermaye yatırımlarının ekonomik büyüme üzerindeki etkilerini teorik olarak açıklamak amacıyla yapılmıştır.

Anahtar Kelimeler: Yabancı Yatırımlar, Doğrudan Yabancı Yatırımlar, Ekonomik Büyüme.

A Theoretical Examination On The Effect Of Foreign Direct Investment On Economic Growth

Abstract: Foreign direct investments are made by either acquiring any firm located in another country or by providing capital to a newly established firm or by increasing the capital of an existing firm. Foreign direct investment has benefits to country such as increasing capital accumulation, providing technology transfer, expanding production capacity, increasing employment, training domestic enterprises and providing foreign exchange inflow. Foreign direct investments have positive effects on economic growth. Although the effect on economic growth varies from country to country, the main determinants in developing countries are technological development, improving export performance, increasing foreign capital inflows and reducing unemployment. For these purposes, countries have continuously developed different models and policies to attract foreign direct investments. Foreign direct investment has been seen as a source of not only capital but also technological innovation and job creation for beneficiary countries. Due to the desire to benefit from increase in capital and employment with new technology provided by foreign direct investments and both developed and developing countries make great efforts to attract foreign direct investments to their own countries. Financial liberalization practices, which started in the 1980s, led to the development of foreign trade and as a part of it an increase in capital movements which causing foreign direct investments to enter an increasing trend in the world.

This study was conducted to theoretically explain the effects of foreign direct investment on economic growth.

Keywords: Foreign Investments, Foreign Direct Investments, Economic Growth.

1. GİRİŞ

Sanayi devrimi ile birlikte kitlesel üretime geçilmesi ve ilerleyen dönemde de bu üretim biçiminin giderek yayılması, üretim faaliyetleri sonucunda elde edilen çıktı miktarının artması sonucunu doğurmuştur. Üretim faaliyetlerinin konusunun çeşitlenmesi de ürün çeşitlerinin ve üretim miktarının artmasını sağlamıştır. Bu ise ticaretin sınırlar ötesine yayılmasını hızlandırmıştır. Küreselleşme ve teknolojik gelişmeler sonucu üretim faktörlerinin hareketliliğinin artması, ülkeler arası gelişmişlik farklarının giderilmesi için gelişmişlik düzeyi göreceli olarak daha düşük olan ülkelerin ihtiyaç duydukları sermayeyi ulusal olmayan kaynaklardan temin etme fikrini ortaya çıkarmıştır (Aktan ve Vural, 2006: 27). Söz konusu ülke sınırları içinde yerleşik olmayan unsurların ülkede servet edinmelerine uluslararası yatırım veya yabancı yatırım adı verilmektedir (Candemir, 2006: 18).

Yabancı sermaye bir ülkeye değişik yollarla giriş yapabilir. İlk olarak, finansal gelişmelerle hareket eden sermaye piyasası yatırımlarıdır. Bu yatırımların bir diğer ismi ise portföy yatırımlarıdır. Bir diğeri ise; ülke içinde üretilen mallar başka bir ülkeye satılır ve buna da ihracat adı verilir. Sonuncusu ise, doğrudan yabancı sermaye yatırımında bulunacak kişi hangi piyasaya girmek isterse o ülkedeki firma, kurum, kuruluşa kendi teknolojisini veya marka adını kullanabilir. Yatırımcı piyasaya girmek istediği ülkedeki bir firmaya kendi teknolojisini ya da marka ismini kullanma izni verir, yani firmalar lisans anlaşması gerçekleştirir. Yabancı yatırımlar birde ülkelere doğrudan gelirler bunlar ise sermaye birikimine yönelik ve üretime yönelik reel yatırımlardır (Alpar,1978:1).

Yabancı yatırımlar mali yatırımlar ve doğrudan yatırımlar şeklinde gruplanır. Mali yatırımlara portföy yatırımı, fiziki yatırımlara ise doğrudan yabancı yatırım ya da dolaysız yatırım denilmektedir.

Bir ülkede yerleşik olmayan kişi ya da kurumların o ülke sınırları içerisinde mali nitelikli servet edinmelerine yönelik yapmış oldukları her türlü faaliyetlere portföy yatırımları denir. Kısacası portföy yatırımlarını; yabancıların tahvil, hisse senedi ve benzeri şekildeki menkul değerlere yaptığı yatırımlar biçiminde tanımlamak mümkündür (Batmaz ve Tunca, 2005: 6).

Doğrudan yabancı yatırımlar, bir ülkeden başka bir ülkede bulunan herhangi bir firmayı satın alarak ya da yeni kurulan bir firmaya sermaye sağlayarak veya mevcut bir firmanın sermayesini artırarak yapılan yatırımlardır (Karluk, 2007: 100).

Yabancı Yatırımlar;

a) Kısa Dönemli Mali Yatırımlar

- Banka Mevduatları,
- Kısa Vadeli Tahviller,

b) Uzun Dönemli Mali Yatırımlar

- Uzun Dönemli Tahviller
- Yönetim Kontrolü Sağlamayan Sermaye Payları

c) Doğrudan Yabancı Yatırımlar

- Yönetimi Kontrolü Sağlayan Sermaye Payları
 - Üretim Araçlarının Tamamına Sahip Olma.
- şeklinde sınıflandırılmaktadır (Karaçuka, 2001: 12).

Karluk, doğrudan yabancı yatırımları bir ülkenin yerleşik olmayan yabancı bir unsurun ülkedeki bir firmanın sermayesini artırmak veya bir firmayı satın almak ya da yeni kurulan bir firma için kuruluş sermayesini sağlamak biçiminde gerçekleştirilen yatırımlar olarak tanımlamıştır (2003: 486).

Doğrudan yabancı yatırımlar üç unsurdan oluşmaktadır. Bunlar;

- Öz sermaye,
- Yeniden yatırıma dönüştürülmüş kazançlar ve
- Şirket içi borçlanmalardır.

Öz sermaye, yabancı yatırımcının kendi ülkesi sınırları dışındaki girişimlerden pay satın almasını ifade etmektedir. Yeniden yatırıma dönüştürülmüş kazançlar, doğrudan yatırımı gerçekleştirmede pay sahibi olan yabancı yatırımcının dağıtılmayan kârlardaki payını ifade etmektedir. Şirket içi borçlanmalar ise, doğrudan yatırıma katılan taraflar arasında ya da bağlı girişimler arasında kısa veya uzun vadeli borç alacak fonlarını ifade etmektedir.

Doğrudan yabancı yatırımları, bir ülkede yerleşik olmayan özel ya da tüzel kişilerin o ülkenin sınırları içerisindeki yatırımlara; bir firmayı satın alma, yeni bir firma için kuruluş sermayesini sağlama veya var olan bir firmanın sermayesini artırma yoluyla katılmasını ifade etmektedir. Bu yatırımlar teknolojiyi, işletmecilik bilgisini ve kontrol yetkisini sermaye ile birlikte yatırımın gerçekleştiği ülkeye taşır (Kırankabeş, 2001: 267).

Doğrudan yabancı yatırımlar, ekonomik büyüme üzerinde olumlu etkilere sahiptir. Doğrudan yabancı yatırımların, ülkelerin büyüme ve kalkınmasındaki etkisi ülkeden ülkeye değişmekle birlikte, gelişmekte olan ülkelerde temel belirleyiciler;

- Teknolojik gelişme,
- İhracat performansının iyileştirilmesi,

- Yabancı sermaye girişinin artırılması,
- İşsizliğin azaltılmasıdır.

Bu amaçlar için, ülkeler sürekli olarak doğrudan yabancı yatırımları çekmek için farklı modeller ve politikalar geliştirmektedirler. Doğrudan yabancı yatırımlar, yatırımda bulundukları ülkeler için sadece sermaye değil, aynı zamanda teknolojik yenilik ve istihdam yaratmanın kaynağı olarak görülmüştür.

1950’lerden sonra doğrudan yabancı yatırımların dünya ekonomisindeki hacminin artmasıyla birlikte, bu yatırımlar bütün ekonomi çevrelerinde iktisadi gelişme ve büyüme hedeflerinin gerçekleştirilebilmesi için gerekli ve önemli bir araç olarak değerlendirilmeye başlanmıştır. 1980’li yıllarda ortaya çıkan küreselleşme süreci ile birlikte doğrudan yabancı yatırımlar, gelişmiş ve gelişmekte olan tüm ülkelerin ilgi odağı haline gelmiştir. Finansal piyasalarda yaşanan entegrasyonlar sonucunda küreselleşme olgusu yeni bir ivme kazanmıştır. Bu küreselleşme ve entegrasyonlarla birlikte sermaye hareketlerinin büyüklüğü ve hızı dünya genelinde ciddi bir artış göstermiştir. Böylelikle sermaye nispi olarak bol ve getirisi az olan bölgelerden, daha kıt olduğu ve dolayısıyla getirisinin daha yüksek olduğu bölgelere yönelmiştir (Yılmaz, Kaya ve Akıncı, 2011: 14).

Son dönemde dünya ekonomisinde yaşanan küreselleşme olgusu, gelişmekte olan ülkelerin ihtiyaç duyduğu sermayeyi doğrudan yabancı yatırımlar yoluyla karşılamalarına yardımcı olmuştur. Ekonomik ve sosyal hayatta olan gelişmeler doğrudan yabancı yatırımları olumlu etkileyerek bu yatırım şeklinin artmasını sağlamıştır. Türkiye’de yabancı sermayenin ülkeye girişini teşvik etmek amacıyla 1954 yılında Yabancı Sermaye Teşvik Kanunu Yayımlanmıştır. Teşvik kanunu tam anlamı ile 1980 yılına kadar uygulanmamıştır. Dünyadaki gelişim trendine paralel olarak, 1980 yılında 24 Ocak kararları ile ekonomik liberalizasyon sürecini başlatmış ve yabancı sermayeyi ülkemize teşvik etmek ve ekonomideki tüm aksaklıkları gidermek için Yabancı Sermaye Çerçeve Kararnamesi yürürlüğe konulmuştur.

1990’lı yıllardan sonra yoğun sermaye hareketleriyle karşı karşıya kalmıştır. Yaşanan bu sermaye hareketlerinin büyük bir kısmı doğrudan sermaye yatırımları şeklinde olmamıştır. Daha çok yüksek faiz ve sabit döviz kuruna dayalı spekülasyon amaçlı kısa dönemli sermaye hareketleri biçiminde olmuştur (Dilek, 2016:147).

1992 yılından krizin yaşandığı 2001 yılına kadarki zaman diliminde Türkiye’nin doğrudan yabancı sermaye yatırımları oldukça az seviyededir. Doğrudan yabancı sermaye yatırımlarının seviyesini arttırmak için esnek kur ile ihracatı teşvik politikası uygulanmıştır. Böylece ülke içindeki tasarrufların artması amaçlanmıştır. Faiz oranları da bu politika çerçevesinde serbest kalmıştır. Ayrıca ithalattaki kotalar sınırlamalar kaldırılmış ve gümrük vergilerinde indirimle gidilmiştir. Uygulanan bu reformlar sonucunda önemli miktarlarda doğrudan yabancı sermaye yatırımları ülkemize giriş yapmaya başlamıştır (<http://genelkultur.ansiklopedisi.net/>).

Doğrudan yabancı sermaye yatırımları 2004-2007 yılları arasında özelleştirme, birleşme ve satın alma şeklinde Türkiye de görülmüştür. Yabancı sermaye yatırımcılarının, yeni yatırımlar yani “greenfield” yatırımlar yapmaktansa satın alım ya da ortak şeklinde ya da gayrimenkul yatırımı şeklinde ülkeye girme eğilimlerinde oldukları görülmektedir (Acar, 2016: 95).

2. DOĞRUDAN YABANCI SERMAYE - EKONOMİK BÜYÜME İLİŞKİSİ

Doğrudan yabancı yatırımların ekonomik büyüme üzerinde olumlu etkileri vardır. Etki derecesi ülkeden ülkeye ekonomik, siyasi duruma bağlı olarak farklılık gösterse de doğrudan yabancı yatırımlara olan ilgi artmaktadır. Ülkeler sürekli olarak doğrudan yabancı yatırımları çekmek için farklı modeller ve politikalar geliştirmektedir.

Ekonomik büyüme, bir ülkenin mal ve hizmet üretim kapasitesinde meydana gelen artışlar şeklinde tanımlanabilir (Ünsal, 2005: 38). Ülkenin mal ve hizmet üretim kapasitesindeki artış iki biçimde gerçekleşebilir. İlki ekonomide mal ve hizmet üretiminde kullanılan faktörlerin miktarında meydana gelecek bir artış biçiminde gerçekleşirken diğeri de ekonomi tam istihdamda olduğu durumda ve faktör miktarı sabitken faktörlerin verimlilik düzeylerinde meydana gelen artış şeklindedir (Parasız, 2003: 10).

Ekonomik büyüme göstergeleri, bir ülkenin hem iktisadi hem de sosyal refah seviyesindeki artış veya azalışları göstermektedir. İktisatçıların geliştirdiği teoriler ülkelerin ekonomik ve sosyal hayatlarına yön vermişlerdir.

Doğrudan yabancı yatırımlar ile ekonomik büyüme etkileşimini inceleyen çalışmalar gelişmekte olan ülkeler üzerine yoğunlaşmış ve uygulamalarında da teorik temel olarak Neo-Klasik ve İçsel büyüme modelleri kullanılmıştır.

Neo-Klasik büyüme modeli 1956’da Robert Solow tarafından geliştirilmiştir (Ünsal, 2005: 567). Solow yapmış olduğu çalışmada tasarruf, nüfus artışı, teknolojik gelişmenin ekonomik büyüme üzerine etkisine ve bu üç

değişkeninde birbirinden etkilenme durumları üzerinde durmuştur. Ayrıca bazı ülkelerin çok gelişmiş bazı ülkelerin neden az gelişmişliği üzerinde de çalışmalar yapmıştır (Acar, 2016: 94).

Klasik, Keynesyen ve Neo-Klasik büyüme modellerinin genel olarak uzun dönemde ekonomik büyümenin sürdürülemezliğini ve ekonomiler için durağanlığın söz konusu olacağını ifade etmiş olması, ekonomik büyümeye ilişkin çalışmaların hızını yavaşlatmıştır. Ancak 1980'lerin ortasından itibaren yeni içsel büyüme modellerinin ortaya konulması ile birlikte ekonomik büyüme iktisat biliminde önemli bir çalışma alanı olmuştur. Bu bağlamda doğrudan yabancı yatırımların ev sahibi ülkenin ekonomik büyümesine etkilerinin ne şekilde olacağını araştırılması da 1990'larda başlamış ve giderek hız kazanmıştır.

Doğrudan yabancı sermaye yatırımları, üretim imkanlarının ucuz ve çok olduğu, iç piyasa talebinin yüksek, altyapı tesislerinin ve yatırım teşviklerinin olduğu ayrıca daha çok getiri sağlayan ülkeleri talep etmektedirler. Doğrudan yabancı sermaye yatırımcıları, yatırım yapacakları ülkelerin ekonomik durumunun yanı sıra ülkenin siyasi istikrar durumlarına da bakmaktadırlar. Tüm bunların yanında yatırımcılar son bir kriter olarak yatırım yapacakları ülkelerin hem psikolojik hem de ahlaki durumlarına bakarak yatırım kararlarını almaktadırlar (Akdiş, 2007: 5-7).

Doğrudan yabancı sermaye yatırımlarının olumlu etkilerini OECD (Organisation for Economic Co-operation and Development - Ekonomik İşbirliği ve Kalkınma Örgütü) ise beş ana başlıkta toplamıştır. Bunlar (OECD, 2003:14);

- a) Bilgi ve teknoloji transferi,
- b) Girişim kültürünün gelişmesi ve yeniden yapılanma,
- c) Uluslararası ticari entegrasyona katkı,
- d) Yerel işletmelerin sektör içerisindeki rekabetini güçlendirme,
- e) Beşeri sermaye birikimine katkı.

Acar, doğrudan sermaye yatırımlarının etkilerinin etkilerini ise şöyle sıralamıştır (2016: 96);

- Doğrudan yabancı sermaye yatırımları ile ekonomik büyüme arasında ilk ilişkiye bakacak olursak fakirlik sınırında olan ülkelerde bu yatırımlar sermaye oluşumunu artırır, üretim ve büyüme hızının artmasına sebep olur.
- Doğrudan yabancı sermaye yatırımları varmış olduğu ülkedeki hem teknoloji hem de işletmecilik düzeyinin artmasına sebep olur. Sadece maddi işletmecilik değil ayrıca marka, teknoloji gibi maddi olmayan işletmecilik bilgilerinin de ülkede artmasını sağlar. (Kula,2003:143)
- Doğrudan yabancı sermaye yatırımları sayesinde varmış olduğu ülkeye döviz girişleri sağladığı için uzun vadede ithalatı ikame ettiği ve ihracat içinde teşvik ettiğinden dış ödemeler dengesini olumlu etkilemektedir.
- Doğrudan yabancı sermaye yatırımları varmış olduğu ülkenin içsel ekonomik aktörlerini de etkilediği için ülkeye hem canlılık kazandırır hem de iç piyasanın rekabet gücünü artırır.
- Doğrudan yabancı sermaye yatırımlarının en önemli ve en istenen etkisi ise istihdama yönelik olan olumlu katkısıdır. Çünkü ekonomileri az gelişmiş ülkelerde en önemli makroekonomik sorun işsizliktir. Bu sorunun giderilmesinde doğrudan yabancı sermaye yatırımlarının rolü oldukça önemlidir.
- Doğrudan yabancı sermaye yatırımlarının sonucunda gittiği ülkeye yatırımlar sonucunda vergi verdiği için hükümetler açısından son derece önem arz etmektedir.

Doğrudan yabancı sermaye yatırımları gittiği ülkeye döviz girişi sağlamak, ülkenin sermaye birikimini artırmak, ülkede üretim kapasitesini genişletmek, istihdamı arttırmak, ülkeye teknoloji transferi sağlamak, işletmecilik bilgisi sağlayarak yerli girişimleri eğitmek gibi yararları vardır (Seyidoğlu,2002: 139). Doğrudan yabancı sermayenin gelişmekte olan ülkeye en büyük katkısı ise milli gelire yaptığı net katkıdır.

Ülkelerin ekonomik büyümeleri için uluslararası sermaye hareketlerinin önemi oldukça fazladır ve bunun üzerine pek çokta araştırma yapılmıştır. Yapılan bu çalışmaların sonucunda elde edilen verilere göre doğrudan yabancı sermaye yatırımları uzun vadede bakıldığında ülkelerin ekonomik büyümelerini olumlu etkilediği görülmüştür; ancak kısa vadede ise ekonomik büyümeyi olumsuz etkilediği görülmüştür.

Doğrudan yabancı yatırımlar özellikle gelişmekte olan ülkelerde kaynak kullanımını, altyapı yatırımlarını ve teknolojik ilerlemeyi artırarak ekonomik büyümeyi beslediği kabul edilmektedir (Yılmaz, 2010). Bu bağlamda ekonomi teorisinde doğrudan yabancı yatırımlar ve ekonomik büyüme arasında pozitif bir ilişki olduğu kabul

edilmektedir. Neo-klasik teoriye göre doğrudan yabancı yatırımlar, toplam yatırımların miktarını ve etkinliğini artırarak ekonomik büyümeye olumlu katkıda bulunmaktadır (UNCTAD, 1999: Ekinci, 2011: 72). Bunun nedeni olarak doğrudan yatırımların, sermaye oluşumu ve istihdam artışına yol açacağı, sermaye malı ihracatını artırabileceği, sermaye, bilgi ve tecrübeli yöneticiler gibi kaynaklar getirebileceği, teknolojinin gelişmesi ve yayılmasına katkıda bulunabileceğinin önemi belirtilmiştir. Böylelikle hem verimlilik artışı sağlanabilecek hem de iktisadi büyüme desteklenmiş olacaktır (Ekinci, 2011: 72).

3. SONUÇ

Doğrudan yabancı yatırımlar özellikle gelişmekte olan ülkelerde kaynak kullanımını, altyapı yatırımlarını ve teknolojik ilerlemeyi artırarak ekonomik büyümeyi beslediği kabul edilmektedir. Ekonomik büyümelerini artırmaya çalışan pek çok gelişmekte olan ülke, dışa açık sanayileşme politikalarını benimseyerek doğrudan yabancı yatırımların ülkeye girişini desteklemektedir.

Ekonomik büyüme, bir ülkenin mal ve hizmet üretim kapasitesinde meydana gelen artışlardır. Ülkenin mal ve hizmet üretim kapasitesindeki artış, ekonomide mal ve hizmet üretiminde kullanılan faktörlerin miktarında meydana gelecek bir artış biçiminde gerçekleşirken ekonomi tam istihdamda olduğu durumda ve faktör miktarı sabitken faktörlerin verimlilik düzeylerinde meydana gelen artış şeklinde gerçekleşebilir.

Ekonomi teorisinde doğrudan yabancı yatırımlar ve ekonomik büyüme arasında pozitif bir ilişki olduğu kabul edilmektedir. Doğrudan yabancı yatırımlar, yatırımda bulundukları ülkeler için sadece sermaye değil, aynı zamanda teknolojik yenilik ve istihdam yaratmanın kaynağı olarak görülmüştür. Ülkeler sürekli olarak doğrudan yabancı yatırımları çekmek için farklı modeller ve politikalar geliştirmektedir. Gelişmekte olan ülkeler için doğrudan yabancı yatırımlar önem arz etmektedir. Doğrudan yabancı yatırımlar, ekonomik büyüme üzerinde olumlu etkilere sahiptir. Doğrudan yabancı yatırımların ülkelerin büyümesine olan etkisi ülkeden ülkeye değişmekle birlikte, gelişmekte olan ülkelere temel belirleyiciler; teknolojik gelişme, ihracat performansının iyileştirilmesi, yabancı sermaye girişinin artırılması, işsizliğin azaltılmasıdır. Doğrudan yabancı sermayenin gelişmekte olan ülkeye en büyük katkısı ise milli gelire yaptığı net katkıdır.

Dünya ekonomisinde yaşanan küreselleşme olgusu, gelişmekte olan ülkelerin ihtiyaç duyduğu sermayeyi doğrudan yabancı yatırımlar yoluyla karşılamalarına yardımcı olmuştur. Ekonomik ve sosyal hayatta olan gelişmeler doğrudan yabancı yatırımları olumlu etkileyerek bu yatırım şeklinin artmasını sağlamıştır.

1950'lerden sonra doğrudan yabancı yatırımların bütün ekonomi çevrelerinde iktisadi gelişme ve büyüme hedeflerinin gerçekleştirilebilmesi için gerekli ve önemli bir araç olarak değerlendirilmeye başlanmıştır 1980'li yıllarda ortaya çıkan küreselleşme süreci ile birlikte doğrudan yabancı yatırımlar, gelişmiş ve gelişmekte olan tüm ülkelerin ilgi odağı haline gelmiştir. Türkiye'de Doğrudan yabancı sermaye yatırımlar 2004-2007 yılları arasında özelleştirme, birleşme ve satın alma şeklinde görülmüştür.

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Türkiye’de Sürdürülebilir Kalkınma ve Sağlık İşletmelerinde Sürdürülebilirlik

Öğr. Gör. Havva Arabacı¹

Öğr. Gör. Dr. Derya Dinçer Gültekin²

¹Trakya Üniversitesi/Sosyal Bilimler Meslek Yüksekokulu, Muhasebe ve Vergi, arabacih@hotmail.com ORCID: 0000-0003-0212-6590

²Trakya Üniversitesi/Uzunköprü Meslek Yüksekokulu, Yönetim ve Organizasyon, deryadincer@trakya.edu.tr ORCID: <https://orcid.org/0000-0001-9648-7244>

Özet: Sürdürülebilir kalkınma kişilerin şu anki ihtiyaçlarının karşılanması ve gelecekte oluşan veya oluşabilecek ihtiyaçların tehlikeye atılmaması olarak ifade edilmektedir. Kişilerin sağlıklı ve nitelikli olması sürdürülebilir kalkınma için oldukça önemlidir. Sağlık göstergeleri sürdürülebilir kalkınma hedeflerine ulaşılmasına katkı sağlamaktadır. Uzun dönemde sağlığın var olması ve yaşam kalitesinin artırılması sürdürülebilir kalkınma kapsamına girmektedir. Ülkelerin sağlığın korunması ve sürdürülebilirliğinin sağlanması amacıyla yapmış oldukları veya yapacakları harcamalar o ülkelerin gelişmişlik düzeyi hakkında bilgi vermektedir. Sağlık, belirlenen hedeflere erişmek için var olan sosyal bir unsur olarak sayılmaktadır ve sağlık kişilerin temel ihtiyaçlarından birisi olarak ele alınmakta ve yaşam kalitesinin iyileştirilmesi, sağlık hizmetlerine ulaşılabilirlik, sağlık sistemi gibi elementlerle kişiler için önemli olduğu görülmektedir. Sağlık işletmelerinde sosyal ve ekonomik faydanın sağlanması, kamu değerinin yaratılması ve belirlenen hedeflerin uygulanması ihtiyacı vardır. Bu bağlamda sağlık işletmeleri sürdürülebilirliklerini sağlamaya çalışmaktadırlar. Bu çalışmada sürdürülebilirlik konusuna ilişkin olarak sağlık işletmelerinde sürdürülebilirlik konularıyla ilgili farkındalığı arttırmak amaçlanmıştır. Ayrıca sürdürülebilir kalkınma ve sağlık işletmelerinde sürdürülebilirlik ile ilgili literatür taraması yapılmış ve sürdürülebilir kalkınma çerçevesinde sağlıklı toplumların oluşturulmasında sağlık sektörünün ve sağlıkta sürdürülebilirliğin rolü tartışılmıştır. Bu çalışmanın bu konulara ilişkin çalışmaların literatür geliştirmesine ve farkındalığı artırmasına katkı sağlayacağı öngörülmektedir.

Anahtar Kelimeler: Sürdürülebilir Kalkınma, Sağlık Sektörü ve Sağlık İşletmelerinde Sürdürülebilirlik.

Abstract: Sustainable development is defined as meeting people's current needs and not endangering future needs. It is very important for people to be healthy and qualified for sustainable development. Health indicators contribute to achieving sustainable development goals. Ensuring long-term health and improving the quality of life falls within the scope of sustainable development. The expenditures made or to be made by countries to protect health and ensure its sustainability provide information about the development level of those countries. Health is considered as a social element in achieving the determined goals, and health is considered as one of the basic needs of people and is seen to be vital for people with elements such as improving the quality of life, accessibility to health services, and the health system. In health enterprises, there is a need to provide social and economic benefit, create public value and implement the determined targets. In this context, healthcare businesses are trying to ensure their sustainability. In this study, it was aimed to increase awareness about sustainability issues in healthcare enterprises. In addition, a literature review was conducted on sustainable development and sustainability in health enterprises, and the role of the health sector and sustainability in health in creating healthy societies within the framework of sustainable development was discussed. It is anticipated that this study will contribute to the development of literature and awareness on these issues.

Key Words: Sustainable Development, Health Sector and Corporate Sustainability of Health Organizations.

1. GİRİŞ

Mevcut olan sistem içerisinde sürdürülebilirlik kavramının işletmenin içerisinde ve dışarısında yer alan denetim kavramı ile birlikte etkilerinin neler olduğudur. İlk olarak sürdürülebilirlik kavramının genel çerçevesi oluşturulduğundan işletme içinde ve işletme dışında meydana gelebilecek değişimlerin sürdürülebilirliği etkilediği görülmektedir. Bir işletmenin sürdürülebilirliğinin sağlanabilmesi için hem işletmenin hem de toplumun gelişen yanlarını yakından takip etmek gerekmektedir.

Günümüzde giderek artan çevresel sorunlar nedeni ile işletmelerin hem sürdürülebilirliğini sağlaması hem de sürdürülebilir kalkınma faaliyetlerinin istenilen yer ve zamanda yapması gerekmektedir. Sağlık işletmelerinde sürdürülebilirliğin sağlanması ve dengenin oluşturulması gerekmektedir. Bu bağlamda sağlık işletmelerinde olması istenilen ve beklenen özelliklerin, faktörlerin belirlenmesi gerekmektedir.

Bu çalışmada kurumsal sürdürülebilirlik ve denetim ile ilgili kavramlar ayrıntılı olarak incelenmektedir. Çalışmanın birinci bölümünde kurumsal sürdürülebilirlik kavramı, sürdürülebilirlik kavramı, sürdürülebilirliğin boyutları, sürdürülebilir kalkınma kavramı, kurumsal sosyal sorumluluk ve sosyal sorumluluk kavramları açıklanmaktadır. Çalışmanın ikinci bölümünde ise denetim kavramı ayrıntılı olarak açıklanmaya çalışılmıştır. Denetimin özellikleri, denetim türleri, denetimin hedefleri ve denetimin süreçleri açıklanmaktadır.

2. SÜRDÜRÜLEBİLİRLİK ve SÜRDÜRÜLEBİLİR KALKINMA

İlk kez 1970’li yıllarda kullanılan sürdürülebilirlik kavramı, Dünya Çevre ve Kalkınma Komisyonu’nun (WCED) 1987 yılında Birleşmiş Milletler sponsorluğunda “Ortak Geleceğimiz” adlı raporunda tanımlanmıştır. Genel olarak rapor, çevresel sorunlar ve sorunlar ile ilgili çözümlerin ulusal ve uluslararası olarak yapılması gerekenler olarak belirlenmiştir. Sürdürülebilir gelişme kavramı, “günümüzün gereksinimlerini, gelecek nesillerin kendi gereksinimlerini karşılayabilme yeteneklerinden ödün vermeden karşılayan kalkınma” ve “gelecek nesillerin ihtiyaçlarını karşılayabilme yeteneklerine imkân vererek şimdiki nesillerin ihtiyaçlarını karşılaması” şeklinde ifade edilmiştir (Koçak ve Balci, 2010: 215; Çevik ve Gülcan, 2011: 39).

Çevrenin korunması sosyal ve ekonomik kalkınma gibi konuları içermektedir (Kuşat, 2012: 228). Günümüzün ihtiyaçlarını karşılarken gelecek nesilleri düşünmek ve doğal kaynakları korumak, geleceğe iyi bir çevre bırakmak için yapılan faaliyetler bütünüdür (Kuter ve Ünal, 2009: 147). Dolayısıyla kaynakların verimli dağılımı ile birlikte günümüzde ve gelecek nesillerde de adil dağılımını ve orantılı kullanımını ifade etmektedir (Yanık ve Türker, 2012: 295).

Kalkınma, “bir milli gelir düzeyinde meydana gelen sürekli artışa bağlı olarak ekonomik, sosyal ve siyasal yapısında meydana gelen değişimleri içeren bir süreç” olarak ifade edilmektedir (Clark, 1996:34; Boyacıoğlu ve Taşkın, 2012: 14). Kişiye özgü olup, istenilen bir durum olarak görülmektedir (Han ve Kaya, 2008: 257).

Öncü olarak Birleşmiş Milletler’in olduğu sürdürülebilir kalkınma uygulamalarının ve politikalarının geliştirilmesi için küresel, ülke ve bölge düzeyinde girişimler başlatılmış ve çıkış noktası bilinen “Ortak Geleceğimiz: Çevre ve Kalkınma için Dünya Komisyonu” rapor olmuştur (UNGA, 1987). ; “Bugünün ihtiyaçlarını gelecek nesillerin de kendi ihtiyaçlarını karşılamalarından ödün vermeden karşılamak” ifade edilmiştir (Tıraş, 2012: 60). Avrupa Konseyi’nin hazırladığı Göteborg Raporu (2001) da ekonomik ve sosyal gelişme olarak Lizbon sürecine ek olarak çevre faktörü üçüncü boyut olarak eklenmiştir. İklim değişikliği, sürdürülebilir ulaşım, doğal kaynak yönetimi ve halk sağlığı olmak üzere bu raporda dört öncelik yer almıştır (Tanrıverdi, 2009: 91).

Sürdürülebilir kalkınma tanımı, “iş yaşamına bir firmanın doğrudan ve dolaylı paydaşlarının ihtiyaçlarını, gelecekteki doğrudan ve dolaylı paydaşlarının ihtiyaçlarını karşılayabilme olanağını tehlikeye atmadan sağlaması” olarak uyarlanabilir. Bu tanımdan hareketle aşağıdaki temel varsayımlara ulaşmak mümkündür (Altuntaş ve Türker, 2012: 44):

- “Tüm örgütler hayatta kalmayı hedefler. Yaşamını sürdüremeyen bir işletmenin sürdürülebilir kalkınma hedefleri çerçevesinde bugün ve gelecekteki paydaşlarının ihtiyaçlarını karşılayabilmesi düşünülemez.
- Tüm örgütlerin ortak amacı, insan ihtiyaçlarını karşılamaktır. Örgütler bu işlevlerini yerine getirirken sadece kaynakları kullanıp, atık haline gelecek mal ya da hizmetler üretmezler aynı zamanda insanların ihtiyaçlarını yaratır ve böylece tüketim davranışını ve yaşam tarzını etkilerler.
- Örgütler doğrudan ve dolaylı paydaşlarının ihtiyaçlarını mümkün olan en “iyi” şekilde karşılamalıdır. Kuruluşların faaliyetlerini nasıl sürdürdükleri, içinde bulundukları toplum tarafından ne kadar kabul edildikleri, meşruiyetlerini sağlamada en önemli unsurlardır. Kurumsal sürdürülebilirlik hedefleri bu aşamada özellikle de örgütün genel çevresi ve görev çevresi bağlamında devreye girmektedir.”

Sürdürülebilir kalkınma kaynakların yenilenmesi ve korunmasını temel almaktadır. Çevre ile uyum içerisinde olduğu sürece büyüme, sürdürülebilir olarak kabul edilmektedir. Bu bağlamda sürdürülebilir kalkınma ve çevre ayrılmaz iki kavram olarak görülmektedir. Çevre, canlılar ile çevre arasında olan bütün ilişkileri ve bu ilişkilere aracı olan kuvvetlerden oluşmaktadır. Politika, kültür, siyasi sistem, ekonomik ve sosyal yapı ve gelenekler çevrenin birer parçasıdır (Bener ve Babaoğlu, 2008: 4).

2.1. Sürdürülebilir Kalkınmanın Tarihsel Gelişimi

Sürdürülebilir gelişme, “gelecek nesillerin menfaatlerinin korunmasını ve insanların bugünkü menfaatlerinin memnuniyetini dengeleyen gelişme” olarak tanımlanmıştır (Kuter ve Ünal, 2009: 147).

Çevreye verilen zararın ortaya çıkması ile birlikte tetiklenen ekoloji ve çevre hareketi 1960’lı yıllarda ortaya çıkmıştır. 1970’li yıllarda uluslararası olmuş, 1983 yılında ise Dünya ve Çevre Komisyonu’nun kurulmasına neden olmuştur. Çevre sorunlarının ön planda olduğu ve sorunlara çözüm üretmenin önemini arttırdığı yıllarda çevre ile kalkınma arasındaki ilişki kurulmaya başlanmış ve 1987 yılında komisyon tarafından düzenlenen Ortak Geleceğimiz Raporu ile birlikte geliştirilen sürdürülebilir kalkınma kavramı, 1992 yılında Gündem 21 ve Rio de

Janeiro'da Birleşmiş Milletler Çevre ve Kalkınma Zirvesi ile birlikte, kalkınma önemli konular arasında yer almıştır (Özmehmet, 2008: 1857).

Şekil 1. Uluslararası Platformlarda Sürdürülebilir Kalkınma için Atılan Adımlar



Kaynak: Seydioğulları, 2013: 21.

Sürdürülebilirliğe iki temel unsur yön vermektedir. Bunlar (Peattie, 1999: 133; Tiftik, 2022: 406); ilk olarak dünyanın kaynaklarının yenilenebilecek düzeyde kullanılması, yenilenemez kaynaklar olduğunda sürdürülebilir ikamenin geliştirilmesidir. İkinci ise çevreye zarar verebilecek atıkların önlenmesi ve atık düzeyinin belirlenmesidir.

Sürdürülebilirlik girişimlerinin etkin olabilmesi için birkaç kurumsal unsur vardır. Bunlar (Boone, 2012; Tamer, 2018: 8);

- “Önemli paydaşlara sürdürülebilirliğin savunuculuğunu yapacak bir lider yönetici olmasıdır.
- Sürdürülebilirlik girişimi değerlerinin kurumun üst düzey misyon, vizyon ve değerlerine yansıtılmasıdır.
- Sürdürülebilirlik faaliyetlerini izlemek ve yönlendirmek için performans ölçüm sistemleri kullanılır.”

Sürdürülebilir kalkınma unsurlarından sosyal, ekonomik ve çevresel unsurun üzerinde durulmak gerekir. Çünkü bu unsurlar birbirinden bağımsız değildir. Birbirlerini etkiler ve ortak etkileşim sağlar. Bu bağlamda Şekil 2’de sağlık, sosyal, ekonomik ve çevresel unsurların birbiri ile ilişkisi gösterilmektedir.

3. SAĞLIK SEKTÖRÜ

Dünya Sağlık Örgütü’ne göre sağlık, “sadece hastalık ve sakatlığın yokluğu değil bireylerin fiziksel, ruhsal ve sosyal yönden tam iyilik halleri” olarak ifade edilmektedir (WHO, 1994). Sağlıklı bireylerin olması hem çevresel hem de ekonomik açıdan kalkınma için gereklidir. Sürdürülebilir kalkınma için belirlenen amaçlara ulaşmak isteniyorsa sağlık sektörü çok önemlidir (Litsios 1994; Çelik, 2006: 28).

Sağlık sektörü kavramı herhangi bir şekilde sağlığa etkisi olan mal ve hizmetlerin üretimi arzı ve talebi ile tüketimi olmak üzere çeşitli üretim alanlarından oluşan sistem ve alt sistemlerle ilişkili kişiler, kuruluşlar, statüler ve ürünlerin tümünü ifade etmektedir (Sargutan, 2005: 406).

Sağlık sektörü kapsamına giren faaliyetlerin başarılı olması, sektörün hizmet sunduğu kişilerin sağlık göstergelerine odaklanmasıyla mümkün olmaktadır. Ancak yapısı gereği sağlık sektörünün operasyonel ve salt finansal analizler yoluyla incelenmesi mümkün değildir. Sağlık sektörünün toplumsal ihtiyaçların karşılanması ve

verimli şekilde çalışabilmesi için doğru zamanda finansal ve makro dinamik açısından seyrinin tespiti de gerekmektedir (Tengilimoğlu, Işık ve Akbolat, 2018: 302).

Sağlıklı bireyler çevresel ve ekonomik kalkınma için gereklidir. Bir ülkenin sağlık harcamaları, özel ve kamu sektörü tarafından yapılan harcama ve ayrılan kaynak miktarına bağlıdır. Sosyal refah, sağlık harcamaları tarafından direkt etkilenmemektedir. İşletmelerde kurumun performansının sosyal, çevresel ve ekonomik boyutlarının birbiri ile olan dengesinin sürdürülebilirliği sağlayacağı düşünülmektedir. Özsarı (2011: 69) ya göre işletmelerin ve sağlık sistemlerinin sürdürülebilir olması için bazı faktörler olduğunu söylemiştir. Bunlar;

- “Sağlık hizmetlerine erişimde artış,
- Sağlık sektörünün emek ve teknoloji yoğun olması ve bu nedenle maliyetlerin artması,
- Yaşlanan nüfus ve buna bağlı olarak kronik hastalıkların tedavi yükünün artması,
- Çevresel faktörlere bağlı oluşan tehditler ve yaşam biçimleri ve
- Hizmet sunumuna yönelik nitelik ve çeşitlilik beklentileridir.”

Sağlık sektörüne yapılan yatırımlar ekonomik büyüme ve üzerinde pozitif yönde etkiye sahiptir. Pozitif etkilerin sebepleri ise şunlardır (Paksoy, 2017: 12):

- Çalışan ve sağlıklı olan kişiler daha verimli olmaktadır.
- Kişilerin sağlıklı oluşu beşeri sermayeyi olumlu yönde etkilemektedir.
- Ortalama yaşam süresinin fazla olması fiziksel yatırımları arttırmaktadır.

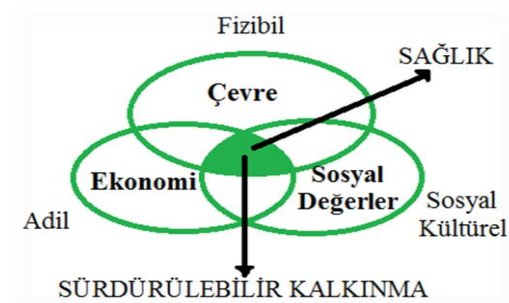
Sağlık harcamaları dünya genelinde genel kabul görmüş standartlara göre yapılmaktadır. Bu standartlardan en çok kullanılanları; sağlık harcamalarının gayrisafi yurtiçi hasılaya oranı, kişi başına düşen sağlık harcamaları ve kamu sağlık harcamalarının toplam sağlık harcamalarına oranıdır (Boyacıoğlu ve Çelik, 2012: 18).

4. SAĞLIK İŞLETMELERİNDE SÜRDÜRÜLEBİLİRLİK ve KALKINMA

Günümüzde sağlık sektöründe maliyetlerin artması ile birlikte finansal ve doğal kaynakların verimli kullanılması gerektiği görülmüştür. Bu bağlamda sağlık işletmelerinin ne derecede sürdürülebilir olduğunun belirlenmesi önem kazanmıştır. Sağlık işletmelerinde minimum girdi ile uzun vadede sağlık hizmetinin üretiminin sağlanması ile rekabet gücü elde etmek amaçlanmaktadır. Bu bağlamda sağlık işletmesine yatırım yapacakların maliyetleri azaltan, ekonomik ihtiyaçları dengeli bir şekilde karşılayan, süreç odaklı, ekolojik çevreye uyumlu ve sürdürülebilir sağlık sistemine ihtiyaç duyduğu görülmektedir. Sağlık işletmelerinin sürdürülebilirliği, verilen hizmetin yüksek kalitede ve düşük maliyetle sunabilmelerine ve kaynaklarını etkin ve verimli kullanabilmelerine bağlıdır.

Sağlık hizmetlerinde sürdürülebilirlikte başlangıçta sağlık sunucusuna ilk yatırım maliyetleri açısından dezavantajlı durumda olsa da, uzun vadede maliyetlerin düşürülmesi, bakım ve işletme açısından bakım masraflarının avantaj sağlaması ve olumlu değer yaratması nedeniyle sağlık sunuculara avantaj sağlamaktadır. Çevrenin, ekonomik koşulların ve toplumun iç içe olduğu biri olmadan diğerinin yoluna devam edemeyeceği ve yalnız başına ifade etmediği görülmektedir. Dolayısıyla sağlık hizmetlerinde de verimliliğin sağlanması ve sürdürülebilir sağlık hizmetinin olması için bu faktörlerin bir arada uyumlu ilerlemesi gerekmektedir (Karaca, Atılğan ve Zekioglu, 2018: 3).

Şekil 2: Sürdürülebilir Kalkınmanın Ekonomik, Sosyal, Sağlık ve Çevresel Unsurları Arasındaki İlişki



Kaynak: Price ve Dube, 1997: 29.

Çevre insan sağlığı üzerinde bazı riskler yaratır. Bunlar, “geleneksel riskler” ve “modern riskler” olarak ikiye ayrılmıştır. Kalkınmanın sağlanmaması geleneksel riskler, kalkınmanın sürdürülebilir olmaması ise modern risklerdir. Çevresel sağlık risklerinin artması, ülkelerin zaman ve kalkınma düzeylerine bağlı olarak geleneksel riskten modern riske doğru geçişin “risk geçişi” olarak ifade edilmektedir. Evdeki temel hijyen koşullarının yetersiz oluşu, temiz içme suyuna erişememe, evsel hava kirliliği, sağlıksız çöp bertarafı, meslek kazası sonucu yaralanmalar, sel, deprem, kuraklık ve mikroplu yiyecekler gibi faktörler geleneksel riskleri oluşturmaktadır. Modern riskler ise, doğal kaynakların sömürülemez kullanılması sonucunda beliren hızlı kalkınmanın ortaya çıkardığı risklerdir. Sanayileşme, yoğun tarım dolayısıyla su kirliliği, kömür santralleri ve sanayinin neden olduğu hava kirliliği, kalabalık nüfus, radyasyon tehdidi, ormansızlaşma ve ozon tabakasının delinmesi gibi faktörlerden oluşmaktadır (Erden ve Koyuncu, 2014: 13).

6. SONUÇ

Günümüzde sağlık işletmelerinin ne derecede sürdürülebilir olduğunu belirlemek önem arz etmektedir. Sağlık işletmelerinde gün geçtikçe maliyetlerin artması ile doğal ve finansal kaynakların doğru şekilde kullanılmasını konusuna ağırlık verilmesini sağlamıştır. Sağlık kaynaklarının verimli kullanılması ile bugünden geleceğe yatırım yapılması olarak görülmektedir. Sağlık işletmelerinde minimum girdi ile uzun vadeli sağlık hizmeti sunmak ve üretimini sağlayarak rekabet üstünlüğü sağlamak ön plana çıkmaktadır.

Çevresel, sosyal ve ekonomik unsurları kapsayan sürdürülebilir kalkınma sağlık unsurlarıyla da ilişkilidir. Gelecek nesillerin ihtiyaçlarını da gözeterek bugünün nüfusunun ihtiyaçlarının karşılanmasıdır. Sağlık işletmelerinde sürdürülebilirliğin sağlanmasında yaşam kalitesinin artırılması ve iyileştirilmesi ile ilgili çalışmaları ile mümkün olabilmektedir. Bu iyileştirme ve kalitenin artırılmasında çevreye zarar vermemek önem arz etmektedir. Bu bağlamda sürdürülebilir kalkınmanın sağlanmasında ve belirlenen hedeflere ulaşmada sağlık sektörü ve sağlık göstergeleri birbiri ile bağlantılıdır. Sosyal unsurlar içerisinde yer alan sağlık sektörü, toplum düzeni ve kültürün sürekli dengeli olmasını sağlanması gerekmektedir. Bu bağlamda toplumlar arasında yer alan farklılığın ortadan kaldırılması, insan hakları ve güvenliğinin sağlanması ve eşitliğin sağlanarak, yoksulluğun ortadan kaldırılması ile belirlenen hedeflere ulaşılabilirliği söylenebilir.

Sağlık alanında yapılan tüm sürdürülebilirlik girişimleri sürdürülebilir kalkınma hedeflerine ulaşmayı sağlayabileceği gibi aynı anda verimlilik üzerinde de etkili iyileştirmeler yapılmasını sağlamaktadır. Dolayısıyla çevresel, ekonomik ve sosyal boyutların birbiri ile bağlantılı olarak diğer sektörlerde olduğu gibi sağlık sektöründe de etkili olmaktadır.

Sağlık sektöründe çalışan kişilerin sürdürülebilirlik konularına ilişkin bilinçlerinin artırılması, eğitim planlamasının yapılması ve gerekli sertifika programlarının oluşturulması ile sürdürülebilirlik ile ilgili bilincin arttırılmasına katkı sağlayacaktır. Buna bağlı olarak sağlık hizmeti alan kişilerin hizmet alımlarında sürdürülebilirlik sağlanarak kalkınmaya destek sağlanacaktır. Gelecekte sürdürülebilir kalkınma ve sağlık ile ilgili planlanan çalışmalara sürdürülebilir kalkınma hedeflerinde yer alan diğer maddelerle ilişkili araştırmalar yapılması önerilebilir.

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Türkiye’de Savunma Harcamaları, Teknolojik Değişim ve Ekonomik Büyüme Üzerine Bir Araştırma

Prof. Dr. İbrahim BAKIRTAŞ¹

Arş. Gör. Emre YARDIMCI²

¹Aksaray Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, İktisat Bölümü, ibakirtas@aksaray.edu.tr, ORCID: 0000-0003-0945-2823

²Aksaray Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, İktisat Bölümü, emre.yardimci@aksaray.edu.tr, ORCID: 0000-0002-8153-3786

Özet: Bu çalışmanın amacı, Türkiye’deki savunma harcamalarının ekonomik büyüme üzerindeki etkisini incelemektir. Çalışmamızı diğer araştırmalardan farklı kılan ve literatüre katkı sağlayacağı düşünülen nokta, söz konusu etkinin tespitinde, teknolojik değişim ve dışsalılık kaynaklı etkileri de ölçme imkanı tanıyan doğrusal olmayan bir üretim modelinin kullanılmasıdır. Böylece savunma harcamalarının ekonomik büyümeye olan etkisini, teknolojik değişim ve dışsallıkların yol açtığı etkileri de dikkate alarak daha ayrıntılı bir şekilde incelemek amaçlanmaktadır. Bu amaç doğrultusunda 1974-2019 dönemi verilerine Otoregresif dağıtılmış gecikme (ARDL) sınır testi ve eşbütünleşme analizi uygulanmıştır. Ampirik bulgulara göre, değişkenler arası uzun dönemli bir denge ilişkisi vardır. Türkiye’de savunma harcamalarında yaşanan bir artış, ekonomik büyüme üzerinde negatif bir etkiye neden olmaktadır. Buna göre Askeri Keynesçi Yaklaşımın vurguladığı savunma sanayisinin sağlayacağı geri besleme ve üretim üzerinde oluşturacağı pozitif dışsallıklar, Türkiye’deki savunma harcamalarının ekonomik büyüme üzerindeki negatif etkisini dengelemekte yeterli değildir. Sonuç olarak, Türkiye’deki savunma harcamalarının niteliksel artışı, niceliksel artışı destekleyemediği ifade edilebilir.

Anahtar Kelimeler: Savunma Harcamaları, Teknolojik Değişim, Ekonomik Büyüme

Abstract: The purpose of this study is to examine the impact of defense expenditures on economic growth in Turkey. What sets our study apart from previous research and is believed to contribute to the literature is the utilization of a nonlinear production model that allows for the measurement of effects arising from technological change and externalities in determining said impact. Thus, the aim is to investigate the influence of defense spending on economic growth in a more comprehensive manner by also considering the effects brought about by technological change and externalities. In line with this objective, Autoregressive Distributed Lag (ARDL) bounds testing and co-integration analysis have been applied to the data spanning from 1974 to 2019. Empirical findings reveal the existence of a long-term equilibrium relationship among the variables. An increase in defense expenditures in Turkey leads to a negative effect on economic growth. Accordingly, the feedback that the defense industry will provide and the positive externalities that it will create on production, emphasized by the Military Keynesian Approach, are not sufficient to balance the negative impact of defense expenditures on economic growth in Turkey. Consequently, it can be asserted that the qualitative increase in defense spending in Turkey does not support a quantitative increase.

Key Words: Defense Spending, Technological Change, Economic Growth

1. GİRİŞ

Güvenlik sorunu, her ekonomi için tarih boyunca diriliğini korumuş önemli konulardan biridir. Bu sorunun potansiyel sonuçlarıyla mücadele edebilmek, sağlam bir savunma gücüyle mümkündür. Savunma gücü ise bir ordu ve bu orduyu donanımlı kılacak mal ve hizmet alımları ile sağlanır. Ancak ihtiyaç duyulan savunma gücünün kazanılması için katlanması gereken maliyetin boyutunu kavramak ve buna yönelik bir değerlendirme yapmak, ülkenin jeopolitik ve jeostratejik konumuyla birlikte yapıldığında anlamlıdır.

Türkiye, jeopolitik açıdan barış ve tehlike bölgelerinin tam ortasında yer alan, jeostratejik açıdan ise karayolu ile üç kıtayı birbirine bağlayan ve Karadeniz’den, Akdeniz ve diğer büyük denizlere geçiş imkanı tanıyan tek su yoluna sahip bir ülkedir. Dolayısıyla Türkiye için savunma harcamalarının boyutu ve bileşenleri incelemeye değerdir. Türkiye’nin bu stratejik avantajları onu dünyada eşsiz kılmaktadır. Fakat bu ayrıcalıklar beraberinde bir dizi tehdit ve tehlikeleri de beraberinde getirmektedir. Terör sorunu, bu tehditlerin en başında gelmektedir ve Türkiye, kırk yılı aşkın bir süredir terörle mücadele etmektedir. Bunun yanı sıra Türkiye’nin sınır komşuları olan Suriye ve Irak başta olmak üzere diğer Orta Doğu ülkelerinde yaşanan iç karışıklıklar ve Karadeniz’e limanı olan ülkelerden Rusya ile Ukrayna arasındaki savaş, ülkenin karşılaştığı dış tehditlerden bazılarıdır. Bu bağlamda olası bir savunma zafiyeti, ülke ve ekonomisi için ağır bedellere neden olabilir. Bu nedenle, Türkiye, savunma kabiliyetini her zaman güncel tutmak, savunma teknolojilerinde yaşanan gelişmeleri yakından takip etmek ve bu gelişmeleri milli savunma sistemine entegre etmek mecburiyetindedir. Bununla birlikte Türkiye’nin

gelişmekte olan ülke statüsünde olduğunu da unutmamak gerekir. Çünkü askeri modernizasyonun önemi tartışılmaz olsa da ekonomik kısıtlılıklar savunma harcamalarını sınırlandırmaktadır.

Tüm bu faktörler göz önünde bulundurulduğunda, savunma amaçlı yapılan mal ve hizmet harcamaları, ülke güvenliği ve ulusal ekonomi açısından büyük önem arz etmektedir. Çünkü bir kamu harcaması bileşeni olan savunma harcamaları doğal olarak GSYİH'nin de belirleyicisidir. Dolayısıyla asıl amacı ülke güvenliğini sağlamak olan savunma harcamaları bir dizi ekonomik sonuçları da beraberinde getirmektedir. Bu bağlamda, savunma harcamalarının ekonomiye olan etkileri araştırmaya ve tartışmaya değer önemli bir konudur. Her ne kadar iktisat alanında, araştırmaya ve tartışmaya değer görülsede henüz üzerinde fikir birliği sağlanabilmiş bir alan da değildir. Örneğin, Neo-Klasik Yaklaşım, savunma harcamalarının ekonomik büyüme üzerindeki olumsuz etkilerini, fırsat maliyeti ve vergi artışı gibi faktörlerle savunurken, Askeri Keynesçi Yaklaşım ise savunma harcamalarının ekonomik büyüme üzerindeki olumlu etkilerini, savunma sanayisinin sağlayacağı geri besleme ve üretim üzerinde doğuracağı pozitif dışsallıkların önemine vurgu yapmaktadır (Değer ve Sen, 1995: 80).

Söz konusu bu fikir ayrılığı Türkiye özelinde de kendini göstermektedir. Halıcıoğlu (2004), Yağtu ve Sezgin (2019), Karakaya ve Şahinoğlu (2020) ile Naimoğlu ve Özbek (2022) yaptıkları analizlerde savunma harcamalarının ekonomik büyümeyi pozitif etkilediğini savunmaktadır. Buna karşın Karagöl ve Palaz (2004), Çevik ve Bektaş (2019), Akcan (2019) ile Kanca ve Yamak (2020) ise analizlerinde savunma harcamalarının ekonomik büyüme üzerinde negatif etkiye yol açtığını ileri sürmektedir. Bu iki ana görüşü destekleyen araştırmaların yanında Canbay ve Mercan'ın (2017), iki dönem için yaptığı analiz, savunma harcamalarının ekonomik büyümeyi kısa dönemde negatif, uzun dönemde ise pozitif etkilediğini ortaya koymaktadır.

Çalışmamızı diğer araştırmalardan farklı kılan ve literatüre katkı yapacağı düşünülen iki unsur vardır; İlki, doğrusal olmayan bir üretim modeli kullanması, ikinci ise savunma harcamalarının teknolojik değişim ve dışsallık kaynaklı etkilerini de ölçme imkanı sunmasıdır. Bu çalışmanın amacı da daha önceki araştırmalardan farklı olarak savunma harcamalarının ekonomik büyüme üzerindeki etkisini teknolojik değişim ve dışsallıkların yol açtığı etkileri de dikkate alarak daha ayrıntılı bir şekilde incelemektedir.

Bu giriş bölümünü takiben çalışma, teorik çerçeve, veri ve metodoloji, analiz sonuçları ve sonuç bölümlerinin içermektedir.

2. TEORİK ÇERÇEVE

Çalışmada kullanılan neoklasik üretim fonksiyonu modeli, savunma harcamaları ile ekonomik büyüme arasındaki ilişkiye arz tarafından yaklaşmaktadır. Feder-Ram modeli olarak bilinen bu model, çıktının sermaye ve işgücü faktörlerine bağlı olduğunu varsayan Solow modeli üzerine inşaa edilmiştir. Feder (1983) ve Ram (1986) modeli, sektörler arası verimlilik farkını ve dışsallıkları içermektedir. Huang & Mintz (1991), Feder ve Ram'ın geliştirdiği bu modeli savunma sektörüne uyarlamıştır. Uyarlanmış bu modelde hükümet harcamaları, askeri ve askeri olmayan harcamalar şeklinde ikiye ayrılmıştır. Aynı zamanda bu harcamaların dışsallıklar yoluyla özel sektörü etkilediğini de varsamışlardır. Mueller ve Atesoglu (1993) ile Cohen vd. (1996) ise teknolojik değişimi üretimin bir girdisi olarak ele alarak modele dahil etmiştir. Son olarak Heo & DeRouen (1998) tarafından derlenen üç sektörlü model, savunma ve savunma dışı hükümet harcamalarının dışsallık etkilerini ayırt etme imkanı sunmuştur.

Geliştirilmiş bu model aşağıda sunulmaktadır;

$$M = A(t)F(L_m, K_m)$$

$$N = B(t)G(L_n, K_n)$$

$$P = C(t)H(L_p, K_p, M, N)$$

Bu eşitliklerde Y, toplam çıktı; M, askeri harcamaları; N, askeri olmayan hükümet harcamalarını ve P ise özel sektörü temsil etmektedir. Eşitliklerdeki L, işgücü ve K, sermaye, modelde her bir sektör için standart girdilerdir. A(t), B(t) ve C(t), ilgili sektörlerde Hicks nötr teknik değişimi ifade etmektedir (Mueller ve Atesoglu, 1993).

Sektörlerin teknik değişimleri birbirinden farklı olsa da aralarında bir orantı olduğu varsayılmaktadır. Buradan hareketle sektörler arasındaki teknik değişim aşağıdaki gibi gösterilebilir;

$$A(t)/C(t) = 1 + \phi_m$$

$$B(t)/C(t) = 1 + \phi_n$$

burada ϕ_m ve ϕ_n bilinmeyen sabitlerdir.

İşgücü ve sermaye üretkenliği sektörler arası farklılık gösterebilir. Kamuda kullanılan faktörlerin marjinal verimliliğinin, özel sektördeki faktörlerin marjinal verimliliğinin $(1 + \delta_i)$ katı olduğu varsayımında;

$$F_i/H_i = F_k/H_k = 1 + \delta_m$$

$$G_i/H_i = G_k/H_k = 1 + \delta_n$$

burada F_i , G_i ve H_i ($i = l, k, m, n$), üç sektör için emek ve sermayenin marjinal ürünlerini temsil etmektedir. Faktör üretkenlik farkı olan δ terimi ise bilinmeyen bir sabittir.

Toplam girdiler aşağıdaki gibi;

$$L = L_m + L_n + L_p$$

$$K = K_m + K_n + K_p$$

Ve ekonominin toplam çıktıları aşağıdaki gibi olsun;

$$Y = M + N + P$$

Yukarıdaki tüm denklemleri kullanarak, tahmin için aşağıdaki denklemi türetebiliriz. (Türetme denklemi için bkz. Heo ve DeRouen, 1998).

$$dY/Y = \lambda + e\lambda t\psi_l(dL/L) + e\lambda t\psi_k(I/Y) + [\pi_m(M/Y) + e\lambda t\psi_m](dM/M) + [\pi_n(N/Y) + e\lambda t\psi_n](dN/N) + \lambda\pi_m(M/Y) + \lambda\pi_n(N/Y)$$

Burada dL/L değişkeni istihdam edilen iş gücünün büyüme oranını; I/Y , yatırımın GSYİH içerisindeki payını; dM/M savunma harcamalarının büyüme oranını; M/Y , savunma harcamalarının GSYİH içerisindeki payını; dN/N , askeri olmayan kamu harcamalarını ve N/Y , askeri olmayan kamu harcamalarının GSYİH içerisindeki payını temsil etmektedir. π_i , teknolojik ilerleme ve verimlilik değişikliklerinin ekonomik büyüme üzerindeki bileşik etkisini, ψ_i ise dışsalıkların etkisini verir. Buradan hareketle ψ_l , işgücü; ψ_k , sermaye; π_m , savunma harcamalarının birleşik etkisini; π_n , askeri olmayan kamu harcamalarının birleşik etkisini (teknoloji ve üretkenlik); ψ_m , askeri dışsallığı ve ψ_n , askeri olmayan dışsallığı ifade etmektedir. Teknolojik değişim faktörü ise $e\lambda t$ terimi ile temsil edilir (Karl DeRouen, 2000: 76).

3. VERİ VE METHODOLOJİ

GSYİH, savunma harcamaları ve kamu harcamaları verileri (sabit 2015 \$ cinsinden) World Bank'dan, yatırım verileri (sabit 2017 \$ cinsinden) ve işgücü verileri IMF'den, faktör verimliliği verileri Out World'den, alınmıştır. Analizde kullanılan ölçümler şunlardır: dY/Y (ekonomik büyüme), dL/L (işgücü büyümesi), I/Y (GSYİH'ye oranla yatırım), dM/M (savunma harcamaları), dN/N (askeri olmayan hükümet harcamaları), M/Y (GSYİH'ye oranla savunma harcamaları) ve N/Y (GSYİH'ye oranla askeri olmayan hükümet harcamaları). Büyüme etkileri için esneklikleri, denklemde M/Y ve N/Y 'nin ortalama yüzdelere kullanılarak hesaplanır.

λ : faktör verimliliği, ψ_l : dL/L , ψ_k : I/Y , π_m : dM/M , π_n : dN/N , ψ_m : M/Y , ψ_n : N/Y ifadelerine karşılık gelmektedir. DUMC'ler ise kriz kukla değişkenlerini ifade etmektedir.

1974 Kıbrıs Barış Harekati'nin başlaması ve akabinde müteffik ülkelerden temin edilen silah ve mühimmatların kullanım hakkından mahrum bırakılmasının bir sonucu olarak Türk Silahlı Kuvvetlerinin silah ve mühimmat ihtiyaçlarının, Türk savunma sanayisi firmaları tarafından karşılanmasına karar verilmiştir (TSKGV, 2021). Bu doğrultuda atılan adımlar da savunma harcamalarında büyük bir kırılmaya yol açmıştır. Bu yüzden başlangıç yılı olarak 1974 baz alınmaktadır. Ayrıca yatırım, işgücü ve faktör verimliliği verilerinin resmi olarak son derlenme yılı 2019 olduğu için analiz dönemi 1974-2019 olarak belirlenmiştir.

Araştırma hipotezinin analizinde ARDL sınır testi yaklaşımı seçilmiştir. Bu yöntemin seçilme nedeni, durağanlık derecelerini dikkate almaksızın kullanabilmek, uygun gecikme seçimi sunarak korelasyonun önüne geçmek ve içsellik sorununu azaltmaktadır. (Menegaki, 2019).

4. ANALİZ SONUÇLARI

Zaman serisi analizlerinde ilk olarak verilerin durağanlık durumlarını kontrol etme imkanı sunan birim kök testlerine yer verilmektedir. Bu çalışmada da durağanlık kontrolü için, genişletilmiş Dickey-Fuller, Dickey-Fuller

GLS, Phillips-Perron ve Kwiatkowski-Phillips-Schmidt-Shin testleri kullanılmaktadır. Birim kök testlerine ait sonuçlar Tablo 1’de gösterilmektedir.

Tablo 1: Birim Kök Testleri

	Düzey							
	Sabit				Sabit ve Trend			
	ADF	DF-GLS	PP	KPSS	ADF	DF-GLS	PP	KPSS
Y	-0,25	1,94	-0,23	1,00	-2,81	-2,60	-2,81	0,11*
λ	-8,04***	-7,87***	-8,04***	0,11***	-7,98***	-7,14***	-7,98***	0,08***
ψ_l	-0,04	1,56	-0,13	0,98	-1,86	-1,76	-2,27	0,07***
ψ_k	-2,61*	-1,48	-2,72*	0,22***	-2,51	-2,06	-2,62	0,18*
π_m	-5,94***	-5,93***	-5,84***	0,30***	-6,17***	-6,11***	-5,94***	0,03***
π_n	-5,29***	-4,61***	-5,25***	0,06***	-5,25***	-5,12***	-5,21***	0,05***
ψ_m	-1,24	-1,23	-1,11	0,62*	-2,43	-2,37	-2,46	0,20*
ψ_n	-1,39	-0,62	-1,50	0,76	-1,83	-1,89	-2,17	0,18**
	Birinci Dereceden Farkı							
	Sabit				Sabit ve Trend			
	ADF	DF-GLS	PP	KPSS	ADF	DF-GLS	PP	KPSS
Y	-7,78***	-6,57***	-7,79***	0,06***	-7,72***	-5,81***	-7,73***	0,06***
λ	-9,89***	-2,48***	-16,43***	0,09***	-9,91***	-12,29***	-16,48***	0,05***
ψ_l	-6,72***	-6,64***	-6,82***	0,06***	-6,66***	-6,75***	-6,76***	0,06***
ψ_k	-8,05***	-7,38***	-8,05***	0,09***	-8,08***	-7,72***	-8,08***	0,04***
π_m	-8,47***	-8,55***	-22,35***	0,28***	-8,42***	-10,45***	-23,48***	0,20***
π_n	-8,51***	-8,52***	-12,31***	0,03***	-8,43***	-8,52***	-12,17***	0,03***
ψ_m	-7,91***	-7,55***	-8,10***	0,19***	-7,93***	-7,63***	-8,22***	0,05***
ψ_n	-6,42***	-5,71***	-6,42***	0,06***	-6,36***	-6,19***	-6,37***	0,07***

Not: *, ** ve *** sembolleri, sırasıyla % 10, % 5 ve % 1 istatistikî anlam düzeylerinde verilerin durağan olduğuna karşılık gelmektedir. ADF, DF-GLS, PP ve KPSS kısaltmaları sırasıyla; genişletilmiş Dickey – Fuller, Dickey – Fuller GLS, Phillips – Perron ve Kwiatkowski-Phillips-Schmidt-Shin ifade etmektedir. Uygun gecikme uzunluğu Schwarz Bilgi Kriteri (SIC) göre belirlenmiştir.

Tablo 1’de gösterilen birim kök testi sonuçlarına göre değişkenlerin büyük çoğunluğunu $I(0)$ seviyesinde birim kök içermekte ve birinci farkta durağan duruma gelmektedir. Değişkenlerin önemli bir bölümünün $I(1)$ seviyesinde durağan olması eşbütünleşme testi yapılmasına imkan tanımaktadır. Bununla birlikte analiz yöntemi seçiminde, değişkenlerin bir kısmının da $I(0)$ seviyesinde durağanlık göstermesi göz önüne alınmış ve ARDL sınır testinin kullanılması uygun görülmüştür. ARDL sınır testinde uygun gecikme uzunluğu SIC bilgi kriteri referans alınarak belirlenmiş ve en uygun gecikmeli modelin ARDL (3, 2, 3, 2, 1, 0, 0, 3) olduğu tespit edilmiştir.

Tablo 2’de ARDL (3, 2, 3, 2, 1, 0, 0, 3) modelinin tahmin sonuçları ve modelin diagnostik test sonuçlarına yer verilmiştir.

Tablo 2: ARDL (3, 2, 3, 2, 1, 0, 0, 3) Modeli Tahmin Sonuçları

Değişken	Katsayı	HAC Std. Hata	t-İstatistiği
Y(-1)	0.883541***	0.192012	4.601483
Y(-2)	0.345655	0.263015	1.314203
Y(-3)	-0.358055***	0.120802	-2.963973
λ	0.008918***	0.000494	18.05690
λ (-1)	0.002469	0.002232	1.105942
λ (-2)	-0.003687**	0.001404	-2.626031
ψ_l	0.174778**	0.077970	2.241613
ψ_l (-1)	0.041921	0.142804	0.293554
ψ_l (-2)	-0.423498***	0.104703	-4.044746
ψ_l (-3)	0.422354***	0.081056	5.210635
ψ_k	-0.020683	0.042408	-0.487706
ψ_k (-1)	-0.131759**	0.057880	-2.276428
ψ_k (-2)	0.056437*	0.029638	1.904210
π_m	0.000645***	0.000156	4.133733
π_m (-1)	0.000255	0.000148	1.715027

π_n	0.001287***	0.000428	3.008972
ψ_m	-0.023723***	0.003628	-6.539427
ψ_n	-0.016941***	0.004543	-3.728685
$\psi_n (-1)$	0.015599***	0.004606	3.386566
$\psi_n (-2)$	-0.001726	0.003716	-0.464377
$\psi_n (-3)$	0.008377***	0.002445	3.426632
DUMC1	0.017150**	0.006472	2.649896
DUMC2	-0.010358*	0.005153	-2.010004
DUMC3	0.009336**	0.003664	2.548222
C	-0.168786	0.166826	-1.011747
Diagnostik Test Sonuçları			
Normal Dağılım (JB):	0,81 [0,66]		
Breusch Godfrey Otokor. LM:	7,97 [0,01]		
Değişen varyans (ARCH):	0,42 [0,51]		
Değişen varyans (White):	31,97 [0,12]		
Değişen varyans (BreuschPagan-Godfrey):	29,48 [0,20]		
Ramsey RESET:	0,22 [0,82]		
F-İstatistiği:	131,47 [0,00]		
R ² :	0,98		

Not: *, ** ve *** sembolleri sırasıyla %10, %5 ve %1 düzeylerindeki istatistiki anlam seviyelerine karşılık gelmektedir. "[]" içerisinde ise prob. değerlerine yer verilmektedir.

Tablo 2’de yer alan diagnostik test sonuçlarında görüldüğü üzere Model 1 ARDL (3, 2, 3, 2, 1, 0, 0, 3) modelinde Breusch Godfrey LM testine göre otokorelasyon sorunu görünmektedir. Bu yüzden HAC (Newey-West) yöntemi ile direçli standart hatalar elde edilerek otokorelasyon sorunu düzeltilmektedir. ARCH ve Breusch-Pagan-Godfrey testlerine göre değişen varyans ve Ramsey RESET testine göre fonksiyonel form sorunları bulunmamaktadır. Son olarak Jarque-Bera testi ile de hata terimlerinin normal dağılım sergilediği sonucuna ulaşılmaktadır.

Model tahminlerinin ardından uzun dönem denge ilişkisini tespit etmek için sınır testi analizi yapılmış ve Tablo 3’de ARDL modelinin sınır testi sonuçları sunulmuştur.

Tablo 3: ARDL Sınır Testi (F ve t) Sonuçları

F-İstatistiği = 13,04 (k = 7) [n = 46]			
H0: Eşbütünleşme yoktur			
Sınır Değerleri			
Asimptotik: n = 1000			
Anlam Düzeyi	I (0)	I (1)	Eşbütünleşme
1%	2,96	4,26	✓
5%	2,32	3,5	✓
10%	2,03	3,13	✓
Sonlu Örneklem: n = 45			
1%	3,59	5,22	✓
5%	2,64	4,00	✓
10%	2,23	3,46	✓
t-İstatistiği = -4,84			
H0: Eşbütünleşme yoktur			
5%	-2,86	-4,57	✓
10%	-2,57	-4,23	✓

Tablo 3’de raporlanan ARDL F-sınır testi sonuçlarına göre mutlak değerce F istatistiği (13,04), Pesaran vd. (2001), Narayan (2005), t-istatistiği (-4,84) ise Pesaran vd. (2001) tablo kritik değerlerinden büyüktür. Bu sonuçlar doğrultusunda ARDL modelinde kullanılan değişkenler arasında uzun dönemli denge ilişkisinin varlığına işaret edilmektedir.

Uzun dönem dengesinde meydana gelen herhangi bir şoktan kaynaklı bir sapma yaşanması durumunda ne kadar sürede tekrar dengeye geleceğini gösteren hata düzeltme mekanizmasının işleyip işlemediğinin cevabını almak için kısa dönem hata düzeltme regresyonu tahmin sonuçlarına bakılmalıdır. ARDL modeli kısa dönem hata düzeltme regresyonu tahmin sonuçlarına ise Tablo 4’de yer verilmiştir.

Tablo 4: ARDL Modeli Kısa Dönem Hata Düzeltme Regresyonu Tahmin Sonuçları

Değişken	Katsayı	Std. Hata	t-İstatistiği
D(Y(-1))	0.012400	0.095498	0.129848
D(Y(-2))	0.358055***	0.094912	3.772480
D(λ)	0.008918***	0.000411	21.67885
D(λ (-1))	0.003687***	0.000981	3.759881
D(ψ)	0.174778***	0.064685	2.701990
D(ψ (-1))	0.001145	0.070639	0.016206
D(ψ (-2))	-0.422354***	0.071615	-5.897563
D(ψ_k)	-0.020683	0.026435	-0.782410
D(ψ_k (-1))	-0.056437*	0.028358	-1.990175
D(π_m)	0.000645***	9.02E-05	7.147701
D(ψ_n)	-0.016941***	0.001839	-9.209699
D(ψ_n (-1))	-0.006651***	0.001797	-3.702258
D(ψ_n (-2))	-0.008377***	0.001806	-4.637196
DUMC1	0.009336*	0.005363	1.740860
DUMC2	-0.010358**	0.004702	-2.202822
DUMC3	0.017150**	0.007882	2.175809
C	-0.168786***	0.014374	-11.74223
CointEq(-1)	-0.128859†, ***	0.010924	-11.79554

Not: *, ** ve *** sembolleri sırasıyla %10, %5 ve %1 düzeylerindeki istatistiki anlamlılığı belirtmektedir. †, %1 anlam düzeyine göre t-sınır testinin anlamlılığı ifade etmektedir.

Tablo 4’de yer alan hata düzeltme terimi (ECT) istatistiki olarak anlamlı ve negatiftir. Bu sonuca göre hata düzeltme mekanizması ARDL modelinde işlemekte ve olası bir sapmada denge duruma yaklaşık 7 dönemde (yılda) dönecektir.

Savunma harcamalarının doğrudan ve dışsalıklar yolu ile ekonomik büyüme üzerinde oluşturduğu etkiyi tespit etmek için her iki modelinde uzun dönem katsayıları incelenmiştir. Tablo 5’de bu katsayılar yer verilmektedir.

Tablo 5: ARDL Uzun Dönem Katsayı Tahmin Sonuçları

Değişken	Katsayı	Std. Hata	t-İstatistiği
λ	0.059754***	0.018663	3.201645
ψ	1.672791***	0.066127	25.29668
ψ_k	-0.745038***	0.201077	-3.705231
π_m	0.006979***	0.001685	4.141660
π_n	0.009985**	0.004011	2.489556
ψ_m	-0.184104***	0.033082	-5.565031
ψ_n	0.041200***	0.009179	4.488590
Bileşik Etkiler			
$\lambda\pi_m$		0,0003	
$\lambda\pi_n$		0.0004	
$\pi_m(M/Y) + e\lambda t\psi_m$		-0,58	
$\pi_n(N/Y) + e\lambda t\psi_n$		-0,12	

Not: *, ** ve *** sembolleri sırasıyla %10, %5 ve %1 düzeylerindeki istatistiki anlamlılığı belirtmektedir.

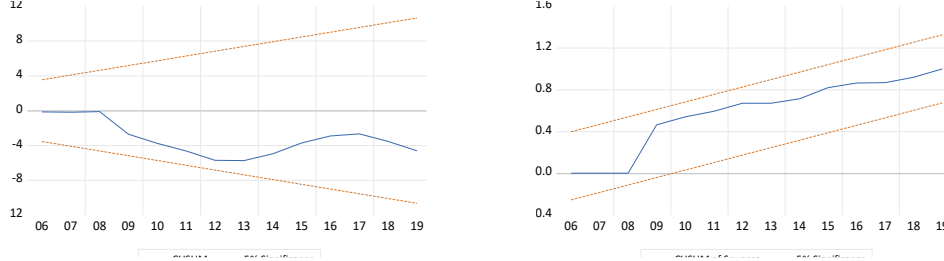
Tablo 5’de göre her iki modelde yer alan tüm değişkenler %10, %5 ve %1 düzeyinde anlamlıdır. Savunma ve askeri olmayan kamu harcamalarının ekonomik büyüme üzerindeki gerçek etkileri ARDL tahmin sonuçları kullanılarak hesaplanmıştır. Türkiye’de savunma harcamalarının GSYİH içindeki payının %1 artması ekonomik büyümede %0,58’lik bir azalmaya neden olurken, savunma harcamalarındaki %1’lik artışın büyüme üzerinde

çok az bir etkisi olacaktır. Askeri olmayan kamu harcamalarının GSYİH içindeki payının ve askeri olmayan kamu harcamalarının %1 artması sırasıyla %0,12 ve %0,0004'lük küçük bir etkiye sahiptir.

Çalışmaya konu olan yıllar içerisinde meydana gelen yapısal değişimler yapısal kırılmalara yol açmaktadır. Hem yapısal kırılmaların hem de bulguların güvenilirliğinin sınanması amacıyla CUSUM ve CUSUM of Squares yapısal kırılma testleri uygulanmıştır.

Şekil 1' de ilk model için yapılmış olan CUSUM ve CUSUM of Squares test sonuçlarına yer verilmiştir.

Şekil 1: ARDL için CUSUM ve CUSUM of Squares Test Sonuçları



Şekil 1'de sol tarafta CUSUM test sonucu, sağ tarafta ise CUSUM of Squares test sonucu bulunmaktadır. Her iki test sonucuna göre test istatistikleri yüzde 5 güven aralığı içerisindeydir. Dolayısıyla baz alınan yıllarda tahmin edilen katsayılar da herhangi yapısal değişim yoktur.

4. SONUÇ

Türkiye, dünyada savunma harcamaları sıralamasında on altıncı, savunma harcamalarının GSYİH içindeki payı bakımından yedinci sırada, batı ülkeleri arasında ise birinci sıradadır. Savunma amaçlı harcamalar her ne kadar miktar olarak dünyaya kıyasla çok büyük rakamlar olmasa da GSYİH içindeki payı bakımından oldukça yüksektir. Bu durumda ülke bütçesi açısından savunma harcamalarını, Türkiye için önemli kılmaktadır.

Bu çalışmada Türkiye'deki savunma harcamalarının ekonomik büyüme üzerindeki etkisi, teknolojik değişim ve dışsalılık etkilerini de dikkate alarak daha ayrıntılı bir inceleme imkanı sunan genişletilmiş Feder – Ram modeli ile incelenmiştir. Çalışma 1974 - 2019 dönemini kapsamaktadır. Birim kök testleri sonucunda eşbütünlük analizi yapılmış ve ARDL sınır test yöntemi ile araştırma ampirik olarak desteklenmiştir. ARDL sınır test yöntemi sonuçlarına göre savunma harcamaları ile ekonomik büyüme arasında uzun dönemli bir ilişki vardır. Uzun dönemli tahmin sonuçlarına göre savunma harcamaları ekonomik büyümeyi negatif etkilemektedir. Türkiye'de savunma harcamalarındaki niteliksel artış niceliksel artışı destekleyememektedir. Bu bulgular ışığında Neo-Klasik Yaklaşım tarafından savunulan fırsat maliyetinin doğuracağı negatif etki, Askeri Keynesçi Yaklaşımı tarafından vurgulanan savunma sanayisinin geri besleme ve üretim üzerinde doğuracağı pozitif etkiden daha büyük olduğu ileri sürülebilir.

Türkiye'de savunma harcamalarının GSYİH içerisindeki payında yaşanacak bir artış, dışsalılıklar yolu ile ekonomik büyümeyi negatif etkilemektedir. Bununla birlikte, savunma harcamalarındaki artış, teknolojik değişim ve üretkenlik ile ekonomik büyümeyi olumlu yönde etkileme potansiyeline sahiptir. Ancak bu olumlu etki, dışsalılıkların negatif etkisinin yanında oldukça küçük kalır. Son yirmi yılda Türkiye, savunma alanında teknolojik anlamda önemli ilerlemeler kaydetmiş, birçok firmayı alt yüklenici pozisyonunda savunma sanayisi ile birleştirmiş ve Türk Silahlı Kuvvetleri'nin ihtiyaçlarını karşılama konusunda önemli adımlar atmıştır. Ancak, yapılan savunma harcamalarının negatif etkisi hala göz önünde bulundurulması gereken önemli bir faktördür. Bu sonuca göre savunma harcamalarının niteliksel boyutunu ifade eden savunma sanayisi faaliyetleri, üretim maliyetini düşürmek, ihracatı arttırmak, diğer sanayi kolları ile daha entegre bir hale gelmek ve sonucunda üretim ve istihdamı arttırmak için yeterli olmadığı görülmektedir.

Sonuç olarak Türkiye, savunma harcamalarının niteliğini arttıran savunma sanayisi faaliyetlerinde yeterli ilerlemeyi kaydedememiştir. Bu ilerleme ise savunma alanında yapılan Ar-Ge faaliyetlerinin artırılması ile mümkündür. Bu yüzden gelecek çalışmalarda savunma harcamaları içerisindeki Ar-Ge faaliyetlerine ayrılan bütçeyi ayrı bir değişken olarak çalışmaya değil etmek, savunma harcamalarının ekonomi üzerindeki etkisiyle ilgili daha spesifik sonuçlar verebilir.

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Vergi ve Muhasebe Yönüyle Bağış Yoluyla Kitle Fonlama Modeli

Doç.Dr.İlknur ESKİN¹

¹ Trakya Üniversitesi, UUBYO, Muhasebe ve Finans Yönetimi Bölümü, ilknureskin @trakya.edu.tr,

ORCID: 0000-0003-2306-7315

Özet: Kitle fonlama modeli, 2008 yılı krizinden bu yana yenilikçi projelerin finansmanının ana kaynaklarından biri olarak görülmektedir. Model, internetin ve mobil erişimin hızla yaygınlaşmasına bağlı olarak, girişimcilerin projeleri için ihtiyaç duydukları fonu doğrudan internet tabanlı platformlar aracılığıyla bulmalarına olanak sağlamaktadır. Kitle fonlama modeli, girişimcilere ihtiyaçları doğrultusunda bağış bazlı, ödül bazlı, hisse bazlı ve borçlanma bazlı gibi farklı fonlama modelleri sunmaktadır.

Bu çalışmanın amacı kitle fonlama modelinin hukuki yapısını incelemek, bağış yoluyla kitle fonlama modelinin vergi mevzuatı ve muhasebe sistemi açısından değerlendirmektedir. Türk vergi mevzuatında bağış yoluyla kitle fonlamasına ilişkin özel bir düzenleme bulunmadığından vergilendirme mevcut vergi kanunları dikkate alınarak yapılmaktadır. Özellikle kâr amacı gütmeyen kuruluşların ve sosyal girişimcilerin projelerinin desteklenmesinde önemli finansal kaynaklardan biri olan bağış yoluyla kitle fonlama modelinin yaygınlaşmasında bu modele yönelik özel vergi düzenlemelerinin yapılması önem arz etmektedir. Bu modelin geliştirilmesine yönelik atılacak adımlar, gelişmiş ülkelerde olduğu gibi Türkiye'nin de ekonomik ve sosyal gelişmişlik düzeyine katkı sağlayacaktır.

Anahtar Kelimeler : Bağış Yoluyla Kitle fonlama, Vergi, Muhasebe.

Donation-Based Crowdfunding Model in Terms of Tax and Accounting

Abstract: Since the 2008 financial crisis, the crowdfunding model has been seen as one of the primary means of funding innovative projects. The model enables entrepreneurs to directly get the funding they require for their projects using web-based platforms because of the internet and mobile connectivity rapid spread. The crowdfunding models offer entrepreneurs a variety of funding models, including donation-based, reward-based, equity-based, and debt-based, depending on their needs.

The purpose of current study is to investigate the crowdfunding model's legal framework, assess the donation-based crowdfunding model in terms of tax legislation and accounting system. As Turkish tax law does not have any special regulations for donation-based crowdfunding, taxation is done by considering existing tax laws. It is significant to make special tax regulations for this model in spreading the donation-based crowdfunding model, which is one of the important financial resources, especially in supporting the projects of non-profit organizations and social entrepreneurs. The actions to be taken towards the development of this model will contribute to the level of economic and social development in Turkey, as in developed countries.

Keywords: Donation-based Crowdfunding, Tax, Accounting.

1.GİRİŞ

Araştırma ve Danışmanlık şirketi Grand View Research tarafından yapılan kitle fonlama pazar araştırmasında, küresel kitle fonlama pazar büyüklüğünün 2022'de 1,67 milyar dolar olduğu ve pazarın 2023'ten 2030'a kadar %16,7 yıllık büyümenin beklenildiği ifade edilmektedir. Facebook, Twitter, Reddit, Instagram ve LinkedIn gibi sosyal medya platformları, yatırımcılardan bağış toplayarak kitle fonlama faaliyetlerine başlaması pazarın büyümesini sağlayan önemli bir faktör olarak görülmektedir. Aynı zamanda kitle fonlama platformlarında yapay zekâ ve makine öğrenimi teknolojilerinin kullanılması da pazarın büyümesinde önemli bir etken olduğu belirtilmektedir (www. grandviewresearch.com). Bu gelişmeler araştırmaların kitle fonlama modeli üzerine yoğunlaşmasını sağlamıştır. Akyıldız vd. (2021) kitle fonlama projelerinin başarısına etki eden faktörleri araştırmak amacıyla Türkiye ABD'deki kitlesel fonlama platformlarındaki projeleri incelemiştir. Çalışmada, Türkiye'de yürütülen kitle fonlama projelerinde proje süresi uzadıkça proje başarısı artar iken, ABD'de proje başarısının düştüğü belirlenmiştir. Zengin (2022) çalışmada makroekonomik değişkenlerin kitle fonlama sistemlerinin gelişimine etkisini incelemek amacıyla AB ülkelerini örneklem almıştır. Çalışmanın bulguları borç bazlı kitle fonlama sisteminin gelişiminde, yurtiçi tasarruflar, cari açık, belirsizlikten kaçınma endeksi ve banka ATM sayısının etkili olduğu; pay bazlı kitle fonlama sisteminin gelişiminde yurtiçi tasarruflar ve ödenmemiş borçların etkili olduğunu göstermiştir. Vu ve Christian (2023) rekabetin, Brexit'in ve Covid 19'un İngiltere'deki kitle fonlama modeline etkisini incelemek amacıyla 2011-2020 dönemini ele aldığı çalışmada, rekabetin ve

koronavirüs salgınının kitle fonlama modeline olumlu etkisinin olduğu ama Brexit'in küçük ve orta ölçekli işletmelerin finansmanında kitle fonlama modeliyle fonlamada olumsuz etkisinin olduğu belirlenmiştir. Camgöz ve Yılmaztürk (2023) girişimcinin finansmanın doğru kullanımına olan güveninin, paya dayalı kitlesel fonlama yatırımcıları için yatırım yapacakları projeleri seçerken önde gelen motivasyon faktörü olduğunu tespit etmiştir.

Çalışmanın amacı, bağış yoluyla kitle fonlama modelini vergi mevzuatı ve muhasebe sistemi açısından değerlendirmektir. Bu amaç doğrultusunda öncelikle kitle fonlama modeli ve modelin hukuki yapısı açıklanmış, daha sonra bağış yoluyla kitle fonlama modeli vergi mevzuatı ve muhasebe sistemi açısından değerlendirilmesi yapılmıştır.

2.KİTLE FONLAMA MODELİ

Kitle fonlaması, finansal destek arayan girişimci veya şirketler ile kendi seçtikleri projelere destek veren yatırımcıların internet platformunda buluşmasını sağlayan bir dijital finans yöntemidir. Girişimciler, geleneksel finansal araçlara başvurmadan, iş fikirlerini hayata geçirmek için ihtiyaç duydukları fonları, doğrudan internet tabanlı platformlar aracılığıyla nispeten küçük tutarlarda katkıda bulunacak geniş bir kitleden toplamaya çalışmaktadır (Troise vd., 2023 :124).

Kitle fonlamasının temel amacı, belirli bir projeyi veya girişimi finanse etmektir. Girişimcilerin iş fikirlerini gerçekleştirme noktasında karşılaştıkları en önemli sorun finansman sorunudur. Melek yatırımcılar ve girişim sermayesi ortakları daha büyük projeleri finanse ederken, küçük girişimler kendi imkânlarıyla finansal kaynaklara ulaşmaya çalışmaktadır. Bu durum küçük girişimcilerin projelerinin finansal zorluklar nedeniyle başarısız olmasına neden olabilmektedir. Bu noktada kitle fonlaması, internet kullanımının artması ve dijital platformların dünya çapında yaygınlaşması sayesinde özellikle küçük girişimlerin finansmanı için önemi giderek artan bir alternatif temsil etmektedir (Anbar, 2020 :239-240). Kitle fonlamasının finansal faydalarının yanı sıra inovasyon faaliyetlerini artırma ve kaynakların etkin kullanımını sağlama gibi faydaları da bulunmaktadır. Girişimcinin bir ürün veya hizmetin pazar potansiyelini değerlendirmesine, pazar payını artırmasına ve ürün/hizmet tanıtımından önce rekabet avantajı yaratmasına yardımcı olarak projenin başarı şansını artırabilir. Kitle fonlaması, küçük, riskli start-up yatırımları, yenilikçi projeler ve çevre ve sürdürülebilirlik odaklı projelerin uygulanmasına da fayda sağlama potansiyeline sahiptir (Vu ve Christian, 2023 :2).

Kitle fonlaması modeli; bağış bazlı, ödül bazlı, hisse bazlı ve borçlanma bazlı olmak üzere dört alt modelden oluşmaktadır. Bağış ve ödül bazlı kitle fonlaması modelleri finansal olmayan modeller, hisse ve borçlanma bazlı kitle fonlaması modelleri finansal modeller olarak ifade edilmektedir (Zholdyuly, 2022 :75). Bunlar aşağıda açıklanmıştır.

Bağış bazlı kitle fonlaması modeli, bağışların internet platformunda yapılması dışında klasik bir bağış toplama yöntemidir. Destekçiler, girişimciye yaptıkları katkılardan dolayı maddi ödüller değil, teşekkür gibi sosyal ödüller beklerler. Bu modele verilecek en iyi örneklerden biri Barak Obama'nın 2018 yılında düzenlediği cumhurbaşkanlığı kampanyasıdır (Kraus vd., 2016 :15 ; Hıdıroğlu, 2020 :212).

Ödül bazlı kitle fonlaması modelinde proje sahibi destekçilerine maddi veya maddi olmayan ödüller vererek fon sağlamayı amaçlamaktadır. Bu modelde destekçiler projeye verdikleri finansal destek neticesinde bir ürün veya hizmetin pazara girmeden genellikle daha düşük fiyatla veya yalnızca bir onay karşılığında yararlanmasından sağlanmaktadır (Kraus vd., 2016 :15 ; Sezgin ve Orçun, 2020: 480). Ercan'ın (2017) Türkiye'de kitlesel fonlama platformları aracılığıyla girişimcileri finansal olarak destekleyen bireylerin motivasyonlarını araştırdığı çalışmasında, destekçilerin maddi yardımları sonucunda alacakları hediyelerin, yardım etme duygusunun, sosyal sorumluluk bilincinin ve proje ile kurdukları duygusal bağın motive edici unsurlar olduğu belirlenmiştir.

Ödül bazlı kitle fonlama modeli birçok ülkede en yoğun uygulanan kitle fonlama modelidir. Bu modelin en önemli temsilcilerinden biri olan Kinkstarter platformunda 2009 yılından buyana 2 Milyon kişinin projesine destek verilmiş, 7,42 milyar dolar taahhütte bulunulmuş ve 242.075 projeye finansman sağlanmıştır (www.kickstarter.com).

Hisse bazlı kitle fonlama modelinde girişimciler projelerine ortak almaktadır. Yatırımcılar projeye verdikleri destek karşılığında girişim şirket tarafından ihraç edilmiş hisse senetlerini satın almaktadır. Bu modelde yatırımcıların motivasyonu desteklediği projenin belirli bir düzeye gelmesi ve sonrasında kendi hisselerini değer kazandıktan sonra satmak istemesidir (Çonkar ve Canvaz, 2018 :123; Akyıldız vd., 2021 :524). Bu modelin en iyi örneklerinden biri olan Crowdcude, toplanan fon ve yatırımcı sayısı bakımından İngiltere'deki en başarılı hisse

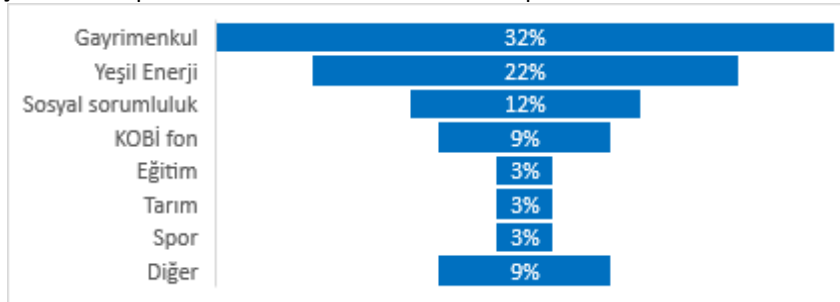
bazlı kitle fonlama platformlardandır. Crowdcude 2011’den 2020’ye kadar %80’i halen faaliyette olan binden fazla işletmeye finansman sağlanmasından önemli rol oynamıştır (Vu ve Christian, 2023 :2).

Borçlanma bazlı kitle fonlama modelinde, yatırımcılar krediler yoluyla girişimcilere fon sağlamaktadır. Girişimciler projelerinde başarıya ulaştıktan sonra kredilerin geri ödemesini anlaşıma çerçevesinde yatırımcılara yapmaktadır. Bu modelde yatırımcıların motivasyonu hem sabit faiz getirisi elde etmek hem de projenin gelişmesine katkı sağlamaktır (Çonkar ve Canvaz, 2018 ; Akyıldız vd., 2021 :524). Bu modelde en iyi bilinen örnek Prosper’dir. 2005 yılında ABD’de kurulan Prosper, 1.400.000’den fazla kişiye 23 Milyar dolardan fazla kredi sağlayan borçlanma bazlı kitle fonlama platformudur. Fona ihtiyacı olanlar platform üzerinden 2.000 dolar ile 50.000 dolar arasından sabit oranlı, sabit vadeli kredi başvurusunda bulunmakta, bireyler veya kurumlar kredilere yatırım yaparak gelir elde etmektedir (www.prosper.com).

Kitle fonlamasının girişimciler (proje sahipleri), destekçiler ve platform olmak üzere üç tarafı vardır. Girişimciler, bir iş fikri veya projesine finansman sağlamak amacıyla yatırımcılara ulaşmak için kitle fonlamasını kullanan kişi veya şirketlerdir. Girişimcilerin sistem içerisindeki rolü, bir ürünü veya projeyi planlamak ve daha sonra iş fikrini açık ve ilgi çekecek şekilde platform aracılığıyla destekçilerine paylaşmaktır. Kitle fonlamanın ikinci tarafı olan destekçiler, beğendikleri projelere küçük miktarlarda yatırım yapan ve yatırım bilgisi olmayan sıradan kişilerdir. Ancak kullanılan kitle fonlama modeline göre destekçilerin rolü fon sağlamanın ötesine geçmektedir. Örneğin bağış yoluyla kitle fonlaması modelinde destekçi sadece projeye katkıda bulunan iken, hisse bazlı kitle fonlaması modelinde yatırımcı girişimcinin başarılı olduğu proje getirisinden hisse aldığı için yatırımcı kimliği kazanmaktadır. Bu sistemin üçüncü tarafı ise yatırımcı ve girişimcileri internet ortamında buluşturan ve bunun karşılığında aracılık ücreti alan platformlardır. İnternet tabanlı bu platformlar sayesinde coğrafi sınırların ortadan kalkması nedeniyle girişimcilerin projelerine daha kolay fon toplaması mümkün olmuştur (Çağlar, 2018 :22-23 ; Sezgin ve Orçun, 2020 :479-480).

Avrupa’daki kitle fonlama platformlarını bir araya getiren bir platform olan Crowdspace, 2022 yılında “ Kitle Fonlama Sektör Raporu ”nu yayımlamıştır. Şekil 1’de görüldüğü üzere 2022 yılında kitle fonlama platformlarında sırasıyla gayrimenkul, yeşil enerji, sosyal sorumluluk, KOBİ’ler, eğitim, tarım ve spor alanlarına yönelik projeler ön plana çıkmaktadır. Raporda gayrimenkul sektöründeki projelere yatırım fırsatı sunan kitlesel fonlama platformlarının ilk sıralarda yer aldığı ve bu platformların Fransa, İngiltere, Belçika, İspanya, İtalya ve Çek Cumhuriyeti’ne kayıtlı olduğu belirtilmiştir. İkinci sırada yer alan yeşil enerji projelerinin 2021’de %12 seviyesinde iken 2022’de %22 seviyesinde olduğu ve bunun sürdürülebilir yatırım ve yeşil enerji projelerine yönelik küresel eğilimden kaynaklandığı belirtilmiştir. Rapora göre platformlar öncelikle organik aramaya güvenmekte, daha sonra sosyal medya, ortaklıklar, ücretli reklamlar, LinkedIn, kişisel bağlantılar, yatırımcı blogu, podcast gibi pazarlama kanallarını sık kullanmaktadır (Crowdfunding Industry Report, 2022 :14-32).

Şekil 1: Avrupa Kitle Fonlama Platformlarında Popüler Alanlar 2022



Kaynak: <https://thecrowdspace.com/whitepapers/crowdfunding-industry-report-2022/> (15.07.2023)

2.1.Türkiye’de Kitle Fonlama Modelinin Hukuki Yapısı

Türkiye’de kitle fonlaması modelinin hukuk sistemine girmesi 2017 yılında 7061 sayılı “Bazı Vergi Kanunları ile Diğer Bazı Kanunlarda Değişiklik Yapılmasına Dair Kanun” ile olmuştur. Bu kanunla 6362 sayılı Sermaye Piyasası Kanununda bazı değişiklikler yapılmıştır. Bu bağlamda kitle fonlaması kavramı “ bir projenin veya girişim şirketinin ihtiyaç duyduğu fonu sağlamak amacıyla Kurul tarafından belirlenen esaslar dahilinde bu Kanunun yatırımcı tazminine ilişkin hükümlerine tabi olmaksızın kitle fonlama platformları aracılığıyla halktan para toplanmasını” şeklinde ifade edilmiştir (7061 sayılı Kanun, madde 107). Bu tarihe kadar daha çok bağış bazlı ve ödül bazlı kitle fonlama modellerinin uygulamalarına rastlanmıştır (Yakar ve Kandır, 2020 :195). Kitle fonlama projelerinin duyurulacağı ve fon toplamada aracı olacak kitle fonlama platformlarına ilişkin düzenleme yapma yetkisi 2019

yılında Sermaye Piyasası Kanunu'na göre Sermaye Piyasası Kurulu'na (SPK) verilmiştir (Vergili, 2022 :112). Sermaye Piyasası Kurulu 2021 yılında konuya ilişkin yayımladığı Kitle Fonlaması Tebliği (III-35/A.2) ile paya ve borçlanmaya dayalı kitle fonlamasına ilişkin usul esasları belirlenmiştir. Tebliğ'de platformların esasları, platformların faaliyet esasları, paya dayalı kitle fonlamasının genel esasları, borca dayalı kitle fonlaması faaliyetinin genel esasları, fon kullanım yerlerine ilişkin esaslar ve girişim şirketleri, paya ve borçlanmaya dayalı kitle fonlaması faaliyetinin ortak ilkeleri açıklanmıştır. Ayrıca, ödül veya bağış karşılığında fon toplama faaliyetlerinin tebliğ hükümlerine tabi olmayacağı belirtilmiştir.

Türkiye Fintek Ekosistemi Durum Raporuna (2022) göre, kitle fonlama tebliği yayınlandıktan sonra 2022 yılında 8 tane paya dayalı kitle fonlama platformları üzerinden 46 kampanya başarı ile tamamlanmasından dolayı model girişimciler için önemli bir finansman kaynağı olmuştur. 2023 tarihi itibarıyla SPK tarafından 11 adet kitle fonlama platformu listeye alınmıştır. Bu platformlar hakkında genel bilgiler Tablo 1'de yer almaktadır.

Tablo 1: SPK Tarafından Listeye Alınan Platformlar

Ünvanı	Faaliyet Türü	Listeye Alınma Tarihi	Platform İsmi
Vakıf Yatırım Menkul Değerler A.Ş.	Paya dayalı kitle fonlaması	01.04.2021	-
Global Kitle Fonlama Platformu A.Ş.	Paya dayalı kitle fonlaması	08.04.2021	Fonbulucu
Halk Yatırım Menkul Değerler A.Ş.	Paya dayalı kitle fonlaması	30.09.2021	fonlabüyüsün
Dijital Kitle Fonlama Platformu A.Ş.	Paya dayalı kitle fonlaması	14.10.2021	efonla
İnfo Yatırım Menkul Değerler A.Ş.	Paya dayalı kitle fonlaması	25.11.2021	Startup burada
Fongogo Kitle Fonlama Platformu A.Ş.	Paya dayalı kitle fonlaması	06.01.2022	fongogo
Girişim Kitle Fonlama Platformu A.Ş.	Paya dayalı kitle fonlaması	24.02.2022	forangels
Basefunder Kitle Fonlama Platformu A.Ş.	Paya dayalı kitle fonlaması	21.07.2022	basefunder
Global Menkul Değerler A.Ş.	Paya dayalı kitle fonlaması	21.03.2023	-
Ecofolio Kitle Fonlama Platformu A.Ş.	Paya dayalı kitle fonlaması	13.04.2023	ecofolio
Nar Kitle Fonlama Platformu A.Ş.	Paya dayalı kitle fonlaması	05.05.2023	narfon

Kaynak : <https://www.spk.gov.tr/sirketler/kitle-fonlama-platformlari/listeye-alinan-platformlar> (06.07.2023) ve yazar tarafından şirket sayfalarından derlenmiştir.

Tablo 1'de SPK'dan fon toplama yetkisi alan kitle fonlama platformlarının şirket unvanları, faaliyet türü, listeye alınma tarihleri ve platform isimleri yer almaktadır . Bu platformlardan fongogo listeye alınmadan önce aynı isimle bağış ve ödül bazlı kitle fonlama faaliyetlerini yürütüyordu. Platform, 2021 yılında SPK tarafından listeye alındıktan sonra aynı isimle hem ödül bazlı hem de hisse bazlı kitle fonlama faaliyetlerini yönetmektedir. Ayrıca crowdFon platformu da ödül bazlı kitle fonlama faaliyetini yönetmektedir.

Buluşum, İdeanest platformları ise bağış bazlı kitle fonlama faaliyetlerini yönetmektedir. Buluşum, Boyner Vakfı tarafından sosyal girişimleri desteklemek için yönetilen bir platformdur. İdeanest, Türkiye Teknoloji Geliştirme Vakfı tarafından teknoloji ve inovasyon temelli projeleri desteklemek için geliştirilmiş bir kitlesel fonlama platformudur.

Borç bazlı kitlesel fonlama modeli Türkiye'de uygulanmamaktadır. Modelin tercih edilmemesi, buna yönelik vergi teşviklerinin olmamasından kaynaklanmaktadır (Vergili, 2022: 114).

3.BAĞIŞ YOLUYLA KİTLE FONLAMANIN VERGİLENDİRİLMESİ VE MUHASEBELEŞTİRİLMESİ

Araştırmanın amacı doğrultusunda bu bölümde bağış yoluyla kitle fonlamanın vergisel boyutu ve muhasebe uygulamaları örnek olay yöntemine göre açıklanmıştır.

Türk vergi sisteminde bağışa dayalı kitle fonlamasının vergilendirilmesi için özel bir düzenleme yapılmamıştır. Bu nedenle kitlesel fonlama faaliyetleri yürürlükteki vergi kanunları dikkate alınarak vergilendirilmektedir. Bu bağlamda bağışa dayalı kitle fonlaması faaliyetlerinin vergilendirme boyutu, yürürlükteki vergi kanunları çerçevesinde kitle fonlama platformu, bağışçı (fonu sağlayan) ve girişimci (fonu bulan) açısından aşağıda açıklanmıştır.

Türkiye’de kitle fonlama modelini bağış bazlı yürüten İdanest ve Buluşum platformları vakıflar tarafından yönetilmektedir. 5737 sayılı Vakıflar Kanunu’na göre vakıflar yurtiçi ve yurtdışındaki kişi, kurum ve kuruluşlardan aynı ve nakdi bağış ve yardım alabilmektedir. Buna göre vakıfların doğrudan bağış adı altında fon toplayabildiklerini ifade edebiliriz. Vakıfların tüm işlemleri, her türlü vergi, resim, harç ve katılım payından istisnadır (5737 sayılı Vakıflar Kanun, madde 25, madde 77).

Türk Medeni Kanunu’na göre kurulan vakıflar, muhasebe kayıtlarını ve belgeleri 213 sayılı Vergi Usul Kanununda belirtilen hükümlere uygun olarak yapmaları gerekmektedir. Bilanço esasına göre defter tutan vakıflar muhasebe kayıtlarını Maliye Bakanlığı’nın belirlediği hükümlere uygun olarak düzenlemek zorundadır. Ayrıca vakıfların kendi mevzuatı gereğince Vakıflar Genel Müdürlüğü tarafından yayımlanan “Vakıflar Tek Düzen Hesap Planı’na göre muhasebe kayıtlarını ve mali tablolarını düzenlemeleri gerekmektedir (cdn.vgm.gov.tr).

Gelir ve kurumlar vergisi mükelleflerinin bağışlarının vergiye tabi gelirden düşülebilmesi için bunu 193 sayılı Gelir ve 5520 sayılı Kurumlar Vergisi kanunlarında belirtilen koşullara uygun yapması gerekmektedir. Gelir Vergisi Kanunun 89’uncu ve Kurumlar Vergisi Kanununun 10’uncu maddeleri göre “*kamu kurum ve kuruluşlarına bağışlanan okul, sağlık tesisi, 100 yatak (kalkınmada öncelikli yörelerde 50 yatak) kapasitesinden az olmamak kaydıyla öğrenci yurdu ile çocuk yuvası, yetiştirme yurdu, huzurevi ve bakım ve rehabilitasyon merkezi ile mülki idare amirlerinin izni ve denetimine tabi olarak yaptırılacak ibadethaneler ve Diyanet İşleri Başkanlığı denetiminde yaygın din eğitimi verilen tesislerin ve Gençlik ve Spor Bakanlığına ait gençlik merkezleri ile gençlik ve izcilik kamplarının inşası dolayısıyla yapılan harcamalar veya bu tesislerin inşası için bu kuruluşlara yapılan her türlü bağış ve yardımlar ile mevcut tesislerin faaliyetlerini devam ettirebilmeleri için yapılan her türlü nakdi ve aynî bağış ve yardımların tamamı*” vergi matrahından indirilebilmektedir. Ayrıca bu kanunlarda gelir vergisi ve kurumlar vergisi mükelleflerinin vergi matrahlarından “*genel ve özel bütçeli kamu idareleri, il özel idareleri, belediyeler, köyler ile kamu yararına çalışan dernekler ve Cumhurbaşkanınca vergi muafiyeti tanınan vakıflara makbuz karşılığında yapılan bağış ve yardımların toplamının o yıla ait kurum kazancının %5’ine kadar olan kısmının*” indirmeleri mümkün olmaktadır. Mükelleflerin bağışları kazançlarından indirebilmeleri için bağışları makbuz karşılığında yapmaları ve bu tutarın beyannamede ayrıca göstermeleri gerekmektedir (193 sayılı Gelir Vergisi Kanun, madde 89; 5520 sayılı Kanun, madde 10). Buna göre, gelir veya kurumlar vergisi mükelleflerinin kitlesel fonlama modeli kapsamında yaptıkları bağışların vergiye tabi kazançlarından indiremeyeceklerini ifade edebiliriz. Ayrıca, bağışçı yapan vergi mükellefi değilse, herhangi bir vergi indirimi hakkına sahip olmayacaktır (Açıkgez vd., 2020 :66-67).

Genç girişimcileri desteklemek amacıyla 2016 yılında 193 sayılı Gelir Vergisi Kanunu’nun 20. maddesi yeniden düzenlenmiştir. Buna göre “*10 Şubat 2016 tarihinden itibaren ticari, zirai ve mesleki faaliyeti nedeniyle adlarına ilk defa gelir vergisi mükellefiyeti tesis olunan 29 yaşını doldurmamış tam mükellef gerçek kişilerin, üç vergilendirme dönemi boyunca elde ettikleri kazançlarının gelir vergisi tarifesinin ikinci diliminde yer alan tutara kadar kısmı gelir vergisinden istisnadır*”. Genç girişimcinin bu teşvikten yararlanabilmesi için; “*işe başladığını kanuni sürede bildirmesi, kendi işinde çalışması, adi ortaklık ve şahıs şirketi bünyesinde faaliyetler gerçekleştiriliyorsa ortaklarının tamamının tüm şartları taşıması, mevcut işletmeye veya faaliyete sonradan ortak olmaması*” şartlarını yerine getirmesi gerekmektedir (193 sayılı Gelir Vergisi Kanunu, mükerrer madde 20).

Kitle fonlama girişimci gelir veya kurumlar vergisi mükellefi olması durumunda araştırma ve geliştirme faaliyetleri ile ilgili Ar-Ge indirimi uygulamasına benzer uygulamalar bulunmamaktadır (Atay, 2017 :18). Ayrıca girişimcilerin kitle fonlama modeli kapsamında elde ettiği fon devamlılık arz etmeyen faaliyetlerden elde edilen gelir olarak yapılması durumunda girişimci tarafından elde edilen kazanç” arizi kazanç” sayılmaktadır. Söz konusu fon, 323 seri numaralı Gelir Vergisi Genel Tebliği’ne göre 2023 yılında arizi kazançlar üzerinden uygulanan 129.000 TL’ye ulaşıncaya kadar vergiden istisnadır (www.pwc.com.tr).

Örnek 1 : Tarım aletlerine yapay zekâ ekleyerek “akıllı cihaz” haline getiren bir girişimci (vergi mükellefi değildir), bu projeyi geliştirmek için ihtiyacı olan 110.000 TL’yi karşılamak amacıyla bağış bazlı kitle fonlama platformuna ön başvuru yapmıştır. Platform yetkilileri bu projenin doğruluğunu ve yeterliliğini inceledikten sonra projeyi onaylamış ve proje platformda yayınlanmaya başlamıştır. Sözleşmede fonlama süresi 80 gün olarak sınırlanmış ve bu sürede hedeflenen bütçe tutarı gerçekleşmediği takdirde girişimciye hiçbir şekilde fon aktarımının yapılmayacağı belirtilmiştir. Ayrıca sözleşmede platformun bu aracılık işlemi için %10 komisyon alacağı yer

almaktadır. Bu platform bir eğitim & bilişim vakfı tarafından yönetilmesinden dolayı bağışlar vakıf hesaplarına yatırılmaktadır. Projenin yayınlandığı 20. gününde İDA Tarım Makineleri A.Ş 110.000 TL'lik tutarı vakfın hesabına yatırarak projenin tamamına fon sağlamıştır. Bu bilgilere göre muhasebe kayıtları aşağıdaki gibi olacaktır.

Vakıf (kitle fonlama platformunu yöneten) tarafından yapılacak kayıt

Vakıflar “Vakıflar Tek Düzen Hesap Planı” gereğince elde ettikleri bağış ve yardım gelirini “603 Bağış ve Yardımlar” hesabına kaydetmektedir. Vakıf senetlerinde belirtilen amaç doğrultusunda yapılan harcamalar ise “633 Amaca Yönelik Giderler” hesabında izlenmektedir. Ayrıca vakıfların tüm işlemleri, her türlü vergi, resim, harç ve katılım payından istisna olmasından dolayı Katma Değer Vergisi hesaplanmamıştır.

102 BANKALAR HESABI

603 BAĞIŞ VE YARDIMLAR	110.000	99.000
643. KOMİSYON GELİRLERİ		11.000
633.AMACA YÖNELİK GİDERLER		
102.BANKALAR	99.000	99.000

Yukarıdaki ilk kayıt proje için alınan bağışı ve komisyon geliri olarak alınan tutarın banka hesabına yatırılmasını, ikinci kayıt girişimciye yapılan bağışın vakfın banka hesabından ödenmesini göstermektedir.

Fon sağlayan (şirket) tarafından yapılacak kayıt

İDA Tarım Makineleri A.Ş tarafından yapılan 110.000 TL'lik bağış, 5520 sayılı Kurumlar Vergisi Kanununda belirtilen koşullara uygun olmadığı için “Kanunen Kabul Edilmeyen Gider” olarak dikkate alınacak ve kurum kazancından indirilmeyecektir.

689. DİĞER OLAĞANDIŞI GİDER VE ZARARLAR

	110.000	
102.BANKALAR		110.000
900.KANUNEN KABUL EDİLMEYEN GİDERLER		
900.01. Bağışlar		
901.KANUNEN KABUL EDİLMEYEN GİDERLER	110.000	
KARŞILIĞI		110.000

Yukarıdaki kayıtlar şirket tarafından yapılan bağışın gider olarak kaydedilmesini ve bu giderin kanunen kabul edilmeyen gider niteliğinde olduğunu göstermektedir. Şirket dönem sonunda kanunen kabul edilmeyen gideri ticari kârına ilave ettikten sonra “900 Kanunen Kabul Edilmeyen Giderler” hesabı ile “901 Kanunen Kabul Edilmeyen Gider Karşılığı” hesabını ters kayıt yaparak kapatacaktır.

Girişimci (fonu alan)

Girişimcinin kitlesele fonlamadan elde ettiği fon, 2023 yılı için belirlenen arızı kazançlara uygulanan vergi istisna tutarının altında olduğu için vergi ödenmeyecektir. Ayrıca girişimci gerçek kişi olduğundan, diğer bir ifadeyle vergi mükellefi sıfatıyla defter tutmakla yükümlü olmadığı için bu fon için herhangi bir muhasebe kaydı yapmayacaktır.

Örnek 2: Orman yangınlarını tespit eden insansız hava aracı (drone) geliştirmeyi hedefleyen bilgisayar mühendisi (ferdi işletme sahibi), 350.000 TL'lik ihtiyacını karşılamak için bağışa dayalı kitle fonlama platformunda kampanyasını başlatmıştır. 90 günlük kampanya döneminde hedeflenen bütçe tutarına ulaşmıştır. Platform, aracılık işleminden %7,5 komisyon aldıktan sonra kalan tutarı mühendisin hesabına aktarmıştır. Kitlesele fonlama platformu bir bilişim vakfı tarafından yönetilmektedir. Bu bilgilere göre muhasebe kayıtları aşağıdaki gibi olacaktır.

Vakıf (kitle fonlama platformunu yöneten) tarafından yapılacak kayıt

Vakıflar “Vakıflar Tek Düzen Hesap Planı” gereğince elde ettikleri bağış ve yardım gelirini “603 Bağış ve Yardımlar” hesabına kaydetmektedir. Vakıf senetlerinde belirtilen amaç doğrultusunda yapılan harcamalar ise “633 Amaca Yönelik Giderler” hesabında izlenmektedir. Ayrıca vakıfların tüm işlemleri, her türlü vergi, resim, harç ve katılım payından istisna olmasından dolayı Katma Değer Vergisi hesaplanmamıştır.

102 BANKALAR HESABI

603 BAĞIŞ VE YARDIMLAR	350.000	323.750
643. KOMİSYON GELİRLERİ		26.250
633.AMACA YÖNELİK GİDERLER		
102.BANKALAR	323.750	323.750

Yukarıdaki ilk kayıt proje için alınan bağışı ve komisyon geliri olarak alınan tutarın banka hesabına yatırılmasını, ikinci kayıt girişimciye yapılan bağışın vakfın banka hesabından ödenmesini göstermektedir.

Fon sağlayanlar tarafından yapılacak kayıt

Bağışçılar gerçek kişi olduğundan, diğer bir ifadeyle vergi mükellefi sıfatıyla defter tutmakla yükümlü olmadığı için bu bağışları için herhangi bir muhasebe kaydı yapmayacaklardır.

Girişimci (fonu alan)

Girişimcinin şahıs işletmesi vardır ve bilanço esasına göre defter tutmaktadır. Kitlesele fonlama platformu üzerinden projesi için bağış alan mühendisin bu geliri, esas faaliyetinden elde ettiği geliri olmadığından "649 Diğer Olağan Gelir ve Kârlar" hesabında izlenecektir. Platforma ödenen komisyon gideri “780 Finansman Giderleri” hesabında izlenecektir.

102 BANKALAR HESABI

780 FİNANSMAN GİDERLERİ

	323.750	
	26.250	
649 DİĞER OLAĞAN GELİR VE KÂRLAR		350.000
649.10. Proje Bağışları		

4.SONUÇ

Anadolu’da köy çocuklarını sanatla tanıştırmak, geleneksel Türk zanaatı yaşatmak veya hareket kabiliyetini kaybetmiş hastalara destek olan dijital asistan tasarlamak gibi sosyal amaçlarla oluşturulan projelerin finansmanı için kitlelerden fon sağlanması bağışa dayalı kitlesele fonlama modeline örnek olarak verilebilir. Türk vergi sisteminde bağışa dayalı kitle fonlamasının vergilendirilmesi için özel bir düzenleme yapılmamıştır. Bu nedenle kitlesele fonlama faaliyetleri yürürlükteki vergi kanunları dikkate alınarak vergilendirilmektedir. Kitle fonlama sürecindeki mali olayların muhasebe kayıtları tekdüzen hesap planı dikkate alınarak yapılmaktadır.

Türkiye’de bağışa dayalı kitle fonlama platformları vakıflar tarafından yönetilmesinden dolayı faaliyetleri 5737 sayılı Vakıflar Kanunu hükümlerine göre işlem yapılmaktadır. Vakıfların hesabına yatırılan bağışlar ve platform komisyon gelirleri vergiden istisnadır. Ayrıca vakıfların tüm işlemleri, her türlü vergi, resim, harç ve katılım payından istisnadır.

Girişimcinin genç girişimcilere sağlanan vergi teşvikinden yararlanabilmesi için 193 sayılı Gelir Vergisi Kanunu’nda belirtilen koşulları taşıması gerekmektedir. Bu koşulların tamamının sağlanması oldukça zordur. Bu nedenle genç girişimci teşvik koşullarının yeniden düzenlenmesi girişimcilerin iş fikirlerini hayata geçirmeleri açısından önemli olacaktır.

Bağış alan girişimcinin kazancı arızı kazanç olarak sayılmakta ve her yıl Maliye Bakanlığı tarafından yayımlanan arızı kazançlara uygulanan istisna tutarı kadar kazancı vergiden istisna tutulmaktadır. Girişimci gelir veya

kurumlar vergisi mükellefi olması durumunda projelerini geliştirmek amacıyla yaptıkları araştırma ve geliştirme faaliyetlerine yönelik bir vergi indiriminden yararlanamamaktadır.

Bağışçı gelir vergisi veya kurumlar vergisi mükellefi olması durumunda, kitle fonlama modelinde yapmış olduğu bağış Gelir veya Kurumlar Vergisi kanunlarında belirtilen koşulları taşımamasından dolayı vergiye tabi kazançlarından indirilememektedir. Bu bağış muhasebe defterine kanunen kabul edilmeyen gider olarak kaydedilmektedir. Bağışçı vergi mükellefi olmaması durumunda ise yaptığı bağışla ilgili bir vergi indirimi hakkına sahip olmamaktadır.

Girişimcilerin ekonomik ve sosyal sorunların çözümüne yönelik yürüttükleri projelerin küçük tasarruf sahipleri tarafından finanse edilebilmesi için bu tasarruf sahiplerine vergi avantajı sağlanması gerekmektedir. Bu, yeni projelerin bağışçılar tarafından desteklenmesini sağlayacağından yeni fikirlerin hayata geçirilmesini kolaylaştıracaktır.

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What is the solution for local development?

Ismail Bulent Gurbuz¹

¹ Bursa Uludağ University, Agricultural Faculty, Dept. of Agricultural Economics, bulent@uludag.edu.tr, ORCID: 0000-0001-5340-3725

Abstract: Local development can be defined as activating the existing potential in cooperation with local actors. The main local actors are public, private and civil institutions such as local governments, development agencies, cooperatives, and universities. These local actors operate based on the governance approach in local development. Public authorities, one of the local actors, “intervene” through some means to accelerate local development. Public intervention is evaluated within the framework of some criteria such as effectiveness, impact and sustainability. The livestock sector plays a vital role in the balanced and healthy nutrition of the increasing population. In particular, this sector aims to reduce the unemployment rate by creating job opportunities in rural areas, prevent migration from rural areas to cities, and contribute to the local economy by creating added value to the products produced: meat, milk, leather, etc. and functions such as supplying raw materials to other sectors.

Keywords: Sustainability, Rural Development, Livestock activities, Employment, Local Community

1. INTRODUCTION

The increasing world population shows that access to food has become critical. (Koknaroglu and Akunal, 2013; Choudhury et al., 2020). Meat and milk production, which are essential outputs of animal husbandry in terms of access to food, are an important source of protein for nutrition (Ayyıldız & Çiçek, 2019; Mazhangara et al., 2019; Ozsaglicak & Yanar, 2021). In addition to food production, the cattle industry is a significant source of income for rural people, developing rural areas and preventing migration from rural to urban areas by creating local employment opportunities and contributing to the industry (Erden et al., 2020; İşler, 2020; Gezginç, 2022).

The main goal of this sector is to produce healthy and highly efficient products. (Diler et al., 2022). To achieve this goal, animals must consume the required feed (Gurbuz & Ozkan, 2019). There are two types of feed in livestock farming. These are called roughages and concentrated feeds. Roughages have low protein and energy and contain plenty of cellulose (Özkan & Şahin Demirbağ, 2016). Concentrate feeds have high energy and protein (Hatipoğlu vd., 2020). Feeds constitute 70% of the costs in livestock farming (Sıkar & Çimrin, 2020). Labor, insurance expenses, veterinarian and medicine expenses, etc., are other expense items in animal husbandry (Çevik, 2021).

In cattle farming, the shelter areas of the animals affect productivity. Open, semi-open, and closed barns are created to shelter cattle (Özbeyaz & Ünal, 2018). These areas' ventilation conditions, waterers, feeders, and stall numbers directly affect animal welfare (Akbay, 2010; Özdemir & Singin, 2016). Animal welfare is defined as the care of animals, their nutrition, housing conditions, the conditions under which they are raised, how they are transported, treatment conditions, or providing a suitable environment for animals, free from pain and suffering during studies (Keeling vd., 2019).

Agricultural activities are a sector that provides lower income, takes a longer time compared to other sector types, and has high risks (Kadağan & Gürbüz, 2022). However, the sustainability of this activity is vital for countries. Agriculture gains importance by meeting the essential nutritional needs of the country's population, providing raw materials to the industry, creating demand for produced products, and contributing to income and exports. In addition, agricultural activities prevent migration from rural to urban areas (Buğrahan, 2019; Gürbüz & Kadağan, 2019).

Countries in the developing period are making great efforts to have a modern economy. The way to have a modern economy is through improving the industrial sector. There is a strong relationship between the agricultural and industrial sectors (Polat, 2017). In other words, it is possible to discuss a strong relationship between the agriculture and industrial sectors in economic development. Countries with this awareness first developed agriculture and then incorporated the raw materials they obtained from agricultural activities into the industry (Buğrahan, 2019).

Development is a concept that expresses social change as the amount of production and per capita income increases. Development is the development of a country's economy, health, education, justice, transportation,

etc. It means material and spiritual development and increasing social welfare (Ari, 2020). More comprehensive development: The region's economic growth, income distribution as somewhat as possible, and social and political development.

The primary purpose of development is to meet the socio-cultural needs of society and raise living standards (Emirkadi, 2019). The concept of development is a concept that emerged with the Industrial Revolution in the 18th century. This concept is used not only in the economic sense but also to develop all other areas (Polat, 2017). The goals and processes of development may change according to the situation and needs of the society in which we live.

The economic situation of less developed regions in Turkey is based on agriculture and animal husbandry, has high population growth, and constantly emigrates to more developed regions, etc., reasons have increased the importance of development (Tutar & Demiral, 2007). Today, economic development has functions such as creating local job opportunities, including the local people in the production process, providing employment opportunities, and increasing per capita national income (Polat, 2017).

Economic development is the increase in the production and income of any country, and with this increase, changes occur in economic, political, social and cultural areas. Economic development is the increase in development in all areas of a country. Generally, developing countries strive to achieve economic development (Korkmaz & Budak, 2022).

Economic development is a phenomenon that affects the welfare and living conditions of citizens. Economic development has multiple dimensions. These are listed as political, administrative, legal, economic, socio-cultural and economic. Moreover, economic development also includes social welfare (Şaşmaz & Yayla, 2018).

The world is rapidly globalizing. For this reason, states must be economically strong to protect their national interests and have their say in international relations. People and societies are obligated to develop economically, socially, politically and at a minimum (Yılmaz ve Gündüz, 2021).

Before 2000, a comprehensive and sustainable support policy for the development of animal husbandry was not implemented in Turkey. While 29 products in crop production are under the scope of support, livestock support policies still need to be revised. However, the support given for animal products is essential in improving the living conditions of animal producers, making animal husbandry a profitable and highly productive sector, increasing the quality of products, and developing the animal product industry. (Erdal et al., 2013; Gurbuz and Ozkan, 2021).

2. THE IMPORTANCE OF LOCAL ECONOMIC DEVELOPMENT AND LIVESTOCK SECTOR IN TERMS OF DEVELOPMENT

Local development has dimensions such as creating local job opportunities and employment environment, involving local individuals in production, and increasing the per capita income of local people. (Tunçsiper and Yılmaz, 2009).

Local development helps to improve the quality of life, improve the situation of poor people, develop the local area, or maintain its current situation. This form of development aims to obtain the maximum benefit from the local community. Within the scope of the target, local non-governmental organizations, politicians, local governments, etc., determine standard policies (Tutar & Demiral, 2007).

Similarly, the concept of local economic development ensures that new business areas are created, beneficial policies are determined that will revitalize the regional economy, and that the policy to be created is at a level that will bring profit to the society. In this way, unemployment is expected to be minimized and poverty reduced (Zengin et al., 2014).

Local development also tends to diversify production, promote tourism, produce high-value-added products, specialize in local products and maximize local production potential. (Gurbuz and Manaros, 2018; Gurbuz et al., 2019; Sevimli, 2020).

The main goals of local economic development are listed as follows (Tunçsiper & Yılmaz, 2009).

1. To ensure economic superiority and competitiveness by using the local or regional economy, human and natural resources,
2. To create a wider employment environment and create long-term career opportunities for the local people,

3. Carefully accepting new investments for further growth and diversification of the local economy,
4. Creating new opportunities by improving the marketing conditions of local products and local resources,
5. To ensure more external resources enter the local and regional economy.

The livestock sector is essential in producing products that create added value by establishing businesses that process agricultural products in local areas and ensuring that these businesses contribute to the local economy (Gürbüz & Kadağan, 2022).

Today, the livestock industry not only meets the nutritional needs of the local people but also has economic benefits. The livestock sector contributes to employment, provides foreign exchange inflow to the country through exports, an increase in national income, and provides economic benefits by providing raw materials to the meat, milk, leather, textile, cosmetics and pharmaceutical industries (Öter, 2019; Satar et al., 2022).

As in all living things, the strongest urge in humans is hunger. Eliminating hunger is directly related to the struggle to continue living. For this reason, societies' main problem is feeding their populations. The necessity of nutrition to continue life makes agriculture a strategic sector. Therefore, great importance is given to the sustainability of this activity (Polat, 2014; Eisler vd., 2014).

Animal products are of great importance in the healthy nutrition of societies and in meeting their protein needs. Meat production in animal husbandry has an important place in Turkey. This activity is an essential income source for the country's economy and the people living in rural areas. In addition, meat is one of the indispensable nutrients for human health. Meat production contributes to the country's economy and is a source of income for families engaged in animal husbandry in rural areas (İşler, 2020; Gezginç, 2022).

In recent years, the integration problems experienced in large-capacity enterprises in the country have yet to bring the sector to the desired level, in small businesses, problems such as less use of technology, low productivity, and lack of market-oriented production due to the predominance of traditional methods. Due to the use of conventional methods in the meat industry in Turkey, slaughtering of butchered animals is done in small slaughterhouses (Polat, 2014).

Another essential raw material obtained from animal husbandry is milk. A healthy, balanced and regular diet, such as milk and meat products, is essential. (Ozkan vd., 2023b). Milk is used as the main ingredient for industry; It is consumed by turning into products such as cheese, yogurt, butter and ayran (İşler, 2020).

Regardless of the economic structure in which the industrial sector is located, it plays a role in developing all sectors that supply input to it. This is also valid for the livestock sector and the industrial sector based on livestock. Livestock farming, the primary income source in rural areas, provides input to many industrial sectors. Thus, the role of animal products in developing the livestock-based industry is gaining importance. Ensuring integrity between animal production and industry in Turkey is necessary to develop the economy. Livestock farming is a type of production that continues throughout the year (Koçyiğit et al., 2022).

In Turkey, as in the rest of the world, some of the inputs required for the industrial sector are met from agriculture and animal husbandry. From this perspective, agriculture and animal husbandry significantly impact the development of agriculture-based industry. There are two types of industries in Turkey that process products obtained from animals. One is the food industry, and the other is the textile and leather industry.

Turkey's population is in a constant increasing trend. The demand for the food, leather, and textile industries is increasing in parallel with the people. For a regular and balanced diet, societies must use animal-derived proteins as raw materials in industry. In addition, societies use clothing and apparel, furniture, etc. The industry uses leather and wool as raw materials to meet the needs. The primary raw material in the dairy industry is milk. Products like yogurt, cheese, and butter are made from processed milk. Of flesh, salami, sausage, bacon, ham etc. is obtained.

The raw materials of the leather industry are also supplied from the livestock sector. From the skin, Bags, furniture coverings, gloves, garment products, and many other items are made and used as input materials. Processing leather and shaping it into goods creates a comprehensive employment environment, producing products with high added value (Uysal, 2002; Karim et al., 2020; Diler et al., 2022).

In order to carry out animal husbandry profitably, the knowledge level of the producers is essential. Farms with cultured cattle have high milk yield and long lactation periods. This situation encourages the amount of milk

produced to be high and produced for market purposes rather than home production. They generate income by giving milk to a dairy farm or cooperative, which increases annual agricultural income.

The livestock sector has social functions such as reducing the unemployment rate prevalent in rural areas and helping to reduce unplanned urbanization by preventing rural-urban migration. The sector helps the country's balanced development, increases national income, and produces meat, milk, leather, cosmetics, etc. It also includes economic function (Seçer & Boğa, 2016).

3. CONCLUSION

Agricultural activities in Turkey have had an important position since the foundation of the Republic. Agricultural activities are activities that must be continued in order to meet the food needs of individuals, to have a healthy diet, and to be the primary source of many industrial products. The livestock sector is one of the leading agricultural activities carried out in rural areas. In particular, cattle breeding creates employment in rural areas and prevents migration from rural to urban areas, meat, milk, cheese, etc. It is a sector whose cultivation is preferred by the public in terms of its contribution to the regional economy by marketing its products.

Most countries in the world are trying to be self-sufficient in food. However, it can only sometimes reach enough food to feed its population. For this reason, countries that consume meat etc. are choosing to import products. Increasing the capacity of small-scale enterprises instead of imports, increasing the amount of products obtained and contributing to the location's economy will help development. For this reason, the state should increase the amount of support it provides for cattle breeding. Capacity expansion studies should be carried out, especially for the growth of small producers.

Producers should be included in modern projects related to animal husbandry, and trainers should bring producers together. In this way, producers should be encouraged to turn to modern technological production techniques instead of traditional ones. Producers' awareness should be raised by organizing training and trips regarding animal breeding and obtaining animal products.

Livestock activities are the source of income for rural areas. However, businesses need more financing to meet all needs arising from production. Since animal production cannot be carried out continuously, it is inevitable for businesses to become active. For this reason, low-cost or interest-free loans should be given to producers who need more capital. Animals should not be mortgaged for loans. Thus, it is estimated that the business will continue its production activities.

The producer must sell the products and raw materials (meat, milk, etc.) produced in the enterprises at the right time, to the right places, at the most affordable price, using the best marketing methods. Here, the importance of cooperatives and unions emerges.

Feed expenses are one of the most critical cost elements in livestock farming. Livestock farms use wheat, barley straw, and straw from other field crops as roughage sources. In dairy cattle farms, it is essential to use green grasses or feeds with high protein content. For this reason, businesses that are planned to be established or are already established must have a minimum of 2.5 decares of irrigated or 5 decares of dry land. It is recommended to policymakers to cover the feed costs of the producer by providing state support in return for low rent to the producer who does not have land. In addition, misuse of meadows and pasture areas, which are cheap animal feed sources, should be prevented.

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Gelişmekte Olan Ekonomilerde Ticari ve Finansal Globalleşmenin Kamu Harcamaları Üzerindeki Etkisi*

Prof. Dr. Jülide YALÇINKAYA KOYUNCU¹

Deniz SONGUR²

¹Bilecik Şeyh Edebali Üniversitesi/ İktisadi ve İdari Bilimler Fakültesi/İktisat Bölümü,
julide.yalcinkaya@bilecik.edu.tr, ORCID: 0000-0001-7930-4901

²Bilecik Şeyh Edebali Üniversitesi / İktisadi ve İdari Bilimler Fakültesi/İktisat Bölümü,
songurdeniz@hotmail.com, ORCID: 0000-0003-2552-2991

Özet: Globalleşme literatüründe etkinlik ve telafi hipotezleri geniş bir şekilde ele alınıp ampirik boyutta irdelenmektedir. Bu çalışmada etkinlik ve telafi hipotezlerinin geçerliliğini on iki farklı kamu harcaması için sınanmaktadır. Dört farklı globalleşme indeksi (fiili ticari globalleşme, yasal ticari globalleşme, fiili finansal globalleşme ve yasal finansal globalleşme indeksi) için analizler gerçekleştirilmiştir. Çalışmanın periyodu olarak globalleşmenin en yoğun olduğu Berlin duvarının çöküşü sonrası dönem (hiper globalleşme dönemi olarak adlandırılan 1989 yılı sonrası dönem) seçilmiş, analizler gelişmekte olan ülkeler örneklemi için dengesiz panel veri seti ve iki yönlü sabit etki modelleri kullanılarak gerçekleştirilmiştir. Ayrıca modellerde tüm değişkenler durağan düzeylerinde kullanılmıştır. Ele alınan dört farklı globalleşme türü için yapılan analizler sonrasında elde edilen sonuçlara göre yoğun bir şekilde istatistiksel olarak anlamlı pozitif katsayılar elde edilmiş olup, bundan dolayı da ağırlıklı bir biçimde telafi hipotezinin geçerli olduğu görülmüştür.

Anahtar Kelimeler: Kamu Harcamaları, Finansal Globalleşme, Ticari Globalleşme, Etkinlik Hipotezi, Telafi Hipotezi, İki Yönlü Sabit Etki Modeli

The Impact of Trade and Financial Globalization on Public Expenditures in Developing Economies

Abstract: In the globalization literature, efficiency and compensation hypotheses are widely discussed and analyzed empirically. In this study, validity of the efficiency and compensation hypotheses for twelve different public expenditures is tested. Analyzes related with four different globalization indexes (De facto trade globalization, de jure trade globalization, de facto financial globalization and de jure financial globalization index) were performed. The period after the collapse of the Berlin wall when globalization was most intense (the post-1989 period, which is called the hyper-globalization period) was chosen as the period of the study, and the analyzes were carried out using unbalanced panel data and two-way fixed effect models for the sample of developing countries. In addition, in the models of the study all variables were used in their stationary levels. According to the results obtained from the analyzes performed for the four different types of globalization, statistically significant positive coefficients were intensely obtained and therefore, it was observed that the compensation hypothesis was predominantly valid.

Key Words: Public expenditure, Financial Globalization, Trade Globalization, Efficiency Hypothesis, Compensation Hypothesis, Two-way fixed Effect Model

1. GİRİŞ

Globalleşme, dünya çapında ekonomik, teknolojik, sosyal, kültürel, politik ve ticari entegrasyonu içeren ve karşılıklı bağımlılığa dayalı uluslararası ilişkiler üreten bir süreçtir. Emek hareketliliği, sermaye hareketliliği, bilgi ve iletişimde yaygınlık globalleşmenin öne çıkan özellikleri arasındadır (Garret, 1998: 139). Anglosakson geçmişli olan Globalleşme (Globalization), İngilizcede “arz küresi, dünya” anlamında olan “globe” kelimesinden türetilmiştir. Kısaca, dünya çapında olmak ya da dönüşmek anlamına gelmektedir (Lubbers, 1996: 1). Türkçede “globalization” ya da “globalizm” kelimesinin tam olarak karşılığı bulunmamakla birlikte görüş birliğinin sağlandığı bir tanımda bulunmadığından farklı disiplinlerde çeşitli tanımlamaları yapılmaktadır. Çok boyutlu ve karmaşık bir yapıya sahip olması nedeniyle farklı disiplinleri ilgilendiren birçok konuyu etkilemekle beraber sade, tek ve bütün alanlarda kabul edilebilen bir tanımlama yapmak zordur (Solmaz, 2014: 105). Bu yüzden globalleşme kavramı sıklıkla belirli görüşler, politikalar, olaylar, kurumlar, teknolojiler, fikirler gibi durumların global düzeyde bulunur bir konuma gelmesini ya da dünya genelinde milli kimliklerin, sınırların ve ekonomilerin çözüldüğü, sosyal yaşamın büyük bir kısmının global aşamalar tarafından belirlendiği, dünyanın ekonomik birliğini oluşturma, toplumların birbirlerine benzemesi şeklinde ifade edilmektedir. (Stiglitz, 2017: 131).

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Globalleşme her alanda etkisini göstermekle birlikte en çok baskın olan, ekonomik globalleşmedir. Ekonomi, globalleşmenin meydana gelmesinde ve gelişmesinde ön plandadır. Globalleşme sadece yurt içi ekonomik birimler ve ekonomik yapı üzerinde etkili bir süreç olmayıp, kamu sektörü faaliyetlerini de etkilemektedir (Busemeyer, 2009: 457). Globalleşmenin kamu harcamaları üzerindeki etkisini inceleyen yaklaşımların en önemli olanı; globalleşme ile birlikte ülkeler arasında yaşanan vergi rekabetinin ülkelerin refah seviyesi ile kamusal harcamalar üzerinde yarattığı etkiye ilişkindir. Globalleşme ve kamu maliyesi arasındaki ilişkiyi açıklayan iki temel teorik yaklaşım; etkinlik hipotezi ve telafi hipotezidir. Telafi (tazminat) ve etkinlik (verimlilik) hipotezinin ortaya çıkış gerekçelerin arasında finansal piyasalarda yaşanan dalgalanmalar ve ekonomik, güvensizliğin yanında gelir dağılımında yaşanan eşit olmayan bir durum hakimdir. Aslında bu durumda üreticiler ve bireyler doğrudan yaşadıkları kayıplar ile gelecekte yaşayabilecekleri riskleri devletin telafi etmesini beklemektedirler. Telafi (tazminat) hipotezi, kamu harcamalarında ve vergilerde artış üzerinde etki yaratan ve globalleşmenin dış risklerini azaltmak için devletin kamu harcamalarını artırarak telafi edici bir rol oynaması gerektiğini savunan bir yaklaşımdır (Garret and Mitchell, 2001: 146). Verimlilik ya da etkinlik hipotezi, vergi rekabetindeki hareketliliğin vergi gelirlerini azaltacağı gerekçesiyle kamu harcamalarını azaltabileceğini öngörür. Teori bunu, kamu gelirlerini oluşturan vergi ve borçlanmanın ülke borçlanmasını arttıracak ve yatırım kararlarını etkileyeceği gerekçesine dayandırır (Tütüncü ve Zengin, 2018: 82). Etkinlik hipotezi dış ticaretin kamu harcamaları üzerinde negatif etkilere sahip olduğunu savunur, oysa telafi hipotezinde böyle bir durum söz konusu değildir.

Literatürde Cameron (1978)'dan sonra en geniş en detaylı çalışma Rodrik (1998) tarafından yapılmıştır. D. Rodrik (1998); ülkelerin dışa açılması ile devlet harcamalarının artıracak olduğunu ortaya koymuştur, devlet harcamalarının artması ile olası refah düşüşlerini telafi edebileceğini savunmuştur. Verimlilik (etkinlik) hipotezi, ekonomilerde globalleşme (genişletilmiş ticaret) düzeyi arttıkça kamu sektörünün boyutunun küçüldüğü görüşünü desteklemekte ve aynı zamanda devletin boyutunun sınırlandırılmasını, refah devletinin küçülmesini, vergi oranlarının düşürülmesini desteklemektedir. Savunma harcamaları, mülkiyet hakkını güvence altına alınması için yapılan kamu harcamaları gibi kamu harcamalarının ülke üreticilerinin global pazardaki rekabet gücünü azalttığı fikri, etkinlik hipotezinin temel tezidir (Garret, 2001: 5)

Globalleşmenin kamu harcamaları ve gelirleri üzerindeki etkisi, genel olarak iki kavram kapsamında incelenmektedir. Bunlar; etkinlik hipotezi ve telafi hipotezidir. Konu ile ilgili literatür ele alındığında, globalleşme ve kamu harcamaları üzerine yapılan çalışmalar geniş kapsamlıdır. Literatürdeki örnekler incelendiğinde; Bernauer ve Achini (2000) 1960-1994 dönemi için globalleşmenin kamu harcamaları üzerindeki etkisini incelemişlerdir. Çalışmada 23 OECD üyesi ve 89 OECD üyesi olmayan ülke ekonomilerini ele almışlardır. Analiz sonucuna göre, kamu harcamaları ve dış ticaret arasında pozitif bir ilişki bulunurken, finansal açıklık ile kamu harcamaları ve ilgili endeks ile arasında anlamlı bir ilişki bulunmamıştır. Sanz ve Velázquez (2003) 1970-1997 dönemini ele alarak globalleşmenin hem kamu büyüklüğünü hem de kamu harcamalarının bileşimini 26 OECD ülkesi için üç aşamalı en küçük kareler yöntemi ile araştırmıştır. Elde edilen bulgulara göre; pozitif bir ilişki bulunmuştur. R.Ram (2009) çalışmasında, 159 ülke ekonomisi için kamu harcamaları ile ticaret açıklığı arasındaki ilişkiyi incelemiş, elde edilen sonuçlarda, pozitif bir ilişki bulunmuştur. D.Sagarik (2014) 2002-2011 dönemi için ASEAN ülkelerini incelediğinde, kamu sağlık harcaması ve dış ticaret arasında pozitif bir ilişki olduğunu gözlemlemiştir. Epifani and Gancia (2009) 143 ülke ekonomisi için 1950-2000 dönemini kapsayan dışa açıklık ile kamu büyüklüğü arasındaki ilişkiyi ele almıştır. Analiz sonucuna göre, kamu büyüklüğü ile dışa açıklık arasında pozitif bir ilişki vardır. Petrou, K. (2014) 102 ülke için 1976-2010 dönemini kapsayan kamu borçlanması ve globalleşme ile kamu boyutu arasındaki ilişkiyi ele almıştır. Elde edilen analiz sonucuna göre, negatif bir ilişki bulunmuştur. M. Pickup (2006) globalleşme ile kamu harcamaları arasındaki ilişkiyi Kanada eyaletleri için araştırmıştır. Elde edilen sonuçlara göre, dış ticaret açıklığı ve kamu tüketim harcamaları ile transfer harcamaları arasındaki ilişki pozitif bulunmuştur. Fedeli (2015) çalışmasında İtalya ekonomisini 1982-2009 dönemi için ekonomik büyüme ile sağlık harcamaları arasındaki ilişkiyi incelemiştir. Bulgulara göre, pozitif bir ilişki olduğu tespit edilmiştir. Balle ve Vaidya (2002) dış ticaret açıklık ile kamu harcamaları arasındaki ilişkiyi Amerika'da bulunan 48 eyalet için 1995-1997 dönemini ele alarak incelemişlerdir. Bulgulara göre, sağlık harcamaları ve sosyal refah harcamalarının dış ticarete açıklık ile arasında pozitif ilişki tespit edilirken, toplam kamu harcamaları için anlamlı bir ilişki olmadığını tespit etmişlerdir. P.Mourao (2007) 1947-2002 yıllarını kapsayan dönemde Portekiz ekonomisi için, dış ticaretin cari kamu harcamaları üzerindeki etkisini incelemiştir. Elde edilen analiz sonucuna göre pozitif bir ilişki bulunmuştur. Figlio ve Blonigen (2000) yaptıkları çalışmada Güney Karolina'da ki 46 ilin beş yıllık ortalama verisi ile globalleşmenin eğitim harcamaları, kamu güvenliği ve ulaşım harcamaları arasındaki ilişkiyi incelemiştir. Elde ettikleri çalışma sonucuna göre globalleşme kişi başına düşen eğitim harcamalarını negatif etkilerken, kamu güvenliği ve ulaşım harcamalarını pozitif olarak etkilediği sonucuna ulaşmışlardır.

Bu çalışma ticari ve finansal globalleşme indikatörlerinin on iki farklı kamu harcamasını nasıl etkilediğini ampirik olarak irdelemektedir. Elde edilen bulgular ticari ve finansal globalleşmenin kamu harcamalarını çoğunlukla pozitif yönde etkilediği görülmüş, bundan dolayı da ağırlıklı bir biçimde telafi hipotezinin geçerli olduğu sonucuna ulaşılmıştır. Çalışmanın ikinci bölümü veri ve metodolojiyi açıklamakta; üçüncü bölüm elde edilen tahmin sonuçlarını açıklayıp tartışmakta; son bölüm sonuç çıkarımında bulunmaktadır.

2. VERİ VE METODOLOJİ

Bu çalışma dengesiz panel veri setini kullanarak on iki farklı türden kamu harcamaları ile globalleşme arasındaki ilişkiyi etkinlik ve telafi hipotezleri bağlamında ele alıp geliştirmekte olan ekonomiler örnekleminde hiper globalleşme dönemi olarak adlandırılan 1989 yılı sonrası için ampirik boyutta irdelemektedir. Örneklem periyodu aralığı en geniş haliyle 1990-2019 yılları arasını kapsamaktadır. Çalışmada içerilen ülke ve yıl sayısı verinin ulaşılabilirliği tarafından sınırlandırılmaktadır. Çalışmada bağımlı değişken olarak on iki farklı kamu harcaması kalemi kullanılmıştır ve bağımlı değişkenlere ait tanımlamalar ve kaynakları aşağıda Tablo 1’de listelenmiştir.

Tablo 1: Kamu harcaması bağımlı değişkenlerinin tanımlamaları ve kaynakları

Değişken	Tanımlama	Kaynak
HARCAMA1	Toplam kamu harcamalarının GSYİH içindeki yüzdesel payı	SPEED
HARCAMA2	Tüketim harcamalarının GSYİH içindeki payı	Penn World Table
HARCAMA3	Sağlık harcamalarının GSYİH içindeki yüzdesel payı	SPEED
HARCAMA4	Eğitim harcamalarının GSYİH içindeki yüzdesel payı	SPEED
HARCAMA5	Sosyal koruma harcamalarının GSYİH içindeki yüzdesel payı	SPEED
HARCAMA6	Savunma harcamalarının GSYİH içindeki yüzdesel payı	SPEED
HARCAMA7	Tarım harcamalarının GSYİH içindeki yüzdesel payı	SPEED
HARCAMA8	Madencilik harcamalarının GSYİH içindeki yüzdesel payı	SPEED
HARCAMA9	Yakıt harcamalarının GSYİH içindeki yüzdesel payı	SPEED
HARCAMA10	Taşımacılık harcamalarının GSYİH içindeki yüzdesel payı	SPEED
HARCAMA11	İletişim harcamalarının GSYİH içindeki yüzdesel payı	SPEED
HARCAMA12	Taşımacılık ve iletişim harcamalarının GSYİH içindeki yüzdesel payı	SPEED

*Statistics on Public Expenditures for Economic Development (SPEED) veri tabanı

Çalışmada kullanılan globalleşme değişkenleri tanım ve kaynakları aşağıda Tablo 2’de gösterilmiştir.

Tablo 2: Globalleşme değişkenlerinin tanımlamaları ve kaynakları

Değişken	Tanımlama	Kaynak
GLOBAL1	Fiili ticari globalleşme indeksi	Gygli vd. (2019)
GLOBAL2	Yasal ticari globalleşme indeksi	Gygli vd. (2019)
GLOBAL3	Fiili finansal globalleşme indeksi	Gygli vd. (2019)
GLOBAL4	Yasal finansal globalleşme indeksi	Gygli vd. (2019)

Bu çalışmada model ve kontrol değişkenler olarak Anderson ve Obeng (2021)’in çalışmasında kullandığı iki-yönlü sabit etki modeli ile temel kontrol değişkenleri kullanılmıştır. Anderson ve Obeng (2021)’in çalışmasında kullandığı temel değişkenler: kişi başı reel GSYİH (RKBGSYİH), bağımlılık oranı (BAĞIMLILIK), kentleşme (KENT), toplam nüfus (NÜFUS) ve fiyat rasyosundan (FİYAT) oluşmaktadır. Modellerde kullandığımız kontrol değişkenlerine ait katsayılarla ilişkin literatürdeki işaret beklentileri; RKBGSYİH için negatif/pozitif, BAĞIMLILIK için pozitif, KENT için negatif/pozitif, NÜFUS için negatif/pozitif, FİYAT için negatif/pozitif şeklindedir.

Bu çalışmada Anderson ve Obeng (2021)’in çalışmasında kullandığı iki-yönlü sabit etki modeli benimsenmiş olup on iki farklı kamu harcama türü için aşağıdaki genel model tahmin edilmiştir:

$$HARCAMA_{it} = \beta_0 + \beta_1 GLOBAL_{it-1} + \beta_2 RKBGSYİH_{it} + \beta_3 BAĞIMLILIK_{it} + \beta_4 KENT_{it} + \beta_5 NÜFUS_{it} + \beta_6 FİYAT_{it} + \lambda_t + \mu_i + u_{it} \quad (1)$$

Yukarıda Eşitlik 1’de it alt indisi $i.ci$ ülkenin t yılındaki gözlem değerini ; λ_t ve μ_i notasyonları iki-yönlü etkinin

sırasıyla zaman etki ve ülke spesifik etki boyutlarını; u_{it} notasyonu regresyon modelinin hata terimini temsil etmektedir. Modelde karşılaşılabilecek potansiyel içsellik sorunundan sakınma amacıyla GLOBAL değişkeni için bir periyot gecikmeli değerleri kullanılmıştır. Modelde yer alan değişkenlerin tamamı için logaritmik değerleri kullanılmıştır ve bu bağlamda tahmin edilen her bir model full-logaritmik modeldir ve bundan dolayı da tahmin edilen katsayılar esneklikleri vermektedir.

3. TAHMİN SONUÇLAR

Fiili ticari globalleşme, yasal ticari globalleşme, fiili finansal globalleşme ve yasal finansal globalleşme ile on iki farklı kamu harcaması arasındaki ilişkiyi etkinlik ve telafi hipotezleri çerçevesinde incelenen analizlere ilişkin elde edilen sonuçlar Tablo 3 ve 4'te raporlanmıştır.

3.1. Fiili Ticari ve Fiili Finansal Globalleşme İçin Tahmin Sonuçları

Fiili ticari ve fiili finansal globalleşme indeksinin kamu harcamaları üzerindeki etkisine ilişkin elde edilen sonuçlar tablo 3'te verilmektedir. GLOBAL1 değişkeni (fiili ticari globalleşme) beş kamu harcamasında en azından %10 düzeyinde istatistiksel olarak anlamlıdır. Bu beş kamu harcamasından üç kamu harcaması pozitif değer alırken, iki kamu harcaması negatif değer almaktadır. Pozitif değer alan kamu harcaması; HARCAMA4, HARCAMA7, HARCAMA10 modellerinde telafi hipotezi geçerliken, HARCAMA8, HARCAMA12 modeli negatif değer almaktadır ve etkinlik hipotezi geçerlidir. En büyük negatif etkiyi, HARCAMA8 değişkeni (Madencilik harcamalarının GSYİH içindeki yüzdesel payı) almaktadır. Fiili ticari globalleşme indeksinde meydana gelecek olan %1'lik artış madencilik harcamalarının GSYİH içindeki payını %0.73 azaltmaktadır. En büyük pozitif etkiyi ise, HARCAMA10 değişkeninde meydana gelmektedir. GLOBAL10 değişkeninde meydana gelecek olan %1'lik artış taşımacılık harcamalarının GSYİH içindeki yüzdesel payını 0.60 arttırırken, en küçük pozitif etkiyi ise HARCAMA4 değişkeninde meydana gelidği görülmektedir. Fiili ticari globalleşme indeksinde meydana gelecek olan %1'lik artış eğitim harcamalarının GSYİH içindeki payını %0.15 arttırmaktadır.

GLOBAL3 değişkenini ifade eden fiili finansal globalleşme indeksinin kamu harcamaları üzerindeki etkisine bakıldığında, üç kamu harcamasında en azından %10 düzeyinde istatistiksel olarak anlamlıdır. HARCAMA1, HARCAMA8 değişkeni pozitif değer almaktadır (telafi hipotezi) geçerlidir. HARCAMA2 değişkeni ise negatif değer alarak etkinlik hipotezi geçerlidir.

RKBGSYİH değişkeni incelendiğinde, beş kamu harcamasında en azından %10 düzeyinde istatistiksel olarak anlamlıdır. Bu beş kamu harcamasından, HARCAMA1, HARCAMA2, HARCAMA9 değişkenleri negatif değer alırken, HARCAMA4, HARCAMA7 değişkenleri ise pozitif değer almaktadır. BAĞIMLILIK değişkeni ise, altı kamu harcamasında en azından %10 düzeyinde istatistiksel olarak anlamlıdır. HARCAMA1, HARCAMA5, HARCAMA8 değişkenleri negatif değer almaktadır, HARCAMA3, HARCAMA4, HARCAMA12 değişkenleri ise pozitif değer almaktadır.

KENT değişkenine bakıldığında, altı kamu harcamasında istatistiksel olarak en azından %10 düzeyinde anlamlıdır. HARCAMA9, HARCAMA10 değişkenleri negatif değer almaktadır, HARCAMA1, HARCAMA2, HARCAMA4, HARCAMA6 değişkenleri ise pozitif değer almaktadır.

NÜFUS değişkeni sadece sekiz kamu harcamasında %10 düzeyinde istatistiksel olarak anlamlıdır. Sadece HARCAMA9 değişkeni pozitif değer alırken, HARCAMA1, HARCAMA2, HARCAMA3, HARCAMA4, HARCAMA5, HARCAMA6, HARCAMA10 değişkenleri negatif değer almaktadır.

FİYAT değişkeni ise, sadece dokuz kamu harcamasında %10 düzeyinde istatistiksel olarak anlamlıdır. Bu dokuz kamu harcamasından sadece HARCAMA4, HARCAMA7 değişkeni pozitif değer almaktadır. Negatif değer alanlar ise, HARCAMA1, HARCAMA2, HARCAMA5, HARCAMA6, HARCAMA8, HARCAMA10, HARCAMA12 değişkenleridir.

Modellerin açıklama gücünü yansıtan R kare değerleri incelendiği zaman en büyük değeri, HARCAMA2 (tüketim harcamalarının GSYİH içindeki yüzdesel payı) değişkeni 0.8056 değeri ile almaktadır. En düşük değeri ise 0.5026 ile HARCAMA11 değişkeni (taşımacılık harcamalarının GSYİH içindeki yüzdesel payı) almaktadır. F testi sonuçlarına bakıldığında ise on iki modelin her birinde P değerleri %1'de istatistiksel anlamlı olduğu sonucunu vermektedir.

Tablo 3. Fiili Ticari ve Fiili Finansal Globalleşme için Analiz Sonuçları

Bağımlı değişken==>	HARCAMA 1	HARCAMA 2	HARCAMA 3	HARCAMA 4	HARCAMA 5	HARCAMA 6	HARCAMA 7	HARCAMA 8	HARCAMA 9	HARCAMA 10	HARCAMA 11	HARCAMA 12
Sabit Terim	10,7750	1,2934	10,7987	10,4348	17,5358	6,4219	-2,3685	15,7761	-23,9563	24,5428	3,8010	-0,0154
P-değeri	0,0001	0,0000	0,0017	0,0002	0,0073	0,0333	0,5705	0,1376	0,0398	0,0001	0,8823	0,9987
GLOBAL1	0,3254	0,0005	0,0918	0,1555	0,1431	-0,0191	0,3089	-0,7381	0,0909	0,6053	0,8195	-0,3392
P-değeri	0,3773	0,6524	0,2018	0,0090	0,2993	0,7621	0,0013	0,0004	0,6938	0,0000	0,1906	0,0972
GLOBAL3	0,3254	-0,0094	-0,0158	-0,0580	-0,0061	-0,0840	-0,0509	0,4120	0,2851	-0,1837	0,2984	-0,2952
P-değeri	0,0000	0,0000	0,8248	0,3257	0,9645	0,1841	0,5901	0,0485	0,2125	0,1298	0,5601	0,1335
RKBGSYİH	-0,9414	-0,0156	0,2656	0,2547	-0,3691	0,1530	1,0787	-0,3913	-1,0575	0,1926	0,0691	0,3605
P-değeri	0,0000	0,0000	0,1534	0,0803	0,2929	0,3508	0,0000	0,5066	0,0969	0,5756	0,9451	0,3569
BAĞIMLILIK	-0,9911	0,0018	0,8405	0,6963	-1,7813	-0,2284	0,6317	-2,8662	-0,7819	-0,5811	2,1842	2,5721
P-değeri	0,0007	0,7235	0,0079	0,0082	0,0035	0,4165	0,1498	0,0051	0,4401	0,2855	0,2780	0,0022
KENT	0,4493	0,0221	0,1018	0,3673	0,0900	0,6762	-0,2518	-0,1971	-3,0443	-0,9465	1,4702	0,7024
P-değeri	0,0113	0,0000	0,5996	0,0089	0,8093	0,0003	0,3499	0,7373	0,0000	0,0049	0,4681	0,3377
NÜFUS	-0,4405	-0,0204	-0,8592	-0,8252	-0,7034	-0,4365	-0,0243	-0,3409	2,1517	-1,2501	-1,5244	-0,5905
P-değeri	0,0090	0,0000	0,0000	0,0000	0,0568	0,0107	0,9245	0,5557	0,0003	0,0001	0,2457	0,3090
FİYAT	-0,2516	-0,0384	-0,0324	0,1292	-0,2052	-0,1134	0,2071	-0,2418	-0,1122	-0,1740	-0,0760	-0,3098
P-değeri	0,0000	0,0000	0,4429	0,0002	0,0116	0,0023	0,0007	0,0750	0,4696	0,0335	0,8356	0,0026
Yıl sayısı	28	30	28	28	28	28	28	28	28	28	28	28
Ülke sayısı	101	113	85	85	85	81	93	80	64	77	54	69
Gözlem sayısı	2284	3359	1660	1676	1619	1546	2015	1279	1046	1326	555	796
R-kare	0,6020	0,8056	0,7205	0,7729	0,7453	0,7787	0,6219	0,6020	0,5630	0,5834	0,5026	0,6023
F-ist.	24,2590	89,8990	33,6653	44,9024	37,1920	44,1578	24,6486	15,5960	12,5905	15,4666	5,4247	10,2896
P-değeri(F-ist)	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000

3.2. Yasal Ticari ve Yasal Finansal Globalleşme için Tahmin Sonuçları

Yasal ticari ve yasal finansal globalleşme indeksinin kamu harcamaları üzerindeki etkisine ilişkin bulgular tablo 4'te verilmiştir. GLOBAL2 değişkeni yasal ticari globalleşme indeksini temsil etmektedir. GLOBAL2 değişkeni on iki kamu harcamasının altı kamu harcamasında (HARCAMA2, HARCAMA3, HARCAMA4, HARCAMA7, HARCAMA8, HARCAMA10) değişkeninde en az %10 düzeyinde istatistiksel olarak anlamlıdır. HARCAMA2 değişkeni pozitif değer olarak telafi hipotezi geçerlidir, HARCAMA3, HARCAMA4, HARCAMA7, HARCAMA8, HARCAMA10 değişkenlerinde ise etkinlik hipotezi geçerlidir, negatif değer almaktadırlar. En büyük negatif etki HARCAMA8 değişkeninde olduğu görülmektedir. GLOBAL2de meydana gelecek olan %1'lik artış madencilik harcamalarının GSYİH içindeki yüzdesel payını %0.69 azaltmaktadır.

Yasal finansal globalleşme indeksinin (GLOBAL4) kamu harcamaları üzerindeki etkisine ilişkin sonuçları incelendiğinde, on iki kamu harcamasının beş kamu harcamasında en azından %10 düzeyinde istatistiksel olarak anlamlıdır. Bu anlamlı beş kamu harcamasından iki tanesi pozitif değer olarak (HARCAMA3, HARCAMA4) telafi hipotezi geçerlidir. HARCAMA2, HARCAMA8, HARCAMA12 değişkenleri ise negatif değer olarak etkinlik hipotezi geçerli olmaktadır. En büyük pozitif etkiyi HARCAMA4 (eğitim harcamalarının GSYİH içindeki yüzdesel payı) değişkeni almaktadır. GLOBAL4 te meydana gelecek %1'lik artış eğitim harcamalarının GSYİH içindeki yüzdesel payını %0.14 arttırmaktadır. En büyük negatif etkiyi ise HARCAMA12 (iletişim ve taşımacılık harcamalarının GSYİH içindeki yüzdesel payı) değişkeninde meydana gelmektedir. Finansal globalleşme indeksinde meydana gelecek olan %1'lik artış iletişim ve taşımacılık harcamalarının GSYİH içindeki payını %0.85 azaltmaktadır.

RKBGSYİH değişkeninde sadece dört kamu harcaması en azından %10 düzeyinde istatistiksel olarak anlamlıdır. HARCAMA1 ve HARCAMA2 değişkeni negatif değer alırken, HARCAMA4, HARCAMA7 değişkeni pozitif değer almaktadır. BAĞIMLILIK değişkeni incelendiği zaman, sadece yedi kamu harcamasında en azından %10 düzeyinde istatistiksel olarak anlamlıdır. HARCAMA3, HARCAMA4, HARCAMA12 değişkenleri pozitif değer almaktadır. HARCAMA1, HARCAMA5, HARCAMA8, HARCAMA10 değişkenleri ise negatif değer almaktadır.

Tablo 4: Yasal Ticari ve Yasal Finansal Globalleşme için Analiz Sonuçları

Bağımlı değişken==>	HARCAMA 1	HARCAMA 2	HARCAMA 3	HARCAMA 4	HARCAMA 5	HARCAMA 6	HARCAMA 7	HARCAMA 8	HARCAMA 9	HARCAMA 10	HARCAMA 11	HARCAMA 12
Sabit Terim	17,6172	1,1625	11,1488	9,3019	17,7029	4,5206	-1,3280	23,0653	-16,0755	24,7854	14,9878	-0,9757
P-değeri	0,0000	0,0000	0,0003	0,0002	0,0027	0,0957	0,7369	0,0136	0,1190	0,0000	0,5325	0,9163
GLOBAL2	-0,0363	0,0027	-0,2197	-0,1034	-0,1168	-0,0740	-0,1959	-0,6961	-0,0051	-0,2281	0,3319	0,1433
P-değeri	0,5430	0,0251	0,0007	0,0520	0,3423	0,1975	0,0271	0,0002	0,9797	0,0367	0,4537	0,4467
GLOBAL4	-0,0108	-0,0023	0,1341	0,1446	0,1555	0,0304	0,0172	-0,3843	0,3030	0,1041	-0,0174	-0,8530
P-değeri	0,8569	0,0533	0,0390	0,0075	0,2197	0,6046	0,8512	0,0426	0,1896	0,3395	0,9682	0,0000
RKBGSYİH	-0,8106	-0,0209	0,2683	0,2552	-0,3404	0,1027	1,1393	-0,3749	-0,8895	0,1815	0,0251	0,3040
P-değeri	0,0000	0,0000	0,1444	0,0776	0,3284	0,5283	0,0000	0,5161	0,1529	0,5950	0,9805	0,4344
BAĞIMLILIK	-1,2229	-0,0021	0,9010	0,8760	-1,5672	-0,3673	0,5300	-3,6783	-1,3841	-1,0257	1,2529	2,1380
P-değeri	0,0001	0,7206	0,0076	0,0020	0,0170	0,2223	0,2680	0,0004	0,2145	0,0836	0,5445	0,0127
KENT	0,3978	0,0153	0,1052	0,3838	0,0723	0,7303	-0,2386	-0,0143	-3,1511	-0,8059	1,4503	0,9947
P-değeri	0,0270	0,0000	0,5858	0,0065	0,8467	0,0001	0,3760	0,9804	0,0000	0,0165	0,4903	0,1797
NÜFUS	-0,6948	-0,0119	-0,8589	-0,7880	-0,7350	-0,3182	0,0306	-0,4780	1,8466	-1,0711	-1,8001	-0,4861
P-değeri	0,0000	0,0000	0,0000	0,0000	0,0328	0,0451	0,9019	0,3700	0,0007	0,0005	0,1488	0,3837
FİYAT	-0,2110	-0,0381	-0,0053	0,1473	-0,1856	-0,1138	0,2503	-0,1929	-0,0788	-0,1161	-0,1798	-0,3630
P-değeri	0,0000	0,0000	0,8993	0,0000	0,0232	0,0022	0,0000	0,1541	0,6125	0,1560	0,6200	0,0004
Yıl sayısı	28	30	28	28	28	28	28	28	28	28	28	28
Ülke sayısı	100	110	84	84	84	81	92	78	63	76	53	68
Gözlem sayısı	2266	3193	1648	1664	1607	1541	2003	1271	1034	1314	545	786
R-kare	0,5947	0,7990	0,7229	0,7724	0,7445	0,7791	0,6204	0,6040	0,5633	0,5831	0,4875	0,6146
F-ist.	23,5207	83,5368	34,1078	44,8381	37,0792	44,1146	24,5383	15,9281	12,5914	15,4525	5,0657	10,7979
P-değeri(F-ist.)	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000

KENT değişkeni yalnızca altı kamu harcamasında en azından %10 düzeyinde istatistiksel olarak anlamlıdır. HARCAMA9, HARCAMA10 değişkenleri negatif değer almaktadır. HARCAMA1, HARCAMA2, HARCAMA4, HARCAMA6 değişkenleri ise pozitif değer almaktadır. NÜFUS değişkeni ele alındığında sadece sekiz kamu harcamasında %10 düzeyinde istatistiksel olarak anlamlıdır. Sadece HARCAMA9 değişkeni pozitif değer almaktadır, HARCAMA1, HARCAMA2, HARCAMA3, HARCAMA4, HARCAMA5, HARCAMA6, HARCAMA10 değişkeni ise negatif değer aldığı görülmektedir. FİYAT değişkeni ise, sadece yedi kamu harcamasında en azından %10 düzeyinde istatistiksel olarak anlamlıdır. HARCAMA4, HARCAMA7 değişkenleri pozitif değer alırken, HARCAMA1, HARCAMA2, HARCAMA5, HARCAMA6, HARCAMA12 değişkenleri negatif değer aldığı görülmektedir. Modelin R kare değerine bakıldığı zaman en yüksek değeri HARCAMA2 (Tüketim harcamalarının GSYİH içindeki yüzdesel payı) değişkeni 0.7990 ile alırken, en düşük ise HARCAMA11 (iletişim harcamalarının GSYİH içindeki yüzdesel payı) değişkeni 0.4875 değeri ile almaktadır. F testi sonuçlarına bakıldığında da on iki modelin p değeri %1 düzeyinde istatistiksel olarak anlamlı olduğu tespit edilmektedir.

4. SONUÇ

Bu çalışma on iki farklı kamu harcaması için globalleşme literatüründe var olan etkinlik ve telafi hipotezlerinin geçerliliğini ampirik olarak analiz etmektedir. Çalışmada dengesiz panel veri seti ve iki yönlü sabit etki modelleri kullanılarak hiper globalleşme döneminde (1989 yılı sonrası dönem) söz konusu hipotezlerin geçerliliği sınanmıştır. Ele alınan globalleşme türleri; fiili ticari globalleşme, yasal ticari globalleşme, fiili finansal globalleşme ve yasal finansal globalleşme indeksidir.

Fiili ticari ve fiili finansal globalleşme indeksi ayrı ayrı ele alınıp incelendiği zaman fiili ticari globalleşme indeksi ile on iki kamu harcamasından beş kamu harcaması istatistiki olarak anlamlıdır. Anlamlı olan bu beş kamu harcaması (eğitim harcamalarının GSYİH içindeki yüzdesel payı, tarım harcamalarının GSYİH içindeki yüzdesel payı, madencilik harcamalarının GSYİH içindeki yüzdesel payı, taşımacılık harcamalarının GSYİH içindeki yüzdesel payı, taşımacılık ve iletişim harcamalarının GSYİH içindeki yüzdesel payı)dır. Bu beş kamu harcamasından üçü pozitif kat sayı olarak telefi hipotezi (eğitim harcamalarının GSYİH içindeki yüzdesel payı, tarım harcamalarının GSYİH içindeki yüzdesel payı, taşımacılık harcamalarının GSYİH içindeki yüzdesel payı) tespit edilirken diğer iki kamu harcaması ise negatif değer olarak etkinlik hipotezi (madencilik harcamalarının GSYİH içindeki yüzdesel payı, taşımacılık ve iletişim harcamalarının GSYİH içindeki yüzdesel payı) elde edilmiştir. Fiili finansal globalleşme indeksi incelendiğinde on iki kamu harcamasından üçü (toplam kamu harcamalarının GSYİH içindeki yüzdesel payı, tüketim harcamalarının GSYİH içindeki yüzdesel payı, madencilik harcamalarının

GSYİH içindeki yüzdesel payı) istatistiki olarak anlamlıdır. Bir tanesi negatif kat sayı değeri olarak (tüketim harcamalarının GSYİH içindeki yüzdesel payı) etkinlik hipotezi tespit edilmiştir. Diğer ikisi ise telafi hipotezi geçerlidir diğer bir ifade ile pozitif kat sayı değeri (toplam kamu harcamalarının GSYİH içindeki yüzdesel payı, madencilik harcamalarının GSYİH içindeki yüzdesel payı) almıştır.

Yasal ticari ve yasal finansal globalleşme indeksine ayrı ayrı bakıldığında, yasal ticari globalleşme indeksi ile on iki kamu harcamasından altı kamu harcaması (tüketim harcamalarının GSYİH içindeki yüzdesel payı, sağlık harcamalarının GSYİH içindeki yüzdesel payı, eğitim harcamalarının GSYİH içindeki yüzdesel payı, tarım harcamalarının GSYİH içindeki yüzdesel payı, madencilik harcamalarının GSYİH içindeki yüzdesel payı, taşımacılık harcamalarının GSYİH içindeki yüzdesel payı) istatistiki olarak anlamlıdır. Bu anlamlı altı kamu harcamasından bir tanesi pozitif kat sayı değeri olarak (tüketim harcamalarının GSYİH içindeki yüzdesel payı) telefi hipotezi elde edilmiştir. Diğer beş kamu harcaması ise; negatif kat sayı olarak (sağlık harcamalarının GSYİH içindeki yüzdesel payı, eğitim harcamalarının GSYİH içindeki yüzdesel payı, tarım harcamalarının GSYİH içindeki yüzdesel payı, madencilik harcamalarının GSYİH içindeki yüzdesel payı, taşımacılık harcamalarının GSYİH içindeki yüzdesel payı) etkinlik hipotezi tespit edilmiştir. Yasal finansal globalleşme indeksi ile on iki kamu harcamasından beş kamu harcaması (tüketim harcamalarının GSYİH içindeki yüzdesel payı, sağlık harcamalarının GSYİH içindeki yüzdesel payı, eğitim harcamalarının GSYİH içindeki yüzdesel payı, madencilik harcamalarının GSYİH içindeki yüzdesel payı, taşımacılık ve iletişim harcamalarının GSYİH içindeki yüzdesel payı) istatistiki olarak anlamlıdır. İki kamu harcamasında telafi hipotezi geçerli olmuştur diğer bir ifade ile pozitif kat sayı (sağlık harcamalarının GSYİH içindeki yüzdesel payı, eğitim harcamalarının GSYİH içindeki yüzdesel payı) elde edilmiştir. Diğer üç kamu harcamasında ise etkinlik hipotezi geçerli olmuştur yani negatif değeri (tüketim harcamalarının GSYİH içindeki yüzdesel payı, madencilik harcamalarının GSYİH içindeki yüzdesel payı, taşımacılık ve iletişim harcamalarının GSYİH içindeki yüzdesel payı) almıştır.

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Türkiye’de Globalleşmenin Tarımsal Hammadde İhracatı Üzerine Etkisi: ARDL Analizi*

Prof. Dr. Jülide YALÇINKAYA KOYUNCU¹

İmdat Yasin GÜNGÖR²

¹Bilecik Şeyh Edebali Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, İktisat Bölümü,

e-mail: julide.yalcinkaya@bilecik.edu.tr, ORCID: 0000-0001-7930-4901

² Bilecik Şeyh Edebali Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, İktisat Bölümü,

e-mail: imdatyasingunor@gmail.com, ORCID: 0009-0003-1528-3007

Özet: Bu çalışma Türkiye örneklemini bağlamında globalleşme ile tarımsal hammadde ihracatı arasında kısa ve uzun dönem ilişkisini ARDL metodu yardımıyla analiz etmektedir. Çalışma hiper globalleşme (1989 yılı sonrasını) dönemini kapsamaktadır. globalleşmeye ilave olarak tarım sektörü istihdamı ve tarım sektörü katma değeri kontrol değişkenleri olarak kullanılmıştır. Yapılan birim kök test sonuçları sonrasında serilerin her birinin ARDL eş-bütünleşme testinin şartına (düzeylerde veya birinci farklarda durağan olma şartına) uygun olduğu görülmüştür. Eş-bütünleşme testi sonuçları %1 anlamlılık düzeyinde globalleşme değişkeni ile tarımsal hammadde ihracatı, tarım sektörü istihdamı ve tarım sektörü katma değeri değişkenleri arasında eş-bütünleşme ilişkisi olduğunu ortaya koymaktadır. Elde edilen uzun dönem katsayılarına göre; globalleşme tarımsal hammadde ihracatını azaltır iken tarım sektörü istihdamı ve tarım sektörü katma değeri tarımsal hammadde ihracatını arttırmaktadır. globalleşmedeki %1’lik artış tarımsal hammadde ihracatını %1.6782 azaltmaktadır. Diğer taraftan tarımsal istihdam ve katma değerdeki %1’lik artışlar tarımsal hammadde ihracatını sırasıyla %2.9885 ve %3.1680 arttırmaktadır.

Anahtar Kelimeler: Türkiye, Globalleşme, Tarımsal Hammadde İhracatı, Birim Kök Testi, ARDL Analizi

The Impact of Globalization on Agricultural Raw Material Exports in Turkey: ARDL Analysis

Abstract: This study analyzes the short-run and long-run relationship between globalization and agricultural raw material exports in the context of Turkey by using the ARDL method. The study covers the period of hyper globalization (i.e., after 1989). In addition to globalization, agricultural sector employment and agricultural sector value added are used as control variables. After the unit root test results, it was found that each of the series complied with the condition of the ARDL co-integration test (i.e., condition of being stationary at levels or at first differences). The co-integration test results reveal that there is a co-integration relationship between the globalization variable and agricultural raw material exports, agricultural sector employment and agricultural sector value added variables at 1% significance level. According to the obtained long-run coefficients; globalization decreases agricultural raw material exports, while agricultural sector employment and agricultural sector value added increase agricultural raw material exports. A 1% increase in globalization decreases agricultural raw material exports by 1.6782%. On the other hand, 1% increases in agricultural employment and value added enhance agricultural raw material exports by 2.9885% and 3.1680%, respectively.

Key Words: Turkey, Globalization, Agricultural Raw Material Exports, Unit Root Test, ARDL Analysis

1. GİRİŞ

İnsanoğlunu ilk çağlardan beri meşgul eden ve sayesinde medeniyetin ilk temellerinin atılmasına sebep olan şeydir tarım. Üretim araçlarının da ortaya çıkmasıyla birlikte bu durum ilkel çağlarda kapitalizmin oluşmasına sebep olmuştur. Merkantalizmin etkisini kaybetmesiyle birlikte, tarımın sadece ülke içindeki dolaşımı zamanla dış ülkelere de açılarak, ülkeler arası tarım ticareti başlamıştır. Motorlu araçların gelişmesi ile birlikte, ürün taşımacılığı kolaylaşmıştır ve ileriki dönemlerde iletişimin de kapsamlı hale gelmesi ile birlikte Küreselleşme dediğimiz kavram ortaya çıkmıştır. Bu kavram sayesinde insan ve ürün taşımacılığı üst seviyeye çıkmış ve konumuz olan tarımsal işçilerin ve ürettiği tarımsal ürünlerin ülke içi ve ülkelerarası dolaşımı çoğalmıştır. Burada yine direkt yabancı yatırım da ticareti ve direkt olarak tarım ticaretini etkilemektedir (Anderson, 2010: 3010).

Küreselleşme ile birlikte artık tarım sermayenin etkisi altına girmeye başlamıştır. Bunun sebeplerinden bazıları, çokuluslu şirketlerin küresel düzeyde büyümeleri, bankaların tarımsal destekleri ve kredileri, Dünya Ticaret

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Örgütü ve Uluslararası Para Fonu başta olmak üzere çeşitli ticarete yön verici kurumların oluşturduğu kurallardır (Kapdan, 2022: 16).

Türkiye bazında baktığımızda Cumhuriyetin ilk yıllarından İkinci Dünya Savaşı'na kadar tarımın rolü GSYH ve ihracatta çok önemliydi fakat verimli bir tarımın olduğu söylenemez (Kaya ve Kalaycı, 2021: 24). İkinci Dünya Savaşı yıllarında korumacı ekonomi politikalarından dolayı devletçi bir duruş sergilenmiş ve tarım politikalarına müdahale edilmiştir (Şener, 2004:74). Savaşın ardından tarımsal atılımlar yapılmak istenmiştir ve 1945'te Toprak Reformu ile toprak ağaların bulunan fazla topraklar, toprağı olmayan çiftçilere dağıtılarak refah ve serbest rekabet hedeflenmiştir. Demokrat Parti'nin hükümete gelmesiyle birlikte tarımda modernleşmeler yaşanmış ve liberal politikalar adım atılmıştır. Makineleşme, ürün fiyatlarına devlet desteği ve kentleşmedeki hızlanma tarımsal üretimde büyümeyi de beraberinde getirmiştir (Kaya ve Kalaycı, 2021: 26). 1980'li yıllara kadar tarımsal politikalar kalkınma planları ile devam etmiştir.

1980'li yıllar ise Türkiye'nin gerçek küreselleşme ve liberalizm ile tanıştığı yıllar olmuştur. Küreselleşme ile büyük ekonomik değişimlerin yaşandığı bu yıllarda serbest piyasa ekonomisine geçiş ile birlikte yabancı yatırımın Türkiye'ye gelmesi ve dış ticarete serbestleşme hedeflenmiştir. Bu Türkiye'deki çiftçilerin hem uluslararası tarım ticareti ile rekabet etmeleri hem de üretilen ürünlerin uluslararası pazarda değer görebileceği anlamına geliyordu. Neoliberal politikalar neticesinde bu durum devletin ekonomi üzerindeki etkisini azaltması ile sonuçlanmış ve kamu desteğine hâlâ ihtiyaç duyan tarım sektörünü ve tarımsal hammadde ihracatını olumsuz etkilemiştir (Aydın, 2012: 76). Küresel olarak baktığımızda ise çoğu gelişmiş ve gelişmekte olan ülke tarımın önemini anlamış ve bu konuda gerekli adımları atmaya başlamıştır (Anderson, 2010: 3011). Kazgan'a göre, 1990'lı yıllarda her ne kadar IMF ve WB gibi kurumların güdümünde sorunlar kaldırılmaya çalışıldı ise de 2000'lerin ortalarında daha büyük sorunlar ortaya çıkmıştır (Aydın, 2012: 76).

1990'ların sonlarında süregelen politikaların, piyasa mekanizmalarını bozduğu ve gelir dağılımında adaletsizliklere yol açtığı belirtilerek Dünya Bankası'nın teknik ve mali destekleri ile birlikte Tarım Reformu Uygulama Projesi hazırlanmıştır ve bu proje ile birlikte güçlü bir ekonomi hedeflenmiştir. Bu projeyi şekillendiren etmenlerden bazıları Dünya Ticaret Örgütü ve Avrupa Birliği ile yapılan görüşmeler ve anlaşmalar sonucunda ortaya çıkan reform ihtiyaçlarıdır (Akder, 2007: 515). Böylelikle hem Avrupa Birliği için hem de mevcut tarımsal sorunları çözebilmek için belirli reformlar yapılmıştır (Eğri, 2014: 92). Günümüzde de bu politikalar belirli dönüşümler yaşasa da, özellikle 2008 döneminde gıda krizinin ardından, genel olarak benzeri şeklindedir.

Ülkemizin diğer ülkelerden farklı olduğu nokta ise coğrafyasıdır. Çeşitli ürünlerin yetiştirilebileceği bir toprağa sahip olmasının yanında, her ne kadar küreselleşme dünyayı birbirine bağlamış olsa da bulunduğu stratejik konumundan dolayı çevre ülkelere tarımsal ürünleri ihraç edebilir. Örneğin Furtan ve Melle'nin (2004) ele aldığı Kanada'nın Kuzey Amerika ülkeleri ile tarımsal ticaretinde sınırın ne kadar önemli olduğu hakkındaki çalışmasında, sınırın olmasının pozitif bir etken olduğu ortaya konmuştur. Grant ve Lambert'in (2008) farklı bölgesel ticaret anlaşmalarının tarımsal ticareti ne ölçüde etkilediği hakkındaki çalışmasında ise denizden uzaklık ve diğer ülkeye olan uzaklığın ticarete negatif, fakat ortak dil ve ülkelerin birbiri ile sınırlarının olmasının ticaret artırıcı etmenler olduğunu bulmuşlardır.

Küreselleşme ve nüfusun artışı ile birlikte dünya genelinde gıda krizleri baş göstermeye başlamıştır. Bu krizler genel olarak gelişmekte olan ülkelerin verimsiz bir şekilde tarım yapmaları veya tarımı önemsemeden sanayi atılımları yapmalarıdır. 2008'de yaşanan Dünya Gıda Krizi sebebiyle tarımın önemi anlaşılmıştır çünkü tarım insanların birincil ihtiyaçlarından birisidir. Türkiye de gerekli tarım ve ticaret politikalarını yapmadığı takdirde gıda krizi yaşaması kaçınılmazdır. Nitekim Messer ve Cohen'in (2006) çalışmasında Türkiye yüzde 3'lük bir oranla gıda güvensizliği (yani toplumda yeterli gıdaya ulaşamayanların toplam nüfus içindeki oranı) yaşamaktadır. Fakat Çin ve Hindistan'ın benimsediği tarımsal ve sanayi kalkınması (Romano, 2006:1) Türkiye'de de uygulanırsa hem gıda güvensizliği azalır hem de bu ülkelerde yaşanan yoksulluğun azalması ülkemizde de görülebilir. Bir diğer konu olan bio-yakıt ise tarımda, teknolojiye ve uluslararası ticarete yapılacak politikalar ile daha verimli bir üretimin olması gerektiğini kanıtlar niteliktedir (Anderson, 2013: 423).

2. DATA ve METEDOLOJİ

Bu çalışma globalleşme ile tarımsal hammadde ihracatı arasındaki kısa ve uzun dönem ilişkisini ARDL metodu yardımıyla 1991-2020 yılları için Türkiye örneklemini kullanarak analiz etmektedir. Globalleşmenin ihracat üzerinde iki yönlü etkisi olabilir. Bir taraftan globalleşmedeki artış ülkelerin diğer ülkelere göre üretim avantajını ellerinde bulundurdıkları ve rekabet güçlerinin yüksek olduğu ürünlerine yönelik ihracatı arttırabilir. Diğer

tarafından globalleşmedeki artışın etkisiyle ilgili sektörün ya da ürünün yerli üretiminin ithal ürünlerle ikame edilmesi sonucunda ihracat düzeyinde düşüş meydana gelebilir. Bu çalışmada globalleşmenin Türkiye’deki tarımsal hammadde ihracatını etkileme yönünün tespit edilmesi amaçlanmaktadır. Çalışmada yer alan ihracat (İHRACAT) değişkeni tarımsal hammadde ihracatının ticari mal ihracatı içerisindeki yüzdesel payını temsil etmektedir. Globalleşme değişkeni (GLOBAL) genel globalleşme indeksini göstermektedir. Tarımda istihdam değişkeni (İSTİHDAM) tarımda istihdamın toplam istihdam içerisindeki yüzdesel payıdır. Tarım sektörünün temel girdisi olan emek girdisinin miktarındaki artışın tarımsal üretimi artırması, üretim artışının ise tarım sektörü ihracatını arttırması beklenmektedir. (KATMADEĞER) değişkeni 2015 sabit fiyatlarıyla ABD doları cinsinden tarım, ormancılık ve balıkçılık sektörü katma değer şeklinde tanımlanmaktadır ve tarım sektöründeki verimliliğin göstergesi olarak modele dahil edilmiştir, verimlilik artışının üretimi arttıracak ve buna bağlı olarak da tarım sektörü ihracatının artacağı beklenmektedir. Tek başına tarım sektörü katma değerini içeren veri bulunmadığı için bu veri esas alınmıştır. Globalleşme için KOF Globalisation Index kullanılırken, diğer değişkenler WDI veri tabanından alınmıştır. Analizlerde tüm değişkenlerin logaritmik formları kullanılmıştır.

ARDL sınır testi için aşağıdaki model tahmin edilmiştir:

$$\Delta \text{İHRACAT}_t = \alpha_0 + \sum_{i=1}^p \delta_i \Delta \text{İHRACAT}_{t-i} + \sum_{i=0}^q \phi_i \Delta \text{GLOBAL}_{t-i} + \sum_{i=0}^r \gamma_i \Delta \text{İSTİHDAM}_{t-i} + \sum_{i=0}^s \lambda_i \Delta \text{KATMADEĞER}_{t-i} + \theta_0 \text{İHRACAT}_{t-1} + \theta_1 \text{GLOBAL}_{t-1} + \theta_2 \text{İSTİHDAM}_{t-1} + \theta_3 \text{KATMADEĞER}_{t-1} + \varepsilon_t \quad (1)$$

Yukarıdaki Eşitlik 1’de; θ_0 , θ_1 , θ_2 ve θ_3 notasyonları uzun dönem katsayılarını, δ_i , ϕ_i , γ_i ve λ_i notasyonları kısa dönem katsayılarını, Δ sembolü birinci derece fark operatörünü, α_0 notasyonu model sabit terimini, ε_t notasyonu da modelin beyaz gürültü hata terimin göstermektedir.

ARDL sınır testinin sıfır hipotezi $H_0: \theta_0=\theta_1=\theta_2=\theta_3=0$ şeklinde olup iki değişken arasında es-bütünleşme ilişkisinin olmadığı savını öne sürmekteyken alternatif hipotezi $H_1: \theta_0 \neq \theta_1 \neq \theta_2 \neq \theta_3 \neq 0$ şeklinde olup iki değişken arasında es-bütünleşme ilişkisinin olduğu savını öne sürmektedir. ARDL sınır testine ilişkin elde edilen F-istatistik değeri üst sınır kritik değerinde büyük olduğu sürece ARGE harcamaları ile ihracat arasından eş-bütünleşme ilişkisi olduğu sonucuna varılır.

Kısa ve uzun döneme ait parametre tahmincilerini elde etmek için aşağıdaki model tahmin edilmiştir:

$$\text{İHRACAT}_t = \beta_0 + \sum_{i=1}^p \alpha_i \Delta \text{İHRACAT}_{t-i} + \sum_{i=0}^q \mu_i \Delta \text{GLOBAL}_{t-i} + \sum_{i=0}^r \pi_i \Delta \text{İSTİHDAM}_{t-i} + \sum_{i=0}^s \omega_i \Delta \text{KATMADEĞER}_{t-i} + \gamma \text{ECM}_{t-1} + \varepsilon_t \quad (2)$$

Yukarıdaki Eşitlik 2’de; α_i , μ_i , π_i ve ω_i notasyonları serileri uzun dönem patikasına geri döndüren dinamik katsayılarını, ECM kısaltması modelin hata düzeltme terimini, γ notasyonu kısa dönemde oluşan şoklar karşısında serileri uzun dönem patikasına geri döndürme hızını temsil etmektedir. γ katsayısının istatistiksel olarak anlamlı negatif işaret alması gerekmektedir.

3. TAHMİN SONUÇLARI

İlk olarak değişkenlerin durağanlık seviyelerini belirlemek amacıyla modelimizde kullandığımız değişkenlere ADF birim kök testi uygulanmıştır. Çalışmada eş-bütünleşme analizi ARDL sınır testi ile gerçekleştirileceğinden ve ARDL sınır testi iki ve üzeri derecede bütünleşik serilere müsaade etmediğinden dolayı modelde kullanacağımız serilerimizin ikinin altındaki bir dereceden bütünleşik (yani I(0) veya I(1) olduğundan) olduklarından durağanlık testi yardımıyla emin olmak zorundayız.

ADF birim kök testinden çıkan sonuçlar modeldeki tüm değişkenlerin düzeylerde durağan olmasalar da birinci farklarında tamamının durağan olduğunu ortaya koymaktadır. Birim kök testi sonuçları İHRACAT değişkeni için Tablo 1’de, GLOBAL değişkeni için Tablo 2’de, İSTİHDAM değişkeni için Tablo 3’de ve KATMADEĞER değişkeni için Tablo 4’de gösterilmiştir.

Tablo 1: İHRACAT Değişkeni için ADF Birim Kök Testi

Değişken: İHRACAT / Düzeyde		
	t-istatistik	P-değeri
ADF test istatistik ==>	-2.470556	0.1316
Test kritik değerleri:	1%	-3.646342
	5%	-2.954021
	10%	-2.615817
Değişken: İHRACAT / 1. Farklarda		
ADF test istatistik ==>	-6.936835	0.0000
Test kritik değerleri:	1%	-3.646342
	5%	-2.954021
	10%	-2.615817

Tablo 2: GLOBAL Değişkeni için ADF Birim Kök Testi

Değişken: GLOBAL / Düzeyde		
	t-istatistik	P-değeri
ADF test istatistik ==>	-2.353037	0.1628
Test kritik değerleri:	1%	-3.661661
	5%	-2.960411
	10%	-2.61916
Değişken: GLOBAL / 1. Farklarda		
ADF test istatistik ==>	-5.056677	0.0003
Test kritik değerleri:	1%	-3.661661
	5%	-2.960411
	10%	-2.61916

Tablo 3 : İSTİHDAM Değişkeni için ADF Birim Kök Testi

Değişken: İSTİHDAM / Düzeyde		
	t-istatistik	P-değeri
ADF test istatistik ==>	-0.509219	0.8759
Test kritik değerleri:	1%	-3.67017
	5%	-2.963972
	10%	-2.621007
Değişken: İSTİHDAM / 1. Farklarda		
ADF test istatistik ==>	-4.345042	0.0019
Test kritik değerleri:	1%	-3.679322
	5%	-2.967767
	10%	-2.622989

Tablo 4 : KATMADEĞER Değişkeni için ADF Birim Kök Testi

Değişken: KATMADEĞER / Düzeyde		
	t-istatistik	P-değeri
ADF test istatistik ==>	0.612849	0.9880
Test kritik değerleri:		
1%	-3.646342	
5%	-2.954021	
10%	-2.615817	
Değişken: KATMADEĞER / 1. Farklarda		
ADF test istatistik ==>	-10.68874	0.0000
Test kritik değerleri:		
1%	-3.646342	
5%	-2.954021	
10%	-2.615817	

ARDL modelleri içerisinde optimal gecikmeli modeli bulmak amacıyla BIC'e (Bayesian-Schwarz Information Criteria) başvurulmuştur. Tablo 5 'in bize gösterdiği sonuçlara göre ARDL(1, 2, 0, 1) modeli en uygun modeldir. Dolayısıyla çalışmada bu model kullanılmıştır.

Tablo 5: KOFGL için Model Seçimi

Model	LogL	AIC*	BIC	HQ	Adj. R-sq	Specification
35	32.097572	-1.721255	-1.340625	-1.604893	0.968917	ARDL(1, 2, 0, 1)
53	29.747567	-1.696255	-1.410782	-1.608983	0.966579	ARDL(1, 0, 0, 1)
44	30.617883	-1.686992	-1.35394	-1.585175	0.967097	ARDL(1, 1, 0, 1)
32	32.160231	-1.654302	-1.226094	-1.523395	0.967428	ARDL(1, 2, 1, 1)
8	32.121324	-1.651523	-1.223315	-1.520616	0.967337	ARDL(2, 2, 0, 1)
34	32.110080	-1.65072	-1.222511	-1.519812	0.967311	ARDL(1, 2, 0, 2)
26	30.061069	-1.647219	-1.314168	-1.545402	0.965762	ARDL(2, 0, 0, 1)
17	30.969520	-1.64068	-1.26005	-1.524318	0.966309	ARDL(2, 1, 0, 1)
29	32.875880	-1.633991	-1.158204	-1.488539	0.967331	ARDL(1, 2, 2, 1)
50	29.831315	-1.630808	-1.297757	-1.528991	0.965196	ARDL(1, 0, 1, 1)
52	29.787223	-1.627659	-1.294608	-1.525842	0.965086	ARDL(1, 0, 0, 2)
41	30.642585	-1.617327	-1.236698	-1.500965	0.965513	ARDL(1, 1, 1, 1)
43	30.629549	-1.616396	-1.235766	-1.500034	0.965481	ARDL(1, 1, 0, 2)
5	32.229310	-1.587808	-1.11202	-1.442355	0.965787	ARDL(2, 2, 1, 1)
23	30.177477	-1.584106	-1.203476	-1.467743	0.964348	ARDL(2, 0, 1, 1)
38	31.175227	-1.583945	-1.155736	-1.453037	0.965053	ARDL(1, 1, 2, 1)
25	30.169447	-1.583532	-1.202902	-1.46717	0.964328	ARDL(2, 0, 0, 2)
31	32.164304	-1.583165	-1.107377	-1.437712	0.965628	ARDL(1, 2, 1, 2)
7	32.129576	-1.580684	-1.104897	-1.435231	0.965543	ARDL(2, 2, 0, 2)
28	33.026089	-1.573292	-1.049926	-1.413294	0.965779	ARDL(1, 2, 2, 2)
14	31.013200	-1.572371	-1.144163	-1.441464	0.964647	ARDL(2, 1, 1, 1)

47	30.009272	-1.572091	-1.191461	-1.455729	0.963917	ARDL(1, 0, 2, 1)
16	30.970015	-1.569287	-1.141078	-1.438379	0.964537	ARDL(2, 1, 0, 2)
49	29.896475	-1.564034	-1.183404	-1.447672	0.963625	ARDL(1, 0, 1, 2)
2	32.877355	-1.562668	-1.039302	-1.40267	0.965413	ARDL(2, 2, 2, 1)
11	31.859774	-1.561412	-1.085625	-1.41596	0.964872	ARDL(2, 1, 2, 1)
40	30.647801	-1.546272	-1.118063	-1.415364	0.963712	ARDL(1, 1, 1, 2)
20	30.514384	-1.536742	-1.108533	-1.405834	0.963364	ARDL(2, 0, 2, 1)
22	30.343803	-1.524557	-1.096349	-1.39365	0.962915	ARDL(2, 0, 1, 2)
54	26.297787	-1.52127	-1.283377	-1.448544	0.959099	ARDL(1, 0, 0, 0)
46	30.229992	-1.516428	-1.088219	-1.38552	0.962612	ARDL(1, 0, 2, 2)
4	32.229315	-1.51638	-0.993014	-1.356381	0.963775	ARDL(2, 2, 1, 2)
37	31.209984	-1.514999	-1.039212	-1.369546	0.963203	ARDL(1, 1, 2, 2)
19	31.157898	-1.511278	-1.035491	-1.365826	0.963066	ARDL(2, 0, 2, 2)
10	32.141088	-1.510078	-0.986712	-1.35008	0.963546	ARDL(2, 1, 2, 2)
51	27.125188	-1.508942	-1.22347	-1.42167	0.959694	ARDL(1, 0, 1, 0)
1	33.038233	-1.502731	-0.931786	-1.328187	0.963672	ARDL(2, 2, 2, 2)
13	31.019779	-1.501413	-1.025625	-1.35596	0.962700	ARDL(2, 1, 1, 2)
45	26.922689	-1.494478	-1.209005	-1.407206	0.959106	ARDL(1, 1, 0, 0)
27	26.658308	-1.475593	-1.190121	-1.388322	0.958327	ARDL(2, 0, 0, 0)
42	27.607498	-1.471964	-1.138913	-1.370147	0.959204	ARDL(1, 1, 1, 0)
24	27.575725	-1.469695	-1.136644	-1.367878	0.959112	ARDL(2, 0, 1, 0)
18	27.316900	-1.451207	-1.118156	-1.34939	0.958349	ARDL(2, 1, 0, 0)
48	27.290247	-1.449303	-1.116252	-1.347486	0.958269	ARDL(1, 0, 2, 0)
36	27.109023	-1.436359	-1.103308	-1.334542	0.957726	ARDL(1, 2, 0, 0)
15	28.083520	-1.434537	-1.053907	-1.318175	0.958596	ARDL(2, 1, 1, 0)
39	28.020822	-1.430059	-1.049429	-1.313696	0.958411	ARDL(1, 1, 2, 0)
21	27.916942	-1.422639	-1.042009	-1.306276	0.958101	ARDL(2, 0, 2, 0)
12	28.808604	-1.4149	-0.986692	-1.283993	0.958617	ARDL(2, 1, 2, 0)
33	27.702255	-1.407304	-1.026674	-1.290942	0.957453	ARDL(1, 2, 1, 0)
9	27.328507	-1.380608	-0.999978	-1.264245	0.956302	ARDL(2, 2, 0, 0)
30	28.139410	-1.367101	-0.938892	-1.236193	0.956591	ARDL(1, 2, 2, 0)
6	28.093000	-1.363786	-0.935577	-1.232878	0.956447	ARDL(2, 2, 1, 0)
3	28.846593	-1.346185	-0.870398	-1.200732	0.956436	ARDL(2, 2, 2, 0)

ARDL sınır testi kullanılarak gerçekleştirilen eş-bütünleşme testi sonuçları Tablo 6'dan izlenebilir. Tablo 6'da görüldüğü üzere ARDL sınır testine ilişkin F-istatistik değeri bütün anlamlılık düzeylerinde üst sınır kritik değerlerini aşmaktadır ki bu da bizi 1991-2020 periyot aralığında Türkiye için globalleşmenin(GLOBAL) yanı sıra modelin kontrol değişkenleri olan istihdam (İSTİHDAM) ve katma değer (KATMADEĞER) ile tarımsal hammadde ihracatı (İHRACAT) arasında eş-bütünleşme ilişkisinin yani uzun dönem ilişkisinin olduğu sonucuna

ulaştırmaktadır. ARDL eş-bütünleşme testine ait olan; modeldeki değişkenlerin her birinin düzeylerde ya da birinci farklarda durağan olması koşulunun modelimizdeki tüm değişkenler için geçerli olduğu daha önce birim kök testleri aracılığı ile sınındığından, eş bütünleşme testini ARDL sınır testi kullanarak gerçekleştirdiğimizi belirtelim.

Tablo 6: KOFGL için Sınır Testi

<i>F-istatistik: 7.932916</i>	<i>Kritik Değerler</i>	
<i>Anlamlılık Düzeyi</i>	<i>Alt Sınır</i>	<i>Üst Sınır</i>
10%	2.72	3.77
5%	3.23	4.35
2.50%	3.69	4.89
1%	4.29	5.61

Çalışmada optimal gecikmeli model oluşu tespit edilen ARDL(1, 2, 0, 1) modeli aracılığıyla yapılan tahminler sonucunda GLOBAL, İSTİHDAM ve KATMADEĞER değişkenlerine ait uzun döneme ilişkin katsayılar Tablo 7’de gösterilmiştir. Tablo 7 incelendiğinde GLOBAL, İSTİHDAM ve KATMADEĞER değişkenlerinin her birinin %1 anlamlılık seviyesinde istatistiksel olarak anlamlı oldukları görülmektedir. GLOBAL değişkeni için bulunan uzun dönem katsayısının (-3.7011) negatif olması 1991-2020 dönemleri arasında globalleşmede meydana gelecek % 1’lik artışın Türkiye’de tarımsal hammadde ihracatını %3.7011 azaltacağını ifade etmektedir. İSTİHDAM değişkenine ait uzun dönem katsayısının (2.0835) pozitif olduğu görülmektedir ki bu da tarım sektörü istihdamında meydana gelecek % 1’lik artışın Türkiye’de tarımsal hammadde ihracatını %2.0835 arttırdığına işaret eder. Yine KATMADEĞER kontrol değişkeni için tespit edilen uzun dönem katsayısının (2.6325) pozitif işaret alması nedeniyle Türkiye’de tarım sektörü istihdamındaki % 1’lik artışın tarımsal hammadde ihracatını %2.6325 arttırdığı sonucuna ulaşılmaktadır.

Tablo 7. ARDL(1, 2, 0, 1) Modelinin Uzun Dönem Katsayıları

<i>Değişken</i>	<i>Katsayı</i>	<i>Std. Sapma</i>	<i>t-istatistik</i>	<i>P-değeri</i>
GLOBAL	-3.7011	0.6679	-5.5410	0.0000
İSTİHDAM	2.0835	0.2525	8.2525	0.0000
KATMADEĞER	2.6325	0.3487	7.5500	0.0000

Tablo 8 ARDL(1, 2, 0, 1) modeli için bulunan kısa dönem katsayılarını ve modele ait tanı testlerinin sonuçlarını göstermektedir. GLOBAL değişkeninin cari periyoda ait kısa dönem katsayısı negatif ve istatistiksel olarak anlamlıdır. Fakat bir periyot gecikmeli katsayısı istatistiksel olarak anlamsızdır. KATMADEĞER değişkeninin cari periyoda ait kısa dönem katsayısı pozitif ve istatistiksel olarak anlamlıdır. Hata düzeltme terimine ilişkin katsayı beklentiye uygun şekilde negatif işaretlidir ve %1’de istatistiksel olarak anlamlıdır. Jarque-Bera normallik testine ait sonuçlarına göre elde edilen test istatistik değeri istatistiksel olarak anlamlıdır ve bu da modelin hata terimlerinin normal dağılıma sahip olmadığına işaret etmektedir. Breusch-Godfrey otokorelasyon testine ait test istatistiği istatistiksel olarak anlamsızdır ve bu da modelin hata terimlerinin otokorelasyon sorunu içermediğini göstermektedir. Harvey değişen varyans testine ait test istatistiği istatistiksel olarak anlamsızdır dolayısıyla modelin hata terimlerinde değişen varyans sorununun olmadığını göstermektedir.

Tablo 8: ARDL(1, 2, 0, 1) Modeli için Modeli için Kısa Dönem Katsayıları

<i>Değişken</i>	<i>Katsayı</i>	<i>Std. Sapma</i>	<i>t-istatistik</i>	<i>P-değeri</i>
C	-60.1918	10.0250	-6.0042	0.0000
DLOG(GLOBAL)	-2.4240	1.1543	-2.0999	0.0474
DLOG(GLOBAL (-1))	0.4949	1.0415	0.4752	0.6394
DLOG(KATMADEĞER)	1.1050	0.5833	1.8944	0.0714
EC(-1)	-1.0667	0.1776	-6.0049	0.0000

EC=LOG(IHRACAT)-(-3.7011*LOG(GLOBAL)+2.0835*LOG(İSTİHDAM)+2.6325*LOG(KATMADEĞER))

Tanı Testleri	
Test istatistik	P-değeri

Jarque-Bera Testi	9.5590	0.0084
Breusch-Godfrey testi	0.5143	0.6056
Harvey Testi	0.6949	0.6758
Ramsey RESET Testi	0.6649	0.4240

4. SONUÇ

Globalleşmenin Türkiye'deki tarımsal hammadde ihracatını nasıl etkilediğini inceleyen bu çalışmada 1991-2020 zaman aralığı için ARDL yöntemi kullanılarak analiz gerçekleştirilmiştir. Analize değişkenlerin hangi düzeyde durağan olduklarının sınaması amacıyla ADF birim kök testi uygulanarak başlanmış, sonuçta ihracat (İHRACAT), globalleşme (GLOBAL), istihdam (İSTİHDAM) ve katma değer (KATMADEĞER) değişkenlerinin her birinin birinci farklarda durağan oldukları görülmüştür. ARDL eş-bütünleşme testine ait olan modeldeki değişkenlerin her birinin düzeylerde ya da birinci farklarda durağan olması koşulunun modelimizdeki tüm değişkenler için geçerli olması nedeniyle eş-bütünleşme testi için ARDL sınır testi kullanılmıştır. ARDL sınır testinden ulaşılan eş-bütünleşme test sonuçlarına göre globalleşmenin yanı sıra modelin kontrol değişkenleri olan istihdam ve katma değer ile tarımsal hammadde ihracatı arasında eş-bütünleşme yani uzun dönem ilişkisi bulunduğu tespit edilmiştir. Yani 1991-2020 periyodunda Türkiye'de globalleşme, istihdam ve katma değer ile tarımsal hammadde ihracatının uzun dönemde birlikte hareket ettiği saptanmıştır. ARDL(1, 2, 0, 1) modeli ile ulaşılan uzun dönem katsayı tahminleri göstermektedir ki; globalleşme Türkiye'deki tarımsal hammadde ihracatını istatistiksel olarak anlamlı bir şekilde azaltmaktadır. Uzun dönem için 1991-2020 periyodunda globalleşmede %1'lik artış Türkiye'de tarımsal hammadde ihracatını %3.7011 azaltmaktadır. Bu sonuç globalleşme arttıkça Türkiye'nin tarımsal yerli üretiminin ithal ürünlerle ikame edildiği savını desteklemektedir. Türkiye'de tahıl, saman, bakliyat türü ürünlerde yoğun ithalat gerçekleştirilmesi bu savın bir göstergesidir. Uzun dönem tahmin sonuçlarına göre tarımda istihdam düzeyindeki %1'lik artış tarımsal hammadde ihracatını %2.0835 artırmaktadır. Tarım sektörünün ana girdisi olan emek girdisindeki artışın tarımsal üretimi artırması beklendiğinden, tarım sektörü istihdamındaki artışın tarımsal üretimi ve nihayetinde tarımsal ihracatı artırması beklenen bir sonuçtur. Yine uzun dönem için tarım, ormancılık, balıkçılık sektörü katma değerindeki %1'lik artış tarımsal hammadde ihracatını beklentiyle örtüşecek şekilde %2.6325 artırmaktadır.

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Pandemi Döneminde Yaşanan Aşı Tereddüdü Belirleyicilerinin Analizi¹

Doç. Dr. Meftune ÖZBAKIR UMUT¹

Prof. Dr. Meltem NURTANIŞ VELİOĞLU²

¹Bolu Abant İzzet Baysal Üniversitesi, İİBF, İşletme Bölümü, ozbakir_m@ibu.edu.tr,

ORCID: 0000-0001-7619-302X

²İstanbul Aydın Üniversitesi, Uygulamalı Bilimler Fakültesi, mnurtanisvelioglu@aydin.edu.tr,

ORCID: 0000-0002-8238-9480

Özet: Sosyal bir ürün olan aşıya yönelik tutum ve davranışlar özellikle pandemi dönemlerinde hem toplum sağlığının, hem de sosyo-ekonomik yapıda bozulmanın önüne geçmesi sebebi ile önem arz etmektedir. Özellikle aşı tereddüdü yaşayan bireylerin aşı olmayı talep etmesi toplumsal bağışıklığın sağlanması için şarttır. Bu neden ile Dünya Sağlık Örgütü aşı tereddüdünün nedenlerinin araştırılmasını önererek, aşı tereddüdü belirleyicilerini tanımlamıştır. Bu çalışmanın amacı Türkiye'de yaşayan bireylerin aşı tereddüdü belirleyicilerinin ortaya konulması ve olası pandemi dönemlerinde aşı kabulünü kolaylaştırıcı öneriler geliştirmektir. Bu kapsamda Türkiye'nin farklı illerinde aşı tereddüdü yaşayan 18 yaşından büyük 71 katılımcıdan anket aracı ile veriler toplanarak betimsel istatistik analizleri yapılmıştır. Araştırmanın sonuçlarına göre katılımcıların aşı tereddüdü yaşamalarına yönelik en çok bağlamsal etkilere televizyon, gazete, sosyal medya gibi iletişim ortamları, bireysel ve grup etkilerinden aşı ile ilgili bilgi düzeylerinin etkili olduğu tespit edilmiştir. Ancak aşıya/aşılınmaya yönelik özel konuların etkisinin diğer etkilere oranla daha az olduğu sonucuna ulaşılmıştır. Bu kapsamda pandemi dönemlerinde hedef kitleye yönelik etkili iletişim süreçlerinin planlanması ve farklı özellikteki hedef kitleye farklı kanallar ile ulaşılması önerilmektedir.

Anahtar Kelimeler: Aşı Tereddüdü, Aşı, Pandemi, Sosyal Pazarlama

Abstract: Attitudes and behaviors towards vaccines, which are social product, are especially important during pandemic periods due to their potential to prevent both public health and socio-economic disruption. It is essential for individuals, particularly those who have vaccine hesitancy, to choose to get vaccinated in order to achieve herd immunity. Therefore, the World Health Organization has recommended the investigation of the reasons behind vaccine hesitancy and the identification of its determinants. The aim of this study is to identify the determinants of vaccine hesitancy among individuals living in Turkey and to develop recommendations to facilitate vaccine acceptance during potential pandemic periods. In this context, data were collected through a survey instrument from 71 participants aged 18 and over who had vaccine hesitancy in different cities of Turkey, and descriptive statistical analyses were conducted. According to the results of the research, it is observed that contextual influences such as television, newspapers, and social media as well as individual and group influences, particularly the level of knowledge about vaccines, have the most significant impact on participants' vaccine hesitancy. However, the influence of specific issues related to vaccines/vaccination is found to be relatively less compared to other influences. In this context, it is recommended to plan effective communication processes targeting the target audience during pandemic periods and reach different target groups through various channels.

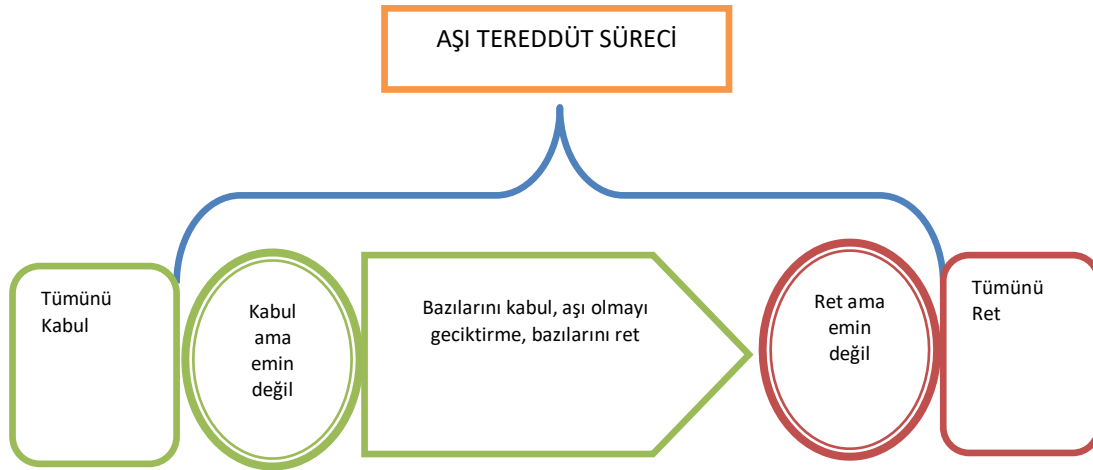
Key Words: Vaccine Hesitancy, Vaccine, Pandemic, Social Marketing

1. GİRİŞ

Önlenilebilir hastalıklar için bağışıklığın elde edilmesi ve sürdürülebilmesi ancak toplum düzeyinde aşı kabulü ile mümkündür (SAGE, 2014). Bu kapsamda aşının "sosyal ürün" olma özelliği vardır. Sosyal ürün, insan sağlığının ve toplumsal koşulların geliştirilmesi amacını taşımaktadır. Bu amaç ile ticari ürün için uygulanan pazarlama yöntemleri ve teknikleri ile sosyal ürün "sosyal pazarlama" (Lefebvre, 2012) kapsamında hedef kitleye kabul ettirmeye çalışılır. Toplumda sosyal ürünlere yönelik tutumlar; "tamamen kabul etmeden", "tamamen reddetmeye" kadar uzanan bir düzlemde gelişir (Benin vd., 2006). Aşı tereddüdü yaşayan bireyler, aşı kabulü veya reddi konusunda emin olmayabilir, bazı aşıları reddederken diğerlerini kabul edebilir veya aşılınmayı geciktirebilir (Opel vd., 2011). Mac Donald (2015)'in aşı tereddüdüne ilişkin yaptığı genellemeye (Şekil 1) göre toplumsal bağışıklığın geliştirilmesine yönelik uygulanan aşılardan toplumun bir bölümü tarafından yüksek talep ile kabul edilmektedir. Diğer taraftan toplumun bir bölümü hiçbir aşıyı talep etmeden tümünü reddetmektedir. Bu iki uç noktanın ortasında ise toplumun önemli bir bölümünü oluşturan aşı tereddüdü yaşayan bireylerin olduğu görülür.

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Şekil 1: Aşı Tereddüt Süreci



Kaynak: Mac Donald (2015)

Ancak Dünya Sağlık Örgütü (WHO)'ne göre özellikle salgın hastalıklara karşı toplumsal bağışıklığın sağlanması için aşı tereddüdü yaşayan bireylerin aşı olmayı talep etmesi şarttır. Çünkü aşığı reddeden ve aşı tereddüdü yaşayan bireyler toplumsal bağışıklığın sağlanmasının önünde engel oluşturmaktadır (WHO, 2021b). Özellikle bulaşıcı hastalığın birden çok ülkeyi etkisi altına aldığı pandemi dönemlerinde aşılama küresel önem taşır (CDC, 2021). İnsanlık tarihinde pek çok bulaşıcı hastalık nedeni ile hem can kaybı hem de önemli sağlık sorunları yaşanmıştır (Whatts, 1997). WHO Stratejik Danışma Grubu (SAGE) aşı reddi yerine aşı tereddüdü kavramına odaklanılması gerekliliğine vurgu yaparak aşı tereddüdü belirleyicilerini üç başlık altında açıklamaktadır (Aker, 2018). Bunlar; bağlamsal etkiler, bireysel ve grup etkileri, aşılama özel konulardır. Bu kapsamda çalışmanın amacı; Türkiye'de yaşayan bireylerin aşı tereddüdü belirleyicilerinin ortaya konulması ve olası pandemi dönemlerinde aşı kabulünü kolaylaştırıcı öneriler geliştirmektir.

2. PANDEMİ DÖNEMLERİ VE AŞININ ÖNEMİ

"Aşı" her dönemde toplum tarafından kabul edilmesi, reddedilmesi ve aşı tereddüdü yaşanması gibi durumlar ile toplumsal bir tartışmanın odağında olmuştur. Aşı diğer ilaçlardan farklı olarak hem bireyin hem de toplumun sağlıklı olması için önem taşır. Aşılama sadece sağlık alanında değil, bir bütün olarak toplumda ekonomik yapının bozulmaması, fakirliğin azaltılması, eğitim sisteminin başarısı, sağlık sistemlerinin güçlendirilmesi gibi alanlarda da önemli sosyoekonomik yararlar sağlar (WHO, 2021a). Bulaşıcı hastalığın birden çok ülkeyi etkisi altına aldığı pandemi dönemlerinde aşılama küresel önem taşır (CDC, 2021). İnsanlık tarihinde veba, çiçek, tüberküloz, meningokok ve difteri gibi pek çok bulaşıcı hastalık nedeni ile hem can kaybı, hem de önemli sağlık sorunları yaşanırken, ekonomik hayatın da olumsuz etkilendiği görülmektedir (Watts, 1997). Milattan önce 430'lu yıllardan başlayıp 14. yüzyıla kadar süren veba pandemilerinin dünya nüfusunun yaklaşık yarısının ölümüne neden olduğu bilinmektedir (Barbieri vd., 2020). 15. yüzyılda Amerika kıtasından Avrupa kıtasına yayılan Sifiliz pandemisi (Arora vd., 2016), 19. yüzyılda Ebola ve Kolera pandemisi tüm kıtalarda milyonlarca insanın ölümüne neden olmuştur (WHO, 2021c; Murray, 2015). 1918 yılında başlayan influenza yakın tarihin en şiddetli pandemisi olarak görülmekte ve ölüm sayısının tüm dünyada en az 50 milyon olduğu tahmin edilmektedir (CDC, 2012). 1981 yılında başlayan HIV virüsü nedeni ile 2020 yılına kadar 33 milyondan fazla kişinin yaşamını yitirdiği raporlanmıştır (WHO, 2021a). 2002 yılında neredeyse pandemi haline gelen SARS virüsü salgını bir yılda 29 ülkeye yayılmıştır (CDC, 2017). Haziran 2009'da yeni bir H1N1 virüsü salgını ABD Hastalık Kontrol ve Korunma Merkezi tarafından pandemi olarak ilan edilmiş geliştirilen aşı sayesinde büyük oranda kontrol altına alınmıştır (CDC, 2020). 2012 yılında ise MERS virüsü nedeni ile her 10 hastadan dördü hayatını kaybetmiştir (CDC, 2019). Aralık 2019 yılında ortaya çıkan Covid-19 pandemisi ise halen devam etmekte olup günümüze kadar beş milyondan fazla kişinin ölümüne neden olmuştur. Pandemi tarihine bakıldığında milattan önceki yıllardan günümüze kadar farklı salgın hastalıkların artarak devam ettiği ve insanların yaşamına son vermesinin yanı sıra sağlık durumlarında kalıcı hasar bıraktığı görülmektedir. Tüm bunların yanı sıra ülkelerin ekonomisini de büyük oranda etkilerken hem bireysel hem de toplumsal olarak maddi güçlükler de

doğurmaktadır. Son yıllarda artan pandemilere karşı en önemli silah olarak görülen aşılar, hem yaşam kayıplarının hem de sosyo-ekonomik yapının bozulmasının önüne geçmektedir. Pandemi döneminde geliştirilen aşılar toplumda belli oranda kabul görse de aşığı reddeden veya aşı tereddüdü yaşayan bireylerin varlığı nedeni ile toplumsal bağışıklık sağlanamamaktadır. Ancak sadece aşığı reddedenlere odaklanarak konuya dar bir perspektiften bakılıp ret kararının öncesinde gerçekleşen durumlar gözden kaçırılabilir. Aşığı reddetmek aşı karar sürecinin bir sonucu olarak değerlendirilmektir. Farklı öğelerin etkilediği heterojen bir gruptan oluşan aşı tereddüdü yaşayan bireyler ile ret kararı vermeden önceki süreçte iletişim kurulmasının daha önemli olduğu düşünülmektedir. Çünkü birey ret kararını verdikten sonra bu kararı değiştirmek daha zordur (Özata ve Kapusuz, 2019).

2. AŞI TEREDDÜDÜ BELİRLEYİCİLERİ VE SOSYAL PAZARLAMA UYGULAMALARI

WHO Stratejik Danışma Grubu (SAGE) aşı reddi yerine aşı tereddüdü kavramına odaklanılması gerekliliğine vurgu yaparak aşı tereddüdü belirleyicilerini üç başlık altında (Tablo 1) açıklamaktadır (Aker, 2018). Bunlar; bağlamsal etkiler, bireysel ve grup etkileri ile aşılarmaya özel konulardır.

Tablo 1: SAGE Aşı Tereddüdü Belirleyicileri

Bağlamsal Etkiler	Din/kültür/cinsiyet/sosyoekonomik etkiler
	Coğrafi engeller
	İletişim ve medya ortamı
	Siyaset/politikalar
	Tarihi etkiler
	Toplumda etkili liderler, bağışıklama programına erişimi kontrol edenler, aşılama karşıtı veya yandaş lobiler
	İlaç endüstrisine dair algılar
Bireysel ve Grup Etkileri	Bilgi/farkındalık
	Sağlık sistemine ve sunucularına olan güven ve kişisel deneyim
	Aşılarmaya dair kişisel, ailevi ve/veya toplumsal deneyimler (ağrı dâhil)
	Risk/yarar (algılanan, deneyimlenen)
	Sağlık ve korunmaya dair inançlar, tutumla
	Sosyal norm olarak bağışıklamanın kabulü veya tersine olarak ihtiyaç duymama/zararlı bulma
Aşı/Aşılarmaya Özel Konular	Aşılama takvimi
	Aşıların uygulama şekli
	Mevcut aşının yerine yeni bir aşının veya yeni bir aşı formülasyonunun veya aşıya dair yeni bir tavsiyenin sunulması
	Aşılama programının tasarımı/Sunulma şekli
	Aşıların üretimi esnasında oluşan maliyetler
	Aşılarla yönelik risk/Yarar (epidemiolojik ve bilimsel kanıt)
	Aşı ve/veya aşılama ekipmanının güvenilirliği ve/veya kaynağı
	Aşıya dair tavsiyenin gücü ve/veya bilginin temeli ve/veya sağlık personelinin tutumu

Kaynak: Aker (2018)

Tablo 1'e göre aşı tereddüdü belirleyicilerinin ilki bağlamsal etkilerden oluşmaktadır. Bunlar; bireyin aşı tereddüdü yaşamasına neden olan sosyokültürel, çevresel, tarihi ve sağlık sistemi/kurumsal/ ekonomik veya siyasi etkenler oluşmaktadır. Aşı tereddüdü belirleyicilerinin diğeri ise bireysel ve grup etkilerinde oluşmaktadır. Kişini aşı tereddüdüne ilişkin kişisel algıları ile sosyal çevre/arkadaş çevresinden kaynaklanan etkilerdir. Aşı tereddüdü belirleyicileri son olarak aşılarmaya ilişkin özel konuları içerir. Bunlar doğrudan aşıyla veya aşılama ile ilişkili olarak bireyin deneyimleri ile ilişkilendirilmektedir.

Aşı tereddüdü yaşayan bireylerin endişeleri ile bu tutumlarının nedenini öğrenmek ve aşılarmayı kabul etmelerini sağlamak için WHO tarafından etkili iletişim süreci önerilmektedir (WHO, 2015). Aşı tereddüdü yaşayanlara yönelik sosyal pazarlama gereği Jesson (2009)'un çalışmasında da önemini vurgulandığı gibi öncelikle hedef kitlenin tanınması gereklidir. Ancak literatürde pandemi dönemlerinde aşı tereddüdüne yönelik uygulanan sosyal pazarlama konulu çalışmalar oldukça kısıtlıdır. Bu çalışmalardan biri Evans ve French (2021) tarafından Covid-19 pandemisinde yaşanan aşı tereddüdünü ortadan kaldırmak amacı ile gerçekleştirilmiştir. Araştırmaya göre Covid-19 pandemisinde aşı tereddüdü yaşayan bireyler halk sağlığının sağlanması yönünde

tehdit oluşturmuşlardır. Çalışmada önümüzdeki yıllarda bu tereddüdün daha da fazla olabileceği yönünde çıkarımlar yapılarak, acilen aşı talebi yaratmaya yönelik stratejilerin geliştirilmesi gerekliliği önemle vurgulanmaktadır. Aşı tereddüdünün üstesinden gelebilmek için hedef kitlenin ihtiyaçlarını anlamak, kararsızlık nedenlerini belirlemek ve doğru iletişim mesajlarını geliştirmek için Fadda vd. (2020) Covid-19 pandemisinde aşılama kabulü için sosyal pazarlama programlarının geliştirilmesini önermektedir. French vd. (2020) ise pandemi döneminde aşı ile ilgili iletişim programlarının planlama adımlarından bahsetmektedir. Buna göre aşı tereddüdünü teşvik eden aşı karşıtı hareketlere karşı koyabilmek için her ülke kendi sosyokültürel özelliklerine uygun olan bir iletişim planı izlemelidir. Aşı kabulünü artırmak için hedef kitleye uygulanacak davranış değişikliği planlamasının temelinde sosyal pazarlama programı olmalıdır (French vd., 2020). Volpp vd. (2021) ise aşı tereddüdüne ilişkin yapılacak çalışmalara sadece hekimler veya politikacılar değil, farklı disiplinlerde çalışan araştırmacıların da önemli katkılar sunabileceğini önemle vurgulamaktadır.

Pandemi dönemleri dışında rutin aşılama ile ilişkin sosyal pazarlama araştırmalarının da sınırlı çalışma ile ele alındığı görülmektedir. Cates vd. (2011)'nin rahim ağzı kanserini önlemek amacı ile rutin aşılama yönelik geliştirilen sosyal pazarlama programının hedef kitlesi 11-12 yaşlarında kız çocuğu olan annelerdir. Üç aylık bir sosyal pazarlama programı kapsamında sosyal pazarlama karması; ürün (önerilen aşı), fiyat (parasal maliyet, erişim maliyeti, güvenlik algısı), tutundurma (afişler, web sitesi, haber bültenleri, doktor tavsiyeleri), dağıtım (sağlık kurumları, satış mağazaları) olarak geliştirilmiştir. Cates vd. (2014) tarafından yapılan diğer çalışmada, Human Papilloma Virüs (HPV) aşısının erkek çocuklarda yaygınlaştırılmasına yönelik bir sosyal pazarlama programı geliştirilmiştir. Hedef kitlenin 9-13 yaş arasındaki erkek çocuğu olan ebeveynlerin oluşturduğu sosyal pazarlama programının sonucunda; sosyal pazarlama tekniklerinin ebeveynleri erkek çocuklarını HPV'ye karşı aşılama teşvik ettiği görülmektedir. Cates ve Beasley (2015) çalışmalarında aşılama önündeki en büyük engelin "aşı tereddüdü" olduğunu ve bu engeli aşarak aşılama teşvik etmek için sosyal pazarlama stratejilerinin kullanılması gerektiğini önemle vurgulamaktadır. Hull vd. (2014) HPV aşı tereddüdüne yönelik yaptıkları sosyal pazarlama çalışmasında hedef pazarı bölümlere ayırarak her bölüme yönelik farklı strateji belirlemiştir. Aşı kabulüne yönelik hazırlanacak sosyal pazarlama programlarının her pazar bölümü için farklılaşmasını ve özellikle farklı etnik kökendeki bölümler için farklı sosyal pazarlama karması geliştirilmesi önerilmektedir (Hull vd., 2014). Ulaşılan diğer çalışmalarda da (Melovic vd., 2020; Roncancio vd., 2019; Mitrović vd., 2019; Özata ve Kapusuz, 2019; Tetu-Mouradjian, 2010) aşı tereddüdü kapsamında hedef kitlenin derinlemesine analizi ve uygun iletişim stratejilerinin belirlenmesi için sosyal pazarlama programlarının geliştirilmesini önermektedir.

Bu çalışma literatürde önerildiği gibi Türkiye'de aşı tereddüdüne yönelik ilk sosyal pazarlama programı hazırlık çalışmaları kapsamında gerçekleştirilmiştir. Amaç; Türkiye'de aşı tereddüdü yaşayan bireyler kapsamında ilişkin SAGE tarafından geliştirilen aşı tereddüdü belirleyicilerinin ortaya konulması ve olası pandemi dönemlerinde aşı kabulünü kolaylaştırıcı öneriler geliştirmektir.

3. YÖNTEM

Bu çalışmada nicel yöntemler kullanılmıştır. Veri toplama aracı ankettir. İlgili anket SAGE (2014)'in aşı tereddüdü belirleyicileri çalışmasında yer alan maddeler kullanılarak hazırlanmıştır. Anket formu 14 adet kapalı uçlu soru ("evet", "hayır", "kararsızım") ve dört adet demografi sorusu olmak üzere toplam 18 sorudan oluşmaktadır. Araştırmının evreni Türkiye'de yaşayan 18 yaşından büyük aşı tereddüdü yaşayan bireylerden oluşmaktadır. Araştırmada kolayda örneklem yolu ile Türkiye'nin farklı bölgelerinde aşı tereddüdü yaşadığını beyan eden 71 katılımcıya ulaşılmıştır. Anket verileri yüz yüze yapılan görüşmeler ile elde edilerek betimsel istatistik analizleri yapılmıştır.

4. BULGULAR

Araştırmadan elde edilen bulgular iki bölümde sunulmaktadır. İlk bölümde demografik özelliklere ilişkin bulgular, ikinci bölümde aşı tereddüdü belirleyicilerine yönelik bulgular yer almaktadır.

4.1. Demografik Özelliklere İlişkin Bulgular

Araştırmada Türkiye'nin farklı illerinde yaşayan ve aşı tereddüdü yaşadığını beyan eden katılımcılara ait demografik bulgular Tablo 2'de sunulmuştur.

Tablo 2: Demografik Özellikler

Yaşadığı Şehir	Frekans	Yüzde
Sakarya	11	16
Ankara	16	22
Konya	10	14
Bolu	10	14
Nevşehir	13	18
Antalya	11	16
Toplam	71	100
Cinsiyet	Frekans	Yüzde
Kadın	33	46
Erkek	38	54
Toplam	71	100
Yaş	Frekans	Yüzde
18-38	37	52
39-59	24	34
60-80	10	14
Toplam	71	100
Eğitim Durumu	Frekans	Yüzde
İlkokul	3	4
Ortaokul	6	9
Lise	25	35
Ön lisans	6	9
Lisans	23	32
Lisans üstü	8	11
Toplam	71	100

Tablo 2’de görüldüğü gibi anketi cevaplayan 71 katılımcının 16’sı Ankara, 13’ü Nevşehir, 11’i Antalya, 11’i Sakarya, 10’u Bolu ve 10’u Konya şehirlerinde yaşamaktadır. Yüzde 54’ü erkek, yüzde 46’sı kadın katılımcılardan oluşmaktadır. Katılımcıların yüzde 52’si 18-38 yaş aralığında, yüzde 34’ü 39-59 yaş aralığında ve yüzde 14’ü 60-80 yaş aralığındadır. Eğitim durumları incelendiğinde ise yüzde 35’inin lise, yüzde 32’sinin lisans, yüzde 11’inin lisans üstü, yüzde dokuzunun ön lisan, yüzde dokuzunun ortaokul ve yüzde dördünün ilkokul mezunu olduğu görülmektedir.

4.2. Aşı Tereddüdü Belirleyicilerine İlişkin Bulgular

Aşı tereddüdü belirleyicilerine ilişkin bulgular üç temel başlıkta incelenmektedir. Bunlardan ilki aşı tereddüdü yaşanmasına neden olan sosyokültürel, çevresel, tarihi ve sağlık sistemi/kurumsal/ ekonomik veya siyasi etkenlerin oluşturduğu bağlamsal etkilerdir.

Tablo 3: Bağlamsal Etkiler

Bağlamsal Etkiler	Evet		Hayır		Kararsızım		Toplam	
	Frekans	Yüzde	Frekans	Yüzde	Frekans	Yüzde	Frekans	Yüzde
TV, gazete, sosyal medya gibi ortamlar	42	59	27	38	2	3	71	100
Dini ve kültürel inançlar	11	15	60	85	0	0	71	100
Siyasi düşünce	6	8	61	86	4	6	71	100
Yaşadığı şehir/bölge	21	30	47	66	3	4	71	100
İlaç sektörüne ilişkin düşünceler	32	45	36	51	3	4	71	100

Tablo 3’de görüldüğü gibi katılımcılar, aşı tereddüdü yaşamalarına televizyon, gazete, sosyal medya gibi iletişim ortamlarının etkili olup olmadığı sorusuna yüzde 59 oranında evet cevabı vermiştir. Aşı tereddüdünü etkileyen diğer unsurlara ilişkin evet cevapları ise sırasıyla şöyledir; yüzde 45 oranında ilaç sektörüne ilişkin düşünceler; yüzde 30 oranında yaşadığı şehir/bölge; yüzde 15 oranında dini ve kültürel inançlar; yüzde sekiz oranında ise siyasi düşüncelerdir.

Aşı tereddüdü belirleyicilerine ilişkin diğer bulgu ise aşı tereddüdüne ilişkin kişisel algılar ile sosyal çevre/arkadaş çevresinden kaynaklanan bireysel ve grup etkileridir.

Tablo 4. Bireysel ve Grup Etkileri

Bireysel ve Grup Etkileri	Evet		Hayır		Kararsızım		Toplam	
	Frekans	Yüzde	Frekans	Yüzde	Frekans	Yüzde	Frekans	Yüzde
Geçmiş deneyimler	28	40	43	60	0	0	71	100
Geçmiş dönemlerde veya pandemi döneminde aşidan kaynaklı yan etkiler	28	40	39	55	4	5	71	100
Sağlık sistemine ilişkin düşünceler	33	46	31	44	7	10	71	100
Aşılar ile ilgili bilgi düzeyi	45	64	22	31	4	5	71	100
Aşıdan beklenen fayda	42	59	24	34	5	7	71	100

Tablo 4’de görüldüğü gibi katılımcılar, aşı tereddüdü yaşamlarına aşı ile ilgili bilgi düzeylerinin etkili olup olmadığı sorusuna yüzde 64 oranında evet cevabı vermiştir. Aşı tereddüdünü etkileyen diğer unsurlara ilişkin evet cevapları ise sırasıyla şöyledir; yüzde 59 oranında aşidan beklenen fayda; yüzde 46 oranında sağlık sistemine ilişkin düşünceler; yüzde 40 oranında geçmiş deneyimler ve aşidan kaynaklı yan etkilerdir.

Aşı tereddüdüne ilişkin son bulgu ise doğrudan aşıyla veya aşılamayla ilişkili olan bireyin deneyimleri içeren aşıya/aşılanmaya özel konulara ilişkin bulgudur.

Tablo 5. Aşıya/Aşılanmaya Özel Konular

Aşı/Aşılamaya Özel Konular	Evet		Hayır		Kararsızım		Toplam	
	Frekans	Yüzde	Frekans	Yüzde	Frekans	Yüzde	Frekans	Yüzde
Aşının uygulama şekli	16	22	53	75	2	3	71	100
Aşılama programı/aşılama takvimi	23	32	46	65	2	3	71	100
Aşılanma ile ilgili tavsiyeler	29	41	37	52	5	7	71	100
Sağlık personelinin tutumu	25	35	44	62	2	3	71	100

Tablo 5’de görüldüğü gibi katılımcılar, aşı tereddüdü yaşamlarına aşılanma ile ilgili tavsiyelerin etkili olup olmadığı sorusuna yüzde 41 oranında evet cevabı vermiştir. Aşı tereddüdünü etkileyen diğer unsurlara ilişkin evet cevapları ise sırasıyla şöyledir; yüzde 35 oranında sağlık personelinin tutumu; yüzde 32 oranında aşılama programı/aşılama takvimi; yüzde 22 oranında aşının uygulama şeklidir.

5. SONUÇ VE ÖNERİLER

Bu çalışma Türkiye'de yaşayan bireylerin aşı tereddüdü belirleyicilerinin ortaya konulması ve olası pandemi dönemlerinde aşı kabulünü kolaylaştırıcı öneriler geliştirmek amacı ile yapılmıştır. Bu kapsamda; Türkiye'nin altı farklı ilinde yaşayan 33'ü kadın 38'i erkek olmak üzere 18 yaşından büyük toplam 71 katılımcıya aşı tereddüdü yaşamalarına etki eden bağlamsal etkiler, bireysel ve grup etkileri ile aşılınmaya özel konulara ilişkin soruları içeren anket uygulanmıştır. Araştırmanın sonuçları ve ilgili öneriler şunlardır:

- Araştırmanın sonucunda katılımcıların aşı tereddüdü yaşamalarına ilişkin bağlamsal etkilerden en fazla televizyon, gazete, sosyal medya gibi ortamların etkili olduğu görülmektedir. Bu bulgu pandemi döneminde iletişim kanallarının ve yönetilen iletişim sürecinin önemli olduğu sonucunu ortaya çıkarmaktadır. Literatürde de belirtildiği üzere pandemi dönemlerinde etkili iletişim süreci bireylerin sosyal bir ürün olan aşığı kabul etme, ret etme ve aşı tereddüdü yaşama kararlarını etkilemektedir (Goldstein vd., 2015). Bu kapsamda pandemi döneminde hedef kitleye yönelik etkili iletişim süreçlerinin planlanması ve farklı özellikteki hedef kitleye farklı kanallar ile ulaşılması önerilmektedir. Özellikle iletişim araçlarının demografik faktörlere dayalı olarak farklılaştırılması bu kapsamda sosyal medyanın daha etkin kullanılması önerilmektedir.
- Katılımcıların aşı tereddüdü yaşamalarına ilişkin bireysel ve grup etkilerine yönelik en fazla aşı ile ilgili bilgi düzeylerinin belirleyici olduğu sonucuna ulaşılmıştır. Aşı tereddüdü yaşayan katılımcıların aşı ile ilgili yetersiz ya da yanlış bilgiye sahip olmalarının bu sonucu ortaya çıkardığı düşünülebilir. Bu kapsamda bağlamsal etkilere ilişkin sonuca da paralel olarak medyada aşı ile ilgili doğru bilgilerin verilmesi ve bilgi kirliliğinin önüne geçmeye yönelik uygulamaların yapılması önerilmektedir. Örneğin Sağlık Bakanlığının sosyal medyayı daha aktif kullanarak doğru ve geçerli bilgileri farklı medya kanallarından da paylaşması önerilir.
- Aşıya/aşılınmaya yönelik özel konuların etkisine bakıldığında katılımcıların diğer iki etkilere (bağlamsal ve bireysel/grup) oranla daha az evet cevabı verdikleri görülmektedir. Özellikle aşılama programı/aşı takviminin aşı tereddüdü yaşamada en az etkisi olan unsur olması pandemi döneminde 65 yaş ve üstü bireylerden başlayarak belli aralıktaki yaşlara doğru genişlemesinin aşı tereddüdü bağlamında olumsuz etkisi olmadığı düşünülebilir.

Sonuç olarak başlangıç niteliğinde Türkiye'de ilk kez yapılan aşı tereddütüne yönelik çalışmanın, pandeminin etkilerinin görece azaldığı ancak çeşitli hastalıklarda da artışların gözlemlendiği dikkate alındığında, aşıya/aşılınmaya karşı düşüncelerin değişim durumunu ve nedenlerini zamana dayalı çalışmalarla tekrarlamak önem taşımaktadır. Aşı/aşılınmanın bireysel tercihler yanında sonuçları açısından toplumsal bir platforma dayanan yapısı disiplinlerarası çalışmaları da gerekli hale getirmektedir. Aşı tereddüdü davranışının nedenlerini anlamak ve toplumsal bağışıklığın oluşması adına geliştirilecek sosyal pazarlama programları ile daha sağlıklı toplumsal yapı için önemli bir adım atılmış olur.

Her çalışmada olduğu bu çalışmada da kısıtları vardır. Özellikle örneklem büyüklüğünün sınırlı olması ve örneklem seçme metodu ile ilişkili olarak genelleştirilebilir sonuçları ifade etmek zor olacaktır. Bundan sonraki çalışmalarda temsil yeteneği daha güçlü ve daha büyük örneklem hacimleri ile çalışmanın yapılması önerilir.

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İnternet Bankacılığı ve Mobil Bankacılık: Türkiye İncelemesi

Dr. Öğretim Üyesi Mehmet Mete Karadağ¹

¹İstanbul Aydın Üniversitesi, ABMYO, Yönetim ve Organizasyon Bölümü, metekaradag@aydin.edu.tr, ORCID:
0000-0001-8063-9151

Özet: Özellikle son dönemlerde yaşanan bilgi teknolojisindeki hızlı ilerlemeler ve bilgisayar ve internet kullanımının yaygınlaşması, yeni finansal ürün ve hizmetlerin gelişmesinin önünü açmıştır. Bankalar, bilgi teknolojisini zaman ve maliyet tasarrufu sağlamak, rakipleri karşısında rekabet üstünlüğü sağlamak, tüketicilerin isteklerine daha iyi cevap verebilmek, yeni ürünler vasıtasıyla gelir elde edebilmek gibi amaçlarla kullanılmaktadırlar. Teknolojik gelişmeler, banka müşterilerine finansal ürünlerin ulaştırılmasında yer ve zaman sınırlamasını ortadan kaldırmakta, bu ürünlere küresel çapta erişimi mümkün hale getirmektedir.

Hızla yaşanan teknolojik gelişmelerle birlikte geleneksel bankacılık değişime uğramış; bankacılık sektöründe rekabet artmıştır. Banka müşterileri yer ve zaman sınırlaması olmaksızın hızla hesaplarına erişmek, finansal ürün ve hizmetlerden yararlanmak istemektedirler. Her geçen gün daha çok müşteri internet bankacılığı ve mobil bankacılığını kullanmaktadır.

Bu çalışma ile amaçlanan elektronik bankacılık türlerinden internet bankacılığı ve mobil bankacılık kavramlarını açıklamak; son gelişmeler ışığında Türkiye’deki internet bankacılığı ve mobil bankacılık eğilimlerinin güncel veriler yardımı ile genel bir değerlendirmesini yapmaktır.

Çalışmada giriş bölümünün ardından elektronik bankacılık kavramı ele alınarak; elektronik bankacılık türleri kısaca açıklanmaktadır. Sonraki bölümlerde ise Türkiye’deki internet bankacılığı ve mobil bankacılık uygulamalarına yer verilmektedir.

Anahtar Kelimeler: elektronik bankacılık, internet bankacılığı, mobil bankacılık

1. GİRİŞ

Bankacılık sektöründe firmalar, rakipleri karşısında rekabet avantajı elde edebilmek ve bunu koruyabilmek için bilgi teknolojilerini uygulamak yoluna gitmişlerdir. Bankalar bilgi teknolojisini zaman ve maliyet tasarrufu sağlamak ile oluşturulacak yeni ürün ve hizmetler sayesinde banka müşterilerinin isteklerine daha iyi cevap vererek daha fazla gelir elde edebilmek gibi amaçlarla kullanılmaktadırlar.

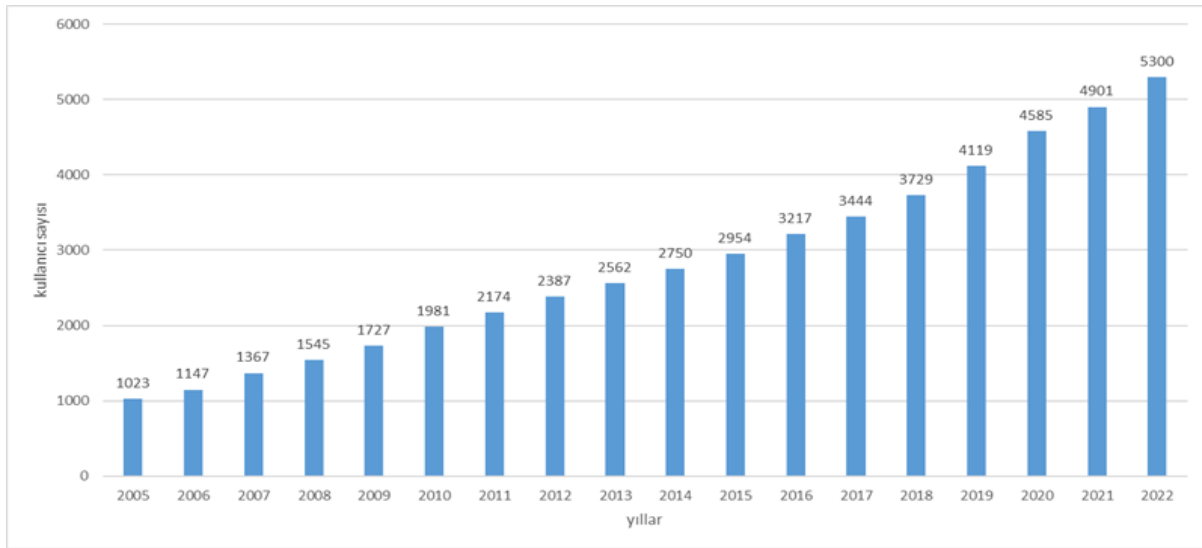
Son yıllarda yaşanan bilgi teknolojisindeki hızlı ilerlemeler, yeni finansal ürün ve hizmetlerin gelişmesinin önünü açmıştır. Bu gelişmeler sayesinde elektronik bankacılık hizmetleri de yaygınlaşmış; özellikle internet bankacılığı ve mobil bankacılık uygulamaları kendine daha fazla yer bulmaya ve benimsenmeye başlamıştır. Elektronik bankacılıkta yaşanan gelişmeler ve internet bankacılığının yaygınlaşması ile mobil araçlar vasıtasıyla internet erişiminin olduğu her yerden bankacılık hizmetinin alınabilmesinin mümkün olması sayesinde bankaların dağıtım kanallarında da değişimler yaşanmıştır. Bazı bankalar müşterilere ulaşmak için geleneksel şube ağlarının yanı sıra web siteleri üzerinden de internet bankacılığı hizmetleri sunarken, bazı bankalar şubeler yerine tamamen sanal olarak bankacılık hizmetleri sunmaya başlamışlardır.

2022 yılında dünya genelindeki tahmini internet kullanıcılarının sayısı, bir önceki yıla göre 4.9 milyardan 5.3 milyara yükselmiştir. Bu oran küresel nüfusun yüzde 66’sını temsil etmektedir. (Statista, 2023). Bilgisayar ve akıllı telefonların kullanımının yaygınlaşması ile dünya genelinde internet kullanıcı sayısı artarken, internet teknolojisindeki ilerlemelerle beraber internete erişimin kolaylaşması ile elektronik bankacılık da gelişmiş ve banka müşterilerine finansal ürünlerin ulaştırılmasında yer ve zaman sınırlaması giderek ortadan kalkarak bu ürünlere küresel çapta erişim olanaklı hale gelmiştir. Söz gelimi, günümüzde banka müşterileri elektronik bankacılık sayesinde banka şubelerine gitmeksizin evlerinden ya da diledikleri yerden kredi talebinde bulunabilmekte, faturalarını ödeyebilmekte, hesaplarını kontrol edebilmekte ve fon transferi gibi birçok finansal işlemi yapabilmektedir.

Elektronik bankacılık, özellikle de internet bankacılığı ya da çevrimiçi (online) bankacılık, “bankacılık” işini önemli ölçüde etkilemekte, değiştirmekte ve geliştirmektedir.

Yakın dönemde ortaya çıkan ve tüm dünyayı etkisi altına alarak ekonomiler üzerinde son derece olumsuz etkiler doğuran Covid-19 pandemisi, elektronik bankacılığın önemini daha da arttırmıştır. Covid-19 pandemisinin elektronik bankacılığı kullanma eğilimlerini arttırdığını söylemek mümkündür.

Tablo 1: 2005-2022 Yılları Arası Dünyadaki İnternet Kullanıcısı Sayısı (milyon)



Kaynak: Statista (2023), Number of internet users worldwide from 2005 to 2022(in millions), <https://www.statista.com/statistics/273018/number-of-internet-users-worldwide>, Erişim Tarihi: 30.09.2023.

Bu çalışma ile amaçlanan elektronik bankacılık türlerinden internet bankacılığı ve mobil bankacılık kavramlarını açıklamak ve son gelişmeler ışığında Türkiye’deki internet bankacılığı ve mobil bankacılık eğilimlerinin güncel veriler yardımı ile genel bir değerlendirmesini yapmaktır. Çalışmada öncelikle elektronik bankacılık kavramı ele alınarak elektronik bankacılık türleri açıklanmaktadır. Ardından Türkiye’deki internet bankacılığı ve mobil bankacılık uygulamaları değerlendirilmektedir.

2. ELEKTRONİK BANKACILIK: TANIM VE KAVRAM

Elektronik bankacılık, elektronik ticaretin (kısaca e-ticaretin) önemli bir dalıdır. Elektronik kanallar işletmeden-işletmeye ve işletmeden-müşteriye yönelik işlemlerde kullanılmaktadır. Elektronik bankacılık bir bankacılık ürünü olmaktan ziyade işlemlerin yapılma şeklini tanımlamaktadır (Deutsche Bundesbank, 2000: 44). Elektronik bankacılık, elektronik kanallar vasıtasıyla bireysel ve küçük değer bankacılık ürünlerinin ve hizmetlerinin sağlanmasıdır. Bu tür ürünler ve hizmetler, mevduat alma, borç verme, hesap yönetimi, finansal hizmet sunma, elektronik fatura ödeme ve elektronik para gibi diğer elektronik ödeme ürünleri ve hizmetlerini içermektedir (TBB, 1998: 3).

“Elektronik bankacılık hizmetleri iki ana yolla sunulmaktadır: İlki, geleneksel tuğla ve harç (brick and mortar) bankaları tarafından geleneksel dağıtım kanallarının ve elektronik dağıtım kanallarının birlikte sunulması (tuğla ve tıklama bankaları - brick and click banks); diğeri ise bankaların herhangi bir şube ağına sahip olmaksızın ürün ve hizmetleri sadece ya da ağırlıklı olarak elektronik dağıtım kanalları vasıtası ile sunmalarıdır. Bu bankalar “şubesiz bankalar”, “internet bankaları” ya da “sanal bankalar” olarak adlandırılmaktadır” (Schaechter, 2002: 4). Bu bankaların şubeleri yoktur; fiziki varlıkları sadece idare ofisleri ya da ATM ya da kiosk gibi vasıtalarla olabilir (Nsouli and Schaechter, 2002).

2.1. Elektronik Bankacılık Türleri

Elektronik bankacılık günümüzde hızlı bir şekilde gelişmekte ve değişmektedir. Özellikle internet ve mobil bankacılıktaki yenilikler bankacılıkta yeni ürün ve hizmetlerin sunulmasını sağlamaktadır. Bu gelişmeler bankacılık sektöründe de rekabetin artmasına neden olmaktadır.

2.1.1. PC Bankacılığı

PC bankacılığı, müşterilerin kişisel bilgisayarlarından (PC) yapılan banka işlemleri için kullanılan bir terimdir. PC bankacılığı çevrimiçi bankacılık ve internet bankacılığı olarak ikiye ayrılabilir. Çevrimiçi bankacılıkta işlemler kapalı ağlar dahilinde gerçekleştirilir. İnternet bankacılığı, kapalı ağların aksine müşterilere internet bağlantısı olan herhangi bir terminalden işlem yapmasına izin vermektedir (Deutsche Bundesbank, 2000: 44,45).

2.1.2. İnternet Bankacılığı

İnternet bankacılığı, interneti bir dağıtım kanalı olarak kullanan bir bilgisayar vasıtasıyla gerçekleştirilen bankacılık faaliyetlerini ifade etmektedir. Banka müşterilerinin en çok kullandıkları internet bankacılığı şekli, hesaplara erişim için genellikle çevrimiçi (online) bankacılık ya da tarayıcı-tabanlı internet bankacılığı olarak adlandırılan bir web tarayıcı yazılımının kullanılmasıdır. Bir başka internet bankacılığı şekli de bankacılık işlemlerini gerçekleştirmek için web tarayıcı yazılımı kullanmak yerine bankanın ev bankacılığı yazılımından faydalanmaktır (ECB, 2007: 42).

Müşterilerin bankanın web sitesi üzerinden elektronik olarak pek çok bankacılık işlemini gerçekleştirebildiği internet bankacılığı, başlangıçta bankaların ürün ve hizmetlerini web sitelerinde pazarladığı bir sunum aracı olarak kullanılmıştır. Sonraki teknolojik gelişmelerle birlikte giderek daha çok bankalar internet bankacılığını hem işlem hem de bilgi sunma aracı olarak kullanmaya başlamıştır (Tan and Teo, 2000: 4).

Bankaların internet bankacılığına yönelme eğilimleri üç temel faktöre dayanmaktadır: maliyet avantajları, yüksek karlılık ve düşük risk. Yapılan çalışmalar, internet bankacılığı için yeterli talep olması durumunda internet bankacılığı yatırımlarının ilk kurulum maliyetlerinin karşılanacağını ve kısa sürede kar elde edileceğini göstermektedir. Çeşitli ülkelere yönelik ampirik çalışmalar, internet bankacılığının bankanın performansını artırdığını ortaya koymaktadır (Tunay vd., 2015: 364).

2.1.3. Mobil Bankacılık

FED’in tanımına göre mobil bankacılık; “mobil telefon ya da tablet gibi mobil bir cihaz vasıtasıyla bakiye sorgulama, hesap uyarıları, fatura ödeme gibi bankacılık faaliyetlerinin gerçekleştirilmesidir” (FED, 2011: 14). Mobil bankacılık, hesap bakiyelerini kontrol etme ve bilançoları görüntüleme gibi bilgi hizmetlerine ek olarak, mobil ödemeleri de kapsayan geniş bir terimdir. Mobil bankacılığa erişim için bir tarayıcı kullanarak veya bir cep telefonu veya tablet için oluşturulmuş özel bir bankacılık uygulaması kullanarak bankaların internet bankacılığı (mobil cihazlar için optimize edilmiş) web sayfalarına erişim gibi çeşitli seçenekler mevcuttur (Financial Conduct Authority, 2014: 4).

Mobil cihazların hızlı ve büyük ölçüde yaygınlaşması ile bankalar, özellikle banka şubelerinin artan operasyon maliyetleri ve finansal hizmet sektöründeki rekabet baskısı da göz önüne alındığında, mobil bankacılığın büyük ve önemli bir ticari fırsata sahip olduğunu fark etmişlerdir. Bu nedenle müşterilerine çeşitli mobil bankacılık hizmetleri sunmak amacıyla mobil bankacılık sistemleri geliştirmeye yönelmişlerdir (Yu vd., 2015: 199).

Banka müşterileri mobil bankacılık vasıtasıyla hesaplarına erişebilmekte, para transferi yapabilmekte, fatura ödeme, finansal enstrümanların alım satımı gibi çok çeşitli finansal işlemleri gerçekleştirebilmektedir.

Mobil bankacılık vasıtasıyla sunulan başlıca hizmetler Tablo 2’de yer almaktadır:

Tablo 2: Mobil bankacılık yoluyla sunulan başlıca hizmetler

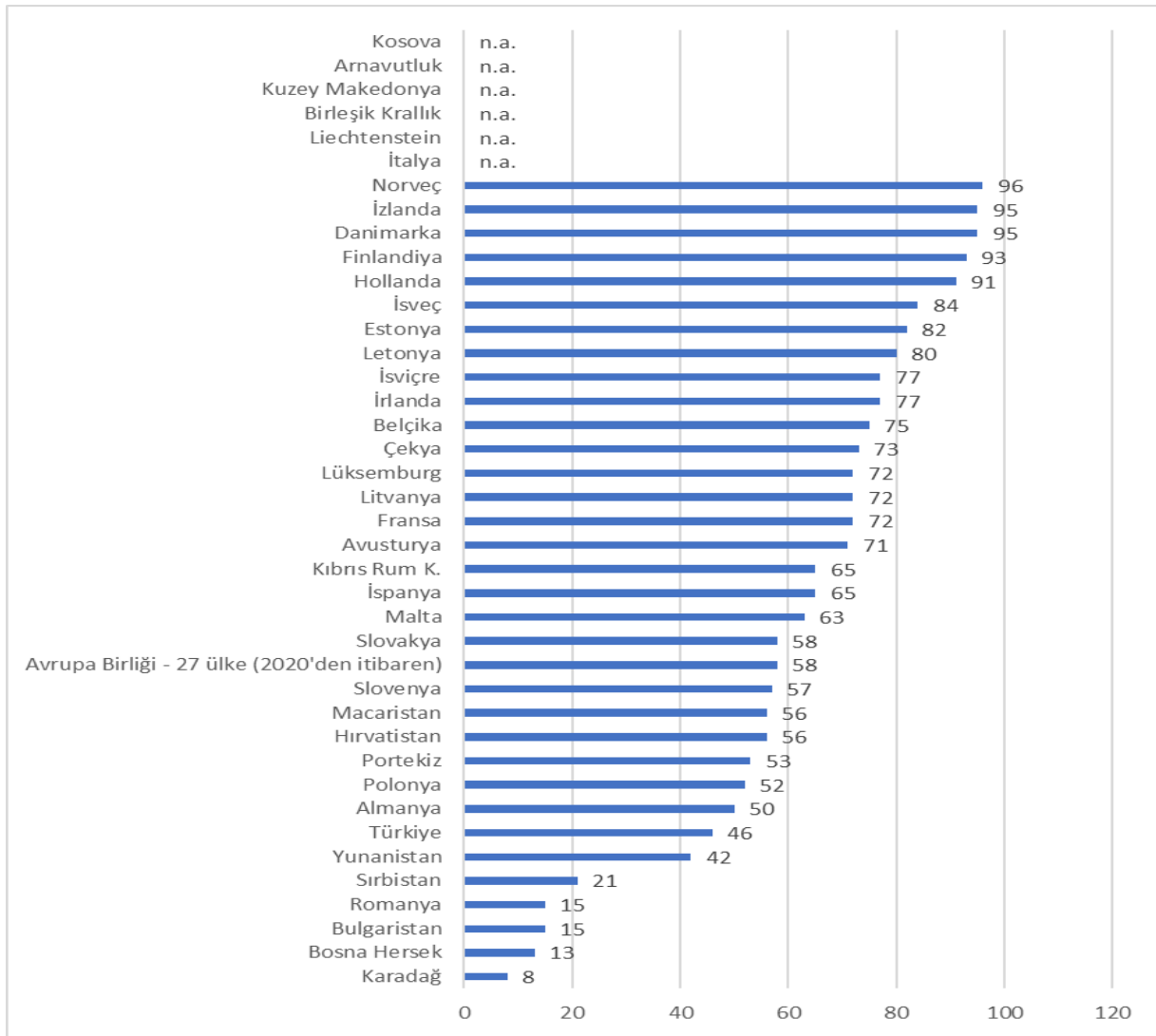
Finansal Hizmetler	Finansal Olmayan Hizmetler
-Fatura ödeme	-Bakiye sorgulama
-Eşten eşe bağlantılı (Peer to Peer/P2P) ödemeler	-Mini banka ekstresi
-Fon transferleri	-PIN değişikliği
-Havale	-Çek defteri isteği
-Alışveriş ve bağışlar	-Vadesi gelmiş ödemeler için uyarılar
-Mobil bakiye yükleme	-ATM konumlarının gösterilmesi

Kaynak: Shaikh, Aijaz A. and Heikki Karjalainen (2015), “Mobile banking adoption: A literature review”, Telematics and Informatics, Volume 32, Issue 1, Pages 129-142, s.131.

3. TÜRKİYE

Eurostat verilerine göre, 2021 yılında Avrupa ülkeleri arasında en yüksek internet bankacılığı kullanımı %96 ile Norveç’tedir. Norveç’i %95 ile Danimarka ve İzlanda izlemektedir. En düşük orana Karadağ sahiptir. Türkiye’de bu oran %46’dır (Eurostat 2022).

Grafik 1: Avrupa Ülkeleri 2021 Yılı İnternet Bankacılığı İçin İnternet Kullanma Oranları (%)



Kaynak: Eurostat (2022), Individuals using the internet for internet banking, Last update: 04-02-2022, <https://appsso.eurostat.ec.europa.eu/nui/setupDownloads.do>, Erişim Tarihi: 20.02.2022 verileri kullanılarak hazırlanmıştır. İlgili dönemde veri olmayan ülkeler "n.a." ile gösterilmiştir.

TÜİK'in 2022 yılı "Hanehalkı Bilişim Teknolojileri Kullanım Araştırması" na göre Türkiye'de 16-74 yaş grubundaki bireylerde internet kullanımı 2021'de %82,6 iken, bu oran 2022 yılında %85,0'a yükselmiştir. Son üç ay içinde internet kullanan bireylerin interneti kişisel kullanım amaçları arasında internet bankacılığı (web sitesi veya mobil bankacılık) kullanımı oranı 2021 yılında %56,5 iken, 2022 yılında %61,3'e yükselmiştir (TÜİK, 2022).

1980'lerde yaşanan deregülasyonun ardından Türk bankacılık sektöründe büyük değişimler yaşanmış; Türkiye'deki finansal hizmetler ortamı artan sayıda yeni girişlerle birlikte giderek daha rekabetçi bir hal almıştır. (Ozdemir vd., 2007). İletişim, bilgisayar ve yazılım alanlarında gelişen teknoloji, bankacılıkta çeşitli ürünlerin geliştirilmesini sağlamıştır. Bu ürünlerin bir kısmı bireysel müşterilere çeşitli hizmetler sunarken, diğer bir kısmı bankaların iç yapı ve işletmelerle olan ilişkilerinin otomasyonunda kullanılmaktadır (Akpınar, 1993: 36).

Bankalar tarafından 1980'lerde ATM'ler, 1990'larda internet bankacılığı, 2000'lerde ise mobil bankacılık uygulamaları sunulmuştur. Şube dışı kanallardan sunulan bankacılık ürün ve hizmetleri her geçen gün artmakta ve müşterilerin şubelere olan gereksinimleri giderek azalmaktadır. Türk bankacılık sektöründe bankaların sunduğu ürün ve hizmetlerin dağıtım kanallarında da büyük değişimler yaşanmaktadır. Türk bankaları günümüzde bankacılık işlemlerinin şubeye gidilmeksizin yapıldığı direkt bankacılık uygulamaları olan şubesiz bankacılık modelleri geliştirmeye ve uygulamaya başlamıştır.

Türk bankacılık sektörü üzerine araştırma yapan Polatoğlu ve Ekin (2001)'e göre ATM ve internet bankacılığı gibi alternatif dağıtım kanallarının şubelere göre maliyetleri daha düşük olmaktadır. Bu durum, banka şubelerindeki iş yükünü azaltmaya katkıda bulunmaktadır. (Polatoglu and Ekin, 2001: 163).

Türkiye’de bankacılık faaliyetleri 1987’ye kadar çoğunlukla şubeler aracılığı ile gerçekleştirilirken, Türkiye İş Bankası 1987 yılında ATM’yi müşterilere sunarak Türkiye’de elektronik bankacılığın temelini atmıştır. 1996 yılından itibaren çeşitli bankalar tarafından telefon, PC / terminal / İnternet ve POS yoluyla alternatif bankacılık kanalları oluşturulmuştur. Türkiye İş Bankası 1997’de World Wide Web (WWW) yoluyla internet bankacılığı sunan ilk bankadır. İş Bankası’nı yine aynı yıl Garanti Bank izlemiştir (Polatoğlu and Ekin, 2001: 157). QNB Finansbank tarafından Ekim 2012’de kurulan Enpara.com ise sadece dijital kanallar üzerinden hizmet sunan Türkiye’nin ilk şubesiz dijital bankasıdır (QNB Finansbank, 2018).

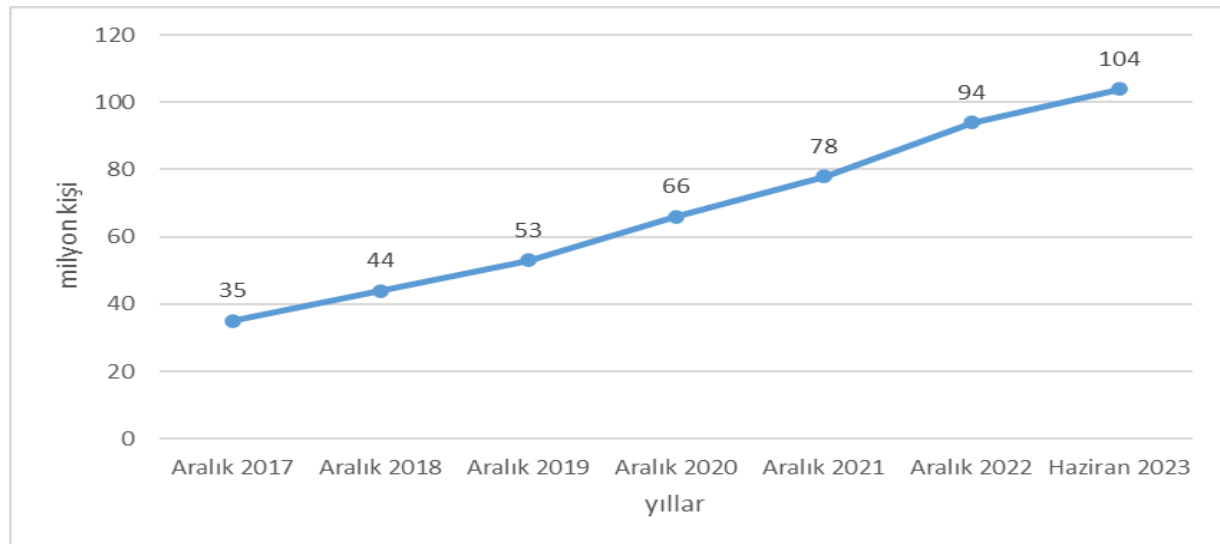
1 Mayıs 2021 tarihinde yürürlüğe giren 1 Nisan 2021 tarih ve 31441 sayılı Resmi Gazete’de yayımlanan “Bankalarca Kullanılacak Uzaktan Kimlik Tespiti Yöntemlerine ve Elektronik Ortamda Sözleşme İlişkisinin Kurulmasına İlişkin Yönetmelik” ile (31441 sayılı yönetmelik, 2021) bankalar, müşteri temsilcisi ile kişinin; fiziksel olarak aynı ortamda bulunmasına gerek olmadan, çevrim içi olarak görüntülü görüşmesi ve birbiriyle iletişim kurması ile gerçekleştirilecek uzaktan kimlik tespiti yaparak müşteri kabul edebileceklerdir. Bu sayede kişiler (gerçek kişi ya da gerçek kişi tacirleri) banka şubesine gitmeksizin mobil cihazlar ve bilgisayarlar aracılığı ile banka müşterisi olup hesap açtırabilmektedirler. Bu durum özellikle pandemi döneminde finansal hizmetlerin sağlanması ve Covid-19 bulaş riskinin azaltılması açısından olumlu bir gelişme olmuştur.

3.1. İnternet Bankacılığı ve Mobil Bankacılık Verileri

Mart 2017’den itibaren dijital bankacılık verilerini paylaşmaya başlayan TBB, “dijital bankacılık müşteri sayısı” olarak “sadece internet bankacılığı kullanan müşteri sayısı”, “sadece mobil bankacılık kullanan müşteri sayısı” ve “hem internet hem mobil bankacılık kullanan müşteri sayısı” toplamalarını kabul etmektedir.

TBB üyesi bankalardan internet bankacılığı hizmeti veren 28 banka ve mobil bankacılık hizmeti veren 22 bankanın bilgilerini içeren 2023 yılı TBB verilerine göre Nisan-Haziran 2023 dönemi içinde toplam (bireysel ve kurumsal) aktif dijital bankacılık müşteri sayısı 103 milyon 634 bin kişidir. Aktif dijital bankacılık müşteri sayının 2 milyon 9 bini “sadece internet bankacılığı” işlemi yaparken, 91 milyon 351 bini “sadece mobil bankacılık” işlemi yapmıştır. Hem internet hem mobil bankacılık işlemi yapan kullanıcı sayısı ise 10 milyon 274 bin kişidir (TBB, 2023). Aktif dijital bankacılık müşterilerinin yaklaşık olarak %96’sı bireysel, %4’ü ise kurumsal müşterilerden oluşmaktadır.

Grafik 2: Aktif dijital bankacılık müşteri sayısı (Milyon)



Kaynak: TBB (2023), Dijital, İnternet ve Mobil Bankacılık İstatistikleri - 2023 – Haziran, <https://www.tbb.org.tr>, Erişim Tarihi: 01.10.2023).

Nisan-Haziran 2023 dönemi içinde az bir kez giriş (log-in) işlemi yapmış aktif bireysel dijital bankacılık müşteri sayısı 99 milyon 159 bin kişidir. Bu sayının 1 milyon 385 bin kişisi “sadece internet bankacılığı” işlemi yaparken 88 milyon 470 bin kişisi “sadece mobil bankacılık” işlemi yapmıştır. Hem internet hem mobil bankacılık işlemi

yapan kullanıcı sayısı ise 9 milyon 304 bin kişidir. Nisan-Haziran 2023 dönemi içinde az bir kez giriş işlemi yapmış aktif kurumsal dijital bankacılık müşteri sayısı 4 milyon 475 bin kişidir (TBB, 2023).

Tablo III'te Türkiye'de Haziran 2022 – Haziran 2023 dönemleri arasındaki bireysel dijital bankacılık müşteri sayılarına ilişkin veriler yer almaktadır (Bu verilere katılım bankaları dahil değildir):

Tablo III: Bireysel Dijital Bankacılık Müşteri Sayıları

Dönem	Sistemde kayıtlı, en az bir kez login olmuş müşteri sayısı (Bin)				Sistemde kayıtlı, son 1 yıl içinde en az bir kez login olmuş müşteri sayısı (Bin)				Aktif bireysel müşteri sayısı (Bin)		
	Sadece İnternet Bankacılığı Kullanan	Sadece Mobil Bankacılık Kullanan	Hem İnternet Hem Mobil Bankacılık Kullanan	TOPLAM	Sadece İnternet Bankacılığı Kullanan	Sadece Mobil Bankacılık Kullanan	Hem İnternet Hem Mobil Bankacılık Kullanan	TOPLAM	Sadece İnternet Bankacılığı Kullanan	Sadece Mobil Bankacılık Kullanan	Hem İnternet Hem Mobil Bankacılık Kullanan
Haziran 2022	18,262	58,313	67,667	144,242	2,697	70,871	20,445	94,012	1,885	71,638	7,811
Eylül 2022	19,993	60,692	69,081	149,766	3,055	76,939	20,907	100,902	2,219	75,929	8,568
Aralık 2022	19,761	64,720	71,376	155,857	2,840	80,875	22,307	106,022	1,678	79,780	8,867
Mart 2023	17,823	70,572	74,265	162,660	2,660	87,253	23,174	113,087	1,474	84,643	9,090
Haziran 2023	17,636	74,565	76,795	168,996	2,454	91,244	24,200	117,898	1,385	88,470	9,304

Kaynak: TBB (2023), Dijital, İnternet ve Mobil Bankacılık İstatistikleri - 2023 – Haziran, <https://www.tbb.org.tr>, Erişim Tarihi: 01.10.2023).

Tablo III'teki TBB verilerine göre Haziran 2022'de dijital bankacılık kullanan toplam bireysel müşteri sayısı 81.335.000 iken bu sayı Aralık 2022'de 90.325.00'e, Haziran 2023'te ise 99.159.000'e yükselmiştir. Bu sayının 1.385.000'i sadece internet bankacılığı kullanan müşteriler iken, 88.470.000'i sadece mobil bankacılık kullanan müşterilerdir. 9.304.000 müşteri ise hem internet hem mobil bankacılık işlemi gerçekleştirmiştir. Bu durum bize müşterilerin dijital bankacılığa giderek daha fazla ilgi duyduklarını ve finansal hizmetlere düşük maliyetle ve daha kolay bir şekilde erişebildikleri için şubeler yerine dijital bankacılığa yöneldiklerini göstermektedir.

TBB Dijital, İnternet ve Mobil Bankacılık İstatistikleri'ne göre internet bankacılığı yapmak üzere sistemde kayıtlı ve en az bir kez giriş işlemi yapmış bireysel müşteri sayısı Haziran 2023 itibarıyla, 94 milyon 431 bin kişidir. İnternet bankacılığı yapmak üzere sistemde kayıtlı olan ve en az bir kez giriş işlemi yapmış kurumsal müşteri sayısı ise Haziran 2023 itibarıyla 6 milyon 428 bin kişidir (TBB, 2023).

Nisan-Haziran 2023 dönemi itibarıyla, internet bankacılığı hizmeti kullanılarak yapılan finansal işlemlerin toplam adedi 126 milyon, tutarı ise yaklaşık 7 trilyon TL'dir. EFT, havale ve döviz transferi işlemlerini kapsayan para transferleri işlemleri, 4 trilyon 804 milyar TL işlem hacmi ve 74 milyon işlem adedi ile finansal işlemler arasında en büyük paya sahip olmuştur (finansal işlem hacminin yüzde 73'ü). İkinci sırada 1 trilyon 156 milyar TL'lik işlem hacmi ve 23 milyon işlem adedi ile yatırım işlemleri bulunmaktadır. Yatırım işlemlerini; yatırım fonları, döviz işlemleri, vadeli hesaplar, hisse senedi işlemleri, repo işlemleri, tahvil ve bono işlemleri, Altın ve VİOP içermektedir. İnternet bankacılığı kullanılarak yapılan yatırım işlemlerinde Nisan -Haziran 2023 dönemi itibarıyla en yüksek işlem hacmi 413 milyar TL ile yatırım fonları işlemleridir. Yatırım fonları işlemlerini sırası ile 339 Milyar TL ile hisse senedi işlemleri ve 161 milyar TL ile döviz işlemleri takip etmiştir (TBB, 2023).

İnternet bankacılığında finansal işlemlere ilişkin veriler Tablo IV'te yer almaktadır. Bu verilere göre Nisan-Haziran 2022 döneminde internet bankacılığı kullanılarak yapılan toplam işlem adedi 120 milyon iken, bu sayı Ocak-Mart 2023 döneminde 126 milyona yükselmiştir. Nisan-Haziran 2023 döneminde ise bir önceki döneme göre bir artış olmayıp toplam işlem adedi 126 milyon olarak gerçekleşmiştir. Toplam işlem hacmi Nisan- Haziran 2022 döneminde 3 trilyon 797 milyar TL iken; Nisan-Haziran 2023 döneminde 6 trilyon 569 milyar TL'ye yükselmiştir.

Tablo IV: İnternet Bankacılığında Finansal İşlemler

	Nis.-Haz. 2022		Oca.-Mart 2023		Nis.-Haz. 2023	
	İşlem Adedi (Milyon)	İşlem Hacmi (Milyar TL)	İşlem Adedi (Milyon)	İşlem Hacmi (Milyar TL)	İşlem Adedi (Milyon)	İşlem Hacmi (Milyar TL)
Para Transferleri	69	2,830	70	4,195	74	4,804
Ödemeler	24	175	22	263	20	318
Yatırım İşlemleri	17	636	24	1,283	23	1,156
Kredi Kartı İşlemleri	7	51	5	74	5	86
Diğer Finansal İşlemler	4	105	4	182	4	206
Toplam	120	3,797	126	5,996	126	6,569

Kaynak: TBB (2023), Dijital, İnternet ve Mobil Bankacılık İstatistikleri - 2023 – Haziran, <https://www.tbb.org.tr>, Erişim Tarihi: 01.10.2023).

Mobil bankacılık verileri 2011 yılından itibaren TBB tarafından yayınlanmaktadır. TBB 2023 yılı verilerine göre Nisan-Haziran 2023 dönemi itibarıyla mobil bankacılık yapmak için sistemde kayıtlı ve en az bir kez login olmuş bireysel müşteri sayısı 151 milyon 360 bin, kurumsal müşteri sayısı 6 milyon 679 bin, toplam müşteri sayısı ise 158 milyon 339 bin kişidir.

Tablo V: Mobil Bankacılıkta Finansal İşlemler

	Nis.-Haz. 2022		Oca.-Mart 2023		Nis.-Haz. 2023	
	İşlem Adedi (Milyon)	İşlem Hacmi (Milyar TL)	İşlem Adedi (Milyon)	İşlem Hacmi (Milyar TL)	İşlem Adedi (Milyon)	İşlem Hacmi (Milyar TL)
Para Transferleri	810	4,545	1,048	8,191	1,210	10,360
Ödemeler	294	199	356	377	333	398
Yatırım İşlemleri	87	1,703	130	3,346	127	3,374
Kredi Kartı İşlemleri	181	368	217	738	234	948
Diğer Finansal İşlemler	69	201	106	541	120	591
Toplam	1,442	7,015	1,856	13,193	2,025	15,671

Kaynak: TBB (2023), Dijital, İnternet ve Mobil Bankacılık İstatistikleri - 2023 – Haziran, <https://www.tbb.org.tr>, Erişim Tarihi: 01.10.2023).

Tablo V'teki TBB verilerine göre mobil bankacılık vasıtasıyla yapılan finansal işlemlerinde Nisan -Haziran 2023 dönemi itibarıyla en yüksek işlem hacmi 10 trilyon 360 milyar TL ile para transferleri işlemleridir. Para transfer işlemlerini 3 trilyon 374 milyar TL ile yatırım işlemleri izlemiştir.

Kredi kartı ve ek kart başvurusu, kredi başvurusu, düzenli ödeme talimatı ve fatura ödeme talimatlarını içeren finansal olmayan internet bankacılığı ve mobil bankacılık işlemlerinde Haziran 2023 itibarıyla kredi kartı ve ek kart başvurusu işlem adedi internet bankacılığında 258 bin; mobil bankacılıkta 13 milyon 209 bin adettir. İnternet bankacılığında kredi başvurusu işlem adedi 1 milyon 261 adet; mobil bankacılıkta 39 milyon 902 bin'dir. Düzenli ödeme talimatı işlemleri internet bankacılığında 580 bin; mobil bankacılıkta 11 milyon 99 bin'dir. Son olarak, fatura ödeme talimatları internet bankacılığında 393 bin, mobil bankacılıkta ise 9 milyon 521 bin adettir (TBB, 2023).

4. SONUÇ

Teknolojik gelişmelerle birlikte bankalar açısından geleneksel bankacılık değişime uğramış, şubelerle sağlanan rekabet üstünlüğü yerini elektronik şubelere bırakmaya başlamıştır. Elektronik bankacılığın hem banka müşterilerine hem de bankalara önemli yararlarının olduğu bir gerçektir. Müşteriler daha düşük maliyetle ve hızlı bir şekilde bankacılık işlemlerini gerçekleştirirlerken, banka şubelerine olan bağımlılıkları da önemli ölçüde azalmaktadır.

Elektronik bankacılık, internet bankacılığı ya da mobil bankacılık için herkes tarafından kabul edilen tek bir tanım yoktur. İnternetin giderek daha fazla yaygınlaşması, internet hizmetlerine erişimin daha kolaylaşması, teknolojik gelişmelerin devam etmesi ve yeni ürün ve hizmetlerin ortaya çıkması mevcut tanımların zaman içerisinde tekrar gözden geçirilmesini ve güncelleştirilmesini de gerekli kılmaktadır.

Bankacılık hizmetlerinin internet üzerinden sunulması olarak adlandırabileceğimiz internet bankacılığı günümüzde oldukça yaygınlaşmıştır. Bankalar daha çok müşteriye ulaşmak için geleneksel şubecilik uygulamalarının yanı sıra internet bankacılığından da yararlanmaktadırlar. Bu alanda rekabet giderek artmaktadır.

Elektronik bankacılık, perakende bankacılığı önemli ölçüde etkilemiş ve değiştirmiştir. İnternet bankacılığı ve mobil bankacılık, bankacılık sektörünü değiştirmeye devam etmektedir. Günümüzde bankalar şube bankacılığı ile birlikte internet bankacılığı hizmetleri de sunarken, bazı bankalar tamamen internet üzerinden şubesiz bankacılık hizmetleri vermeye başlamıştır.

Türkiye'de internet bankacılığının ve mobil bankacılığın önemi giderek artmaktadır. Müşteriler şubeye gitmek yerine internet üzerinden bankacılık işlemlerini gerçekleştirebilmektedirler. Bankalar müşterilerine internet üzerinden yeni finansal ürün ve hizmetler sunmakta, çevrimiçi bankacılık ve mobil bankacılık uygulamaları, her geçen gün daha fazla müşteri tarafından kullanılmaktadır.

Banka müşterileri tarafından mobil telefonlar, akıllı telefonlar ve tabletler gibi mobil araçlar vasıtasıyla internete erişim sağlanarak hesap işlemleri, para transferleri, fatura ödemeleri ve benzeri internet bankacılığı işlemlerinin yapılmasını içeren mobil bankacılık, mobil teknolojilerdeki ilerlemeler sayesinde giderek kendine daha fazla yer bulmakta ve hızla gelişmektedir. Banka müşterileri akıllı telefon gibi mobil araçları kullanarak bankacılık işlemlerini kolaylıkla ve hızla gerçekleştirebilmektedirler. Günümüzde internetin bankacılık hizmetlerine ulaşmanın önemli bir aracı haline geldiğini söylemek mümkündür.

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Çalışanların İş Doymu ile Sosyal Kaytarma Algısı Arasındaki İlişkinin Yiyecek ve İçecek İşletmelerinde İncelenmesi: Ankara İli Örneği

Dr. Öğr. Üyesi Menekşe ÖZTOPRAK¹

Dr. Öğr. Üyesi Şükran ÖKTEM²

¹Başkent Üniversitesi, Sosyal Bilimler Meslek Yüksekokulu, tarhan@baskent.edu.tr, ORCID: 0000-0003-4039-6457

²Başkent Üniversitesi, Sosyal Bilimler Meslek Yüksekokulu, sukrans@baskent.edu.tr, ORCID: 0000-0003-2198-6449

Özet: Bu araştırmanın amacı, turizm sektöründe çalışanların iş doymu ile sosyal kaytarma algısı arasındaki ilişkiyi ortaya koymaktır. Bu amaç doğrultusunda nicel araştırma yöntemlerinden ilişkisel tarama modeli kullanılmıştır. Araştırma verileri için hazırlanan anketler, Ankara ilinde faaliyette bulunan yiyecek içecek işletmelerinde görev yapan çalışanlara kolayda örnekleme yöntemi ile e- posta, instagram ve whatsapp yoluyla gönderilmiştir. Geri dönüşü gerçekleşen 390 anket değerlendirilmiştir. Dolayısıyla araştırmanın örneklemini yiyecek içecek işletmelerinde görev yapan 390 çalışan oluşturmaktadır. Örneklem grubuna, iş doymu ve sosyal kaytarma ölçeğini içeren anketler uygulanmıştır. Verilerin analizi için istatistik bilgisayar yazılım programı kullanılmış ve analiz sırasında, frekans ve yüzde dağılımları, Pearson Korelasyonu, Regresyon analizi, anova ve t-testi yapılmıştır. Araştırmanın sonucunda, çalışanların iş doymu ile sosyal kaytarma algıları arasında dikkate değer bir ilişki tespit edilmiş olup ilişkinin ters yönlü olduğu dikkat çekmiştir. Ayrıca yapılan regresyon analizinde de çalışanların iş doyumlarının sosyal kaytarma üzerine %3'lük bir etkisi olduğu tespit edilmiştir.

Anahtar Kelimeler: İş doymu, Sosyal Kaytarma Algısı, Yiyecek İçecek İşletmeleri.

Investigation the Relationship Between Employees' Job Satisfaction and Perception of Social Loafing in Food and Beverage Enterprises: The Case of Ankara Province

Abstract: The aim of this research is to reveal the relationship between job satisfaction and social loafing perception of employees in the tourism sector. Correlational survey model as a quantitative research method was used for this purpose. The questionnaires including job satisfaction and social loafing scale prepared for the research data were sent to the employees working in the food and beverage enterprises operating in Ankara via e-mail, instagram and whatsapp with the convenience sampling method. From the questionnaires that were sent, 390 of the returned were evaluated. Therefore, the sample of the research consists of 390 employees working in food and beverage enterprises. Surveys including job satisfaction and social loafing scales were applied to the sample group. Statistical computer software was used for the analysis of the data and during the analysis, frequency and percentage distributions, Pearson Correlation, Regression analysis, ANOVA (ANALYSIS OF VARIANCE) test and t-test were performed. As a result, an inversely related significant relationship was found between job satisfaction of the employees and the perceptions of social loafing. Additionally, it was found that the job satisfaction of the employees had a 3% effect on social loafing in the regression analysis.

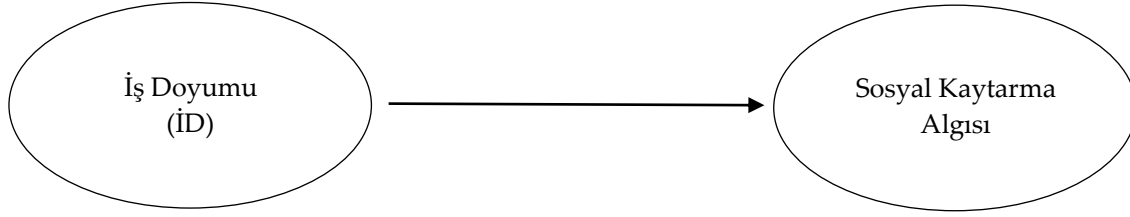
Keywords: Job Satisfaction, Perception of Social Loafing, Food and Beverage Enterprises.

GİRİŞ

İşletmeyi oluşturan örgüt için verimli olmak önemlidir. Teknolojideki gelişmeler ve rekabet ise verimliliği önemli ölçüde etkiler. İşgörenlerin verimliliğinin kaybedilmemesi, motivasyonun azalarak performans kayıplarının yaşanmaması için örgütsel davranış kapsamında bazı önlemler alınmalı, çeşitli stratejiler geliştirilmelidir. Verimliliğin azalmasına etki eden çeşitli faktörler bulunmaktadır, bu faktörlerden iş doymu işgörenin iş durumunu olumlu/olumsuz değerlendirdiği bir yargı (Son ve Ok, 2019), sosyal kaytarma ise işgörenlerin ekip çalışması içinde örgüt açısından beklenen düzeyde performans göstermemesi anlamındadır. Olumsuz iş doymu işgörenlerin yapmaları gereken görevleri olması gerektiği gibi yerine getirmemeleri sonucunda verimliliğe etki ederek performans azalmasına yol açabilir, hatta işten ayrılma gibi olumsuz sonuçlanabilir (Emül ve Karaca, 2023). Bu çalışmada yiyecek içecek işletmelerinde iş doymu ve sosyal kaytarma faktörleri arasındaki ilişki incelenmiş; iş doymu ve sosyal kaytarma algısı arasında anlamlı bir ilişkinin olduğu tespit edilmiş olup, bu ilişkinin düzeyi analizler sonucu ortaya konulmuştur.

Araştırmanın modeli aşağıdaki şekilde oluşturulmuştur.

Şekil 1. Araştırmanın Modeli



Araştırmanın amacına dayanarak aşağıdaki hipotezler test edilmiştir:

H₁: İş doyumu ile sosyal kaytarma algısı arasında ilişki vardır.

H₂: İş doyumunun sosyal kaytarma algısı üzerine etkisi vardır.

H₃: Yaş değişkeni açısından iş doyumu (a) ile sosyal kaytarma algısı (b) arasında anlamlı bir farklılaşma vardır.

H₄: Cinsiyet değişkeni açısından iş doyumu (a) ile sosyal kaytarma algısı (b) arasında anlamlı bir farklılaşma vardır.

H₅: Eğitim değişkeni açısından iş doyumu (a) ile sosyal kaytarma algısı (b) arasında anlamlı bir farklılaşma vardır.

H₆: Sektörde çalışma yılı değişkeni açısından iş doyumu (a) ile sosyal kaytarma algısı (b) arasında anlamlı bir farklılaşma vardır.

KAVRAMSAL ÇERÇEVE

İş Doyumu

İşletmelerde örgütsel yapı içinde çeşitli kişilik özelliklerine sahip işgörenler vardır. Zaman zaman işgörenlerin iş yaşamında gerek yaptıkları işle ilgili gerekse çalışma ortamına ve diğer işgörelere karşı bazı duygusal tepkileri ortaya çıkar. İş doyumu da bu duygusal tepkilerden biridir. İş doyumu olumlu tepkilerin sonucu olarak ortaya çıkar, hoş giden ya da olumlu duygu durumu olarak tanımlanmaktadır, olumsuz tepkiler meydana geldiğinde ise iş doyumсуuzluğu olarak tanımlanabilir (Sevimli ve İşcan, 2005: 56; Romero vd., 2020). İş doyumu her işletme için önemli bir kavramdır, turizm işletmeleri de iş doyumu kavramına önem vermektedirler çünkü işgörenler iş doyumunu hissediyorlarsa işletme başarısına ulaşılabilirdi düşünülür, işletme başarısı ise rakiplerinden bir adım önde olmayı ve müşteri memnuniyetini getirir. İş doyumunun olumlu olarak ortaya çıkması için işletme yönetimi uygun çalışma koşulları oluşturmali, işgörenlerin psikolojik olarak güçlendirilmesi sağlanmalı, tutarlı yetkin ve özerk davranarak ihtiyaçları karşılanmalıdır (Hewagama, vd., 2019). İşyerinde rol belirsizliği psikolojik anlamda işgöreni olumsuz etkileyen önemli konulardan biridir, hatta bu durum turizm sektöründe turnover olarak adlandırılan işten ayrılma niyetini ortaya çıkarır, bir başka deyişle örgütsel iklim ile yakından ilişkilidir (Hight ve Park, 2019). İşgören beklentilerinin karşılanmadığını düşündüğünde iş doyumсуuzluğu ortaya çıkar. Özellikle yönetimin kendisine ve arkadaşlarına objektif olup olmaması, çalışma arkadaşlarının tutumu, terfi olanakları, ücretler, rol belirsizliği iş doyumunda etkili faktörlerdendir. Ayrıca fiziksel iş yeri koşulları da dikkate alınmalıdır (Göktepe ve Ertopçu, 2018). Olumlu iş doyumunu gerçekleştirdiğinde daha üretken olan işgörenler örgüte karşı da olumlu duygular beslerler. Yönetim kaynak dağıtımında adil olmalıdır, iş gören aksini düşündüğünde kendisine haksızlık yapıldığı fikrine kapılabilir (Appiah, 2019). Turizm sektöründe müşterilerle yoğun bir ilişki içinde olan işgörenlerde duygusal zekanın dikkate alınması, iş doyumunun duygusal emek içeren işlerde işgören davranışlarını değiştirebileceği, stres faktörünü azaltıp müşterilerle olumlu iletişim içinde olabilecekleri düşünülmektedir. Bazı durumlarda zor müşterilerle de karşılaşabilirler, bu tür müşterilerle karşılaşıldığında olumlu bir iletişim gerçekleştirmek için çaba sarfetmelidirler (Wen vd., 2019). Maslow'un İhtiyaçlar Hiyerarşisi kuramına göre, insanların çeşitli ihtiyaçları vardır ve bu ihtiyaçların karşılanmasını ister ve çaba gösterir, bu çabanın gösterilebilmesinde motivasyon unsurları devreye girer, çalışma hayatında iş doyumunun gerçekleşebilmesinde de motivasyon unsurları gereklidir (Çoban, 2021). İş doyumunu ihtiyaçların karşılanabilmesi durumunda gerçekleşir, dolayısıyla ihtiyaçları sınıflandıran motivasyon teorileri de iş doyumunu ile yakından ilişkilidir.

Sosyal Kaytarma

İşletmeler işgörenlerin üretken olması ve işletme verimliliğine katkısı konusuna odaklanarak işgörenleri motive ederek ya da uyarak işletme beklentilerinin gerçekleşmesini isterler. Ancak işyerinde yapılan çalışmalar çoğunlukla ekip çalışması şeklinde gerçekleştirilir, bireysel çalışmalar da vardır, verimlilik ekip halinde çalışmaya ya da bireysel çalışmaya göre değişiklik gösterir. Zamanla verimliliğin azalmasında sosyal aylıklık kavramının etkili olduğu düşüncesi ortaya çıkmıştır. İşgörenlerin bireysel çalışma isteği ekip olarak çalışmaları durumundan farklılık göstermektedir, bu farklılık bireysel çalışmada daha çok emek harcadığı, ekip olarak çalışırken ise daha az emek harcadığı şeklinde açıklanan sosyal kaytarma kavramı olarak nitelendirilmektedir (Liden, 2004). Ekip çalışmasında meydana gelen sosyal kaytarma kavramının devamlı olması istenilmeyen bir durumdur, çünkü zamanla örgüt ortamında bireysel olarak işgörenlerin performansları ve verimlilikleri düşmektedir. 1913 yılında Ringelmann'ın gözlemlediği ip çekme görevinde ekip performansının bireysel performans toplamından çok daha az olduğu farkedilmiştir ve bu ters yönlü ilişki "Ringelmann Etkisi" olarak tanımlanmıştır işgörenlerde grup bağlılığının derecesi de sosyal kaytarmayı etkilemektedir, bağlılığın az olduğu gruplarda sosyal kaytarma daha fazla görülmektedir (Sünnetçioğlu, 2014). Sosyal kaytarma farklı kültürlerdeki işletmelerde farklı etkiler ortaya koymaktadır, örneğin bireyselliğin ön planda olduğu Amerika Birleşik Devletleri'nde sosyal kaytarmanın görüldüğü, ekip çalışmasının ön planda olduğu Çin'de ise sosyal kaytarmanın görülmeyişi belirtilmektedir (Earley, 1989). Bireysel çabaların grup içerisinde belirlenememesi sosyal kaytarmanın en önemli nedeni olarak düşünülmektedir, işgörenlerin bireysel olarak en az çaba gösterme eğiliminde oldukları ve bu durumun "Kalabalık içinde kaybolma" yani sosyal kaytarma eğiliminin gittikçe artış göstermesine neden olmaktadır (Şeşen ve Kahraman, 2014). Bazı işyerlerinde işin tarzına bağlı olarak bireylerin grup içindeki performanslarının belirlenebildiği durumlarda bireysel performansın arttığı, sosyal kaytarmanın azaldığı görülmektedir (Liden vd., 2004). Bazı işgörenler grup içinde performansları belirlense bile yaptıkları işin takdir görmeyeceğini düşünmeleri sebebiyle de sosyal kaytarma meydana gelmektedir (Çoban, 2021).

YÖNTEM

Araştırmamızın evrenini Türkiye'deki yiyecek içecek işletmeleri çalışanları oluşturmaktadır. Evrendeki araştırma grubuna ulaşmanın zorluğundan dolayı örneklem seçilmiştir. Örneklem grubu Ankara ilinde bulunan yiyecek içecek işletmeleri çalışanlarından oluşmaktadır. Ankara ilinde faaliyette bulunan yiyecek içecek işletmelerinde çalışan 390 kişiye kolayda örneklem yöntemi ile anketler uygulanmıştır. Evreni temsil eden örneklem sayısı basit tesadüfi örneklem formülü ile 384 olarak belirlenmiştir (Yamane, 1967). Geri dönüşü sağlanan 390 anket değerlendirmeye alınmış olup analizler bu anketler üzerinden gerçekleştirilmiştir.

Araştırmada birincil ve ikincil veri kaynaklarından yararlanılmıştır. Bu kapsamda daha önce yapılmış çalışmalar, makaleler, tezler gibi yazılı kaynaklar taranmıştır. Bu çalışmalar ışığında yiyecek içecek işletme çalışanların iş doyumunu ile sosyal kaytarma algıları arasında bir ilişkinin bulunup bulunmadığı ve bu ilişkinin etkisini saptamaya yönelik anketler uygulanmıştır.

Veri toplama aracı üç bölümden oluşmakta olup; birinci bölümde araştırmaya katılan çalışanlar ile ilgili genel bilgilere ilişkin sorulara, ikinci bölümünde, Tezer (1991) tarafından geliştirilen iş doyum ölçeğine yer verilmiştir. Çalışanların iş doyumunu belirlemeye yönelik oluşturulan anket toplam 10 ifadeden oluşmaktadır. Üçüncü bölümde ise katılımcıların sosyal kaytarma algısını belirlemeye yönelik Liden vd. (2004) tarafından geliştirilen ve 13 ifadeden oluşan sosyal kaytarma ölçeği kullanılmıştır.

BULGULAR

Araştırmamızın örneklem grubunu oluşturan yiyecek içecek işletmeleri çalışanlarının genel yapısına yönelik tanıtıcı frekans ve yüzde dağılımları Tablo-1 de gösterilmiştir.

Tablo- 1: Örneklem Grubuna İlişkin Tanımlayıcı İstatistikler

Yaş	Sayı (f)	Yüzde (%)
25 Yaş ve Altı	158	40,5
26-30 Yaş Arası	128	32,8
31-35 Yaş Arası	48	12,3
36-40 Yaş Arası	32	8,2
41 Yaş Üzeri	24	6,2
Toplam	390	100.0

Cinsiyet	Sayı (f)	Yüzde (%)
Kadın	197	50,5
Erkek	193	49,5
Toplam	390	100,0
Eğitim	Sayı (f)	Yüzde (%)
İlköğretim	29	7,4
Lise	202	51,8
Ön lisans	95	24,4
Lisans	55	14,1
Lisans Üstü	9	2,3
Toplam	390	100,0
Sektörde Çalışma Yılı	Sayı (f)	Yüzde (%)
0-1 Yıl	76	19,5
2-5 Yıl	134	34,4
6-10 Yıl	108	27,7
11-15 Yıl	53	13,6
16 Yıl ve Üzeri	19	4,9
Toplam	390	100,0

Araştırmaya katılan çalışanların yaş dağılımlarına Tablo-1 den bakıldığında; %40,5'i 25 yaş ve altı, %0,32,8 i 26-30 yaş arası, %12,3'ü 31-35 yaş arası, %8,2'si 36-40 yaş arası ve %6,2'sinin 41 yaş ve üzeri olduğu görülmektedir. Örneklem grubundaki çalışanların büyük bir bölümünün 25 yaş ve altı olduğu dikkat çekmektedir.

Araştırmaya göre çalışanların %50,5'i kadın ve %49,5'i erkektir. Örneklem grubunun çoğunluğu kadınlardan oluşmaktadır, dolayısıyla Ankara ilindeki yiyecek içecek işletmelerinde çalışan örneklem grubundakilerin büyük çoğunluğunun kadınlardan oluştuğu görülmektedir.

Araştırmaya katılanların eğitim durumları dağılımları; %7,4'ü ilköğretim %51,8'i lise, %24,4'ü ön lisans, %14,1'i lisans ve %2,3'lük dilimde ise lisans üstü eğitime sahip olanların yer aldığı görülmektedir. Dolayısıyla örneklem gurubu çalışanların büyük çoğunluğunu lise mezunları oluşturmaktadır.

Araştırmaya katılanların sektörde çalışma yılı yüzde ve frekans dağılımına bakıldığında; çalışanların %19,5'i 1 yıl, %34,4'ü 2 ve 5 yıl arası, %27,7'si 6 ve 10 yıl arası, %13,6'sı 11 ve 15 yıl arasında %4,9'unun ise 16 yıl ve üzerinde çalışma süreleri vardır. Araştırmaya göre çalışanların büyük bir bölümünün 2 ve 5 yıl arasında bu sektörde çalıştıkları görülmektedir.

Tablo-2: İş Doyumu ile Sosyal Kaytarma Algısı Arasındaki İlişki

	İş-Aile Çatışması		İşgören Performansı	
	r	1	r	1
İş Doyumu	p		,000	
	n	390	390	
	n	- ,187***	1	
Sosyal Kaytarma Algısı	r	,000		
	p	390	390	

** Korelasyon 0,01 seviyesinde anlamlıdır.

Araştırmaya katılan örneklem grubunun iş doyumu ile sosyal kaytarma algısı arasındaki ilişkiye bakılmış olup $p < 0,00$ önem düzeyinde ters yönlü anlamlı bir ilişki tespit edilmiştir ve ilişkinin şiddeti $r = -0,187$ olduğu görülmüştür. Diğer bir ifade ile iş doyumu ile sosyal kaytarma algısı arasında dikkate değer bir ilişki bulunmuştur. Yapılan analizde bulunan korelasyon katsayısının anlamlılığının oldukça yüksek olduğu ($p = 0,000$) tespit edilerek **H₁ hipotezi yeterli kanıtla desteklenmiştir**. Bir başka çalışmada benzer sonuç görülmüş, İnce'nin (2022) çalışmasında katılımcıların iş tatmini ölçeği, sosyal kaytarma ölçeği skorları arasındaki ilişki Pearson Korelasyonu ile ölçülmüştür. Bu değişkenler arasında orta seviyede, negatif ve anlamlı bir ilişki bulunduğu saptanmıştır. Mete ve Uğurluoğlu'nun (2022) çalışmasında benzer bir diğer sonuç bulunmuş, bireyin kendi sosyal kaytarması ile iş tatmini arasında istatistiksel olarak anlamlı ve negatif yönde bir ilişkinin olduğu görülmüştür. Kurnaz'ın (2016) çalışmasında, sosyal kaytarma ile çalışanın performansı arasında ters yönlü bir ilişkinin olduğu ortaya çıkmıştır.

Tablo-3: İş Doyumunun Sosyal Kaytarma Algısı Üzerine Etkisi

Çalışanların İş Doyumunun Sosyal Kaytarma Algısı Üzerine Etkisi	R	r2
	,187a	,032

Araştırmaya katılan örneklem grubunun iş doyumunun sosyal kaytarma algısı üzerindeki etkisine bakıldığında %32’lik bir etkinin olduğu görülmektedir ($r^2=,032$). Araştırmadan görüldüğü üzere çalışanların iş doyumunu ile sosyal kaytarma algısı arasında ters yönlü bir ilişkinin olduğu ve bu ilişkinin etkisi test edildiğinde ise iş doyumunun sosyal kaytarma algısı üzerinde %0,32 kadar bir etkisi olduğu araştırma sonucunda görülmüştür. **H₂ hipotezi yeterli kanıtla desteklenebilmiştir.** İnce’nin (2022) çalışmasında ise sosyal kaytarma davranışının iş tatminleri üzerine orta düzeyde, negatif yönde, anlamlı bir etkisinin olduğu görülmüştür.

Tablo-4: Yaş Değişkeni Açısından İş Doyumu ile Sosyal Kaytarma Algısı Farklılaşması

	Yaş Değişkeni	N	X	Standart sapma	F	p
İş Doyumu	25 yaş ve altı	158	3,5225	1,09183	3,328	,011
	26-30 yaş	128	3,8665	,87432		
	31-35 yaş	48	3,6438	,80237		
	36-40 yaş	32	3,9988	,66375		
	41 yaş ve üzeri	24	3,7854	,66061		
	Toplam	390	3,7056	,94840		
Sosyal Kaytarma Algısı	25 ve altı	158	2,3571	,93803	1,097	,358
	26-30 yaş	128	2,2418	,97780		
	31-35 yaş	48	2,5505	,92341		
	36-40 yaş	32	2,2710	,99576		
	41 yaş ve üzeri	24	2,1741	1,17944		
	Toplam	390	2,3247	,97066		

Tablo-4’e göre yaş değişkeni açısından iş doyumunu ile sosyal kaytarma algısı arasında anlamlı bir farklılaşmanın olup olmadığına bakıldığında; iş doyumunu ile yaş grupları arasında anlamlı bir farklılaşmanın olduğu görülmektedir ($p=,011$). Sosyal kaytarma algısı ile yaş grupları arasında ise $p=,358$ değeri ile anlamlı bir farklılaşmanın olmadığı tespit edilmiştir. Dolayısı ile iş doyumunu ile yaş grupları arasında anlamlı bir farklılaşma olurken, sosyal kaytarma algısı ile yaş grupları arasında anlamlı bir farklılaşma araştırma sonuçlarına göre olmamıştır. **H_{3a} hipotezi yeterli kanıtla desteklenirken H_{3b} hipotezi desteklenememiştir.** İnce’nin (2022) araştırmasında da iş tatminine yönelik katılımcıların yaş özelliklerine göre istatistiksel olarak anlamlı farklılık gösterdiği bulunmuştur. Avcı’nın (2020) araştırmasında, analiz sonucu incelendiğinde; katılımcıların sosyal kaytarma davranışının yaşa göre istatistiksel olarak anlamlı bir farklılık gösterdiği tespit edilmiştir

Tablo-5: Cinsiyet Değişkeni Açısından İş Doyumu ile Sosyal Kaytarma Algısı Farklılaşması

	Cinsiyet Değişkeni	N	X	Standart Sapma	t	p
İş Doyumu	Kadın	197	3,6292	,92736	-1,611	,392
	Erkek	193	3,7836	,96557		
	Toplam	390				
Sosyal Kaytarma Algısı	Kadın	197	2,4224	1,00220	2,016	,401
	Erkek	193	2,2250	,92938		
	Toplam	390				

Tablo-5’e bakıldığında cinsiyet değişkeni açısından iş doyumunu ve sosyal kaytarma algısı açısından p değerinin ,050 den büyük olduğu görülmektedir ($p=,392$; $p=,401$). Diğer bir ifade ile, cinsiyet değişkeni grupları ile çalışanların iş doyumunu ve sosyal kaytarma algısı arasında anlamlı bir farklılık araştırmada tespit edilememiştir. Dolayısı ile **H₄ hipotezi yeterli kanıtla desteklenememiştir.** İnce’nin (2022) araştırmasında, iş tatminine yönelik katılımcıların cinsiyet değişkenine göre herhangi bir farklılık tespit edilemediği bulunmuştur. Avcı’nın (2020) araştırmasında katılımcıların sosyal kaytarma davranışının cinsiyet değişkenine göre istatistiksel olarak anlamlı bir farklılık göstermediği tespit edilmiştir

Tablo-6: Eğitim Değişkeni Açısından İş Doyumu ile Sosyal Kaytarma Algısı Farklılaşması

	Eğitim Değişkeni	N	X	Standart Sapma	F	p
İş Doyumu	İlköğretim	29	4,0055	,90397	1,066	,373
	Lise	202	3,6901	,93516		
	Ön lisans	95	3,6139	1,02251		
	Lisans	55	3,7309	,87578		
	Lisansüstü	9	3,9000	,98107		
	Toplam	390	3,7056	,94840		
Sosyal Kaytarma Algısı	İlköğretim	29	2,2374	,94252	,240	,916
	Lise	202	2,2983	,96826		
	Ön lisans	95	2,3643	,97295		
	Lisans	55	2,3701	1,03071		
	Lisansüstü	9	2,5033	,86078		
	Toplam	390	2,3247	,97066		

Tablo- 6'ya bakıldığında eğitim değişkeni açısından çalışanların iş doyumu ve sosyal kaytarma algıları arasında anlamlı bir farklılaşmanın ($p=,373$; $p=,916$) olmadığı görülmüştür. Dolayısı ile eğitim değişkeni açısından iş doyumu ile sosyal kaytarma algıları arasında anlamlı bir farklılığın olmadığı araştırma sonuçlarında görülmüş olup, **H₅ hipotezi yeterli kanıtla desteklenememiştir**. Avcı'nın (2020) çalışmasında ise katılımcıların sosyal kaytarma davranışının eğitim durumuna göre istatistiksel olarak anlamlı bir farklılık gösterdiği tespit edilmiştir.

Tablo-7: Sektörde Çalışma Yılı Değişkeni Açısından İş Doyumu ile Sosyal Kaytarma Algısı Farklılaşması

	Çalışma Yılı Değişkeni	N	X	Standart Sapma	F	p
İş Doyumu	0-1 yıl	76	3,6605	1,02184	,777	,541
	2-5 yıl	134	3,6272	,99653		
	6-10 yıl	108	3,7453	,89353		
	11-15 yıl	53	3,7972	,91001		
	16 ve üzeri	19	3,9579	,67521		
	Toplam	390	3,7056	,94840		
Sosyal Kaytarma Algısı	0-1 yıl	76	2,4111	,87694	,521	,721
	2-5 yıl	134	2,3275	1,00087		
	6-10 yıl	108	2,3506	,92231		
	11-15 yıl	53	2,1974	1,06014		
	16 ve üzeri	19	2,1671	1,15861		
	Toplam	390	2,3247	,97066		

Tablo-7'ye bakıldığında sektörde çalışma yılı değişkeni açısından iş doyumu $p=,541$ değeri ile ($P>0,05$) anlamlı bir farklılaşmanın olmadığı görülmüştür. Ayrıca sosyal kaytarma algısı ile çalışma yılı değişkenleri arasında da $p>0,05$ olduğundan ($p=,721$) anlamlı bir farklılaşmanın olmadığı söz konusudur. Diğer bir ifade ile sektörde çalışma yılı değişkeni açısından iş doyumu ile sosyal kaytarma algısı arasında anlamlı bir farklılığın olmadığı araştırma sonuçlarında tespit edilmiştir. Dolayısı ile **H₆ hipotezi yeterli kanıtla desteklenememiştir**. İnce'nin (2022), araştırmasında elde edilen verilere göre iş tatminine yönelik katılımcıların çalışma yılı değişkenine göre herhangi bir farklılık tespit edilmediği görülmüştür.

SONUÇ VE ÖNERİLER

Çalışanlar için iş doyumu son derece önemlidir. İşinde tatmin olan çalışan motive olabilecek ve daha verimli bir şekilde çalışabilecektir. Hatta iş kazaları işten uzaklaşma fiziksel ve ruhsal hastalıklar ve stresten de korunmuş olabilecektir. İş doyumunun çalışanların sosyal kaytarma algılarıyla ilişkili olabileceği kanaatiyle, iş doyumu ve sosyal kaytarma arasındaki ilişki bu çalışmada incelenmiş olup, Ankara ilindeki yiyecek içecek işletmeleri esas alınmış ve 390 kişiye sosyal medya aracılığıyla anketler uygulanmıştır.

Araştırmaya katılan örneklem grubunun iş doyumu ile sosyal kaytarma algısı arasındaki ilişkiye bakılmış olup $p < 0,00$ önem düzeyinde ters yönlü anlamlı bir ilişki tespit edilmiştir ve ilişkinin şiddeti $r = -0,187$ olduğu görülmüştür. **H₁ hipotezi yeterli kanıtla desteklenmiştir.**

Araştırmaya katılan örneklem grubunun iş doyumunun sosyal kaytarma algısı üzerindeki etkisine bakıldığında ise, %3'lük bir etkinin olduğu görülmektedir ($r^2 = 0,032$). Araştırmadan görüldüğü üzere çalışanların iş doyumu ile sosyal kaytarma algısı arasında ters yönlü bir ilişkinin olduğu ve bu ilişkinin etkisi test edildiğinde ise iş doyumunun sosyal kaytarma algısı üzerinde %3 kadar bir etkisi olduğu araştırma sonucunda görülmüştür. **H₂ hipotezi yeterli kanıtla desteklenmiştir.**

Yaş, Cinsiyet, Eğitim ve Sektörde Çalışma Yılı değişkenleri açısından iş doyumu ile sosyal kaytarma algısı arasında anlamlı bir farklılaşmanın olup olmadığına bakıldığında ise;

Yaş değişkeni açısından iş doyumu ile anlamlı bir farklılaşmanın olduğu, sosyal kaytarma algısı açısından ise yaş değişkenleri arasında anlamlı bir farklılaşmanın olmadığı tespit edilmiştir. H_{3a} desteklendi H_{3b} desteklenemedi hipotezi desteklenememiştir.

Cinsiyet değişkeni, Eğitim ve Sektörde çalışma yılı değişkenleri açısından iş doyumu ile sosyal kaytarma algısı arasında anlamlı bir farklılaşmanın olup olmadığına bakıldığında p değerinin ,050'den büyük olduğu görülmektedir ($p > 0,05$). Dolayısı ile cinsiyet, eğitim ve kıdem değişkeni grupları ile iş doyumu ve sosyal kaytarma algısı arasında anlamlı bir farklılaşma araştırmada bulunamamış olup, **H₄, H₅, H₆ hipotezleri yeterli kanıtla desteklenememiştir.**

Sonuç olarak; çalışanların iş doyumu ile sosyal kaytarma algısı arasında anlamlı bir ilişkinin mevcut olduğu ve iş doyumunun sosyal kaytarma algısı üzerinde de bir etkisinin olduğu ve bu etkinin de yüzde %32' seviyesinde olduğu yapılan çalışmada görülmüştür. Yaş değişkeni açısından iş doyumu (H_{3a}) ile arasında bir ilişki tespit edilirken sosyal kaytarma algısı (H_{3b}) arasında anlamlı bir ilişki tespit edilememiştir. Cinsiyet değişkeni, eğitim değişkeni ve sektörde çalışma yılı değişkeni açısından iş doyumu ile sosyal kaytarma algısı arasında anlamlı bir farklılaşmanın söz konusu olmadığı sonucuna bu araştırmada ulaşılmıştır.

Ayrıca bu konu ile ilgili çalışma yapacak araştırmacılara yönelik olarak da şu önerilerde bulunulabilir:

1. İş doyumu ile sosyal kaytarma algısı arasındaki ilişki farklı sektörlerde, çeşitli bölgelerde ve illerde farklılık arz edebileceği için, başka sektör ve yörelerde de araştırılabilir.
2. Yiyecek İçecek işletmeleri açısından merkez konumundaki diğer kentlerdeki 4 ve 5 yıldızlı otellerin de çalışanları üzerinde bu tarz bir araştırma yapılabilir.
3. İş doyumunun; yaşam doyumu, iş stresi, işgören performansı vb. üzerine etkileri başka sektörlerde çalışanlar ve meslek grupları üzerinde de araştırılabilir.

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Logistics Performance and Industrial Pollution A Survey for Emerging Markets

Dr. Öğretim Üyesi MÜCAHİT ÇİTİL¹

¹Harran Üniversitesi, Siverek Uygulamalı Bilimler Fakültesi, mucahitcitol@harran.edu.tr – ORCID ID: 0000-0002-6788-7115

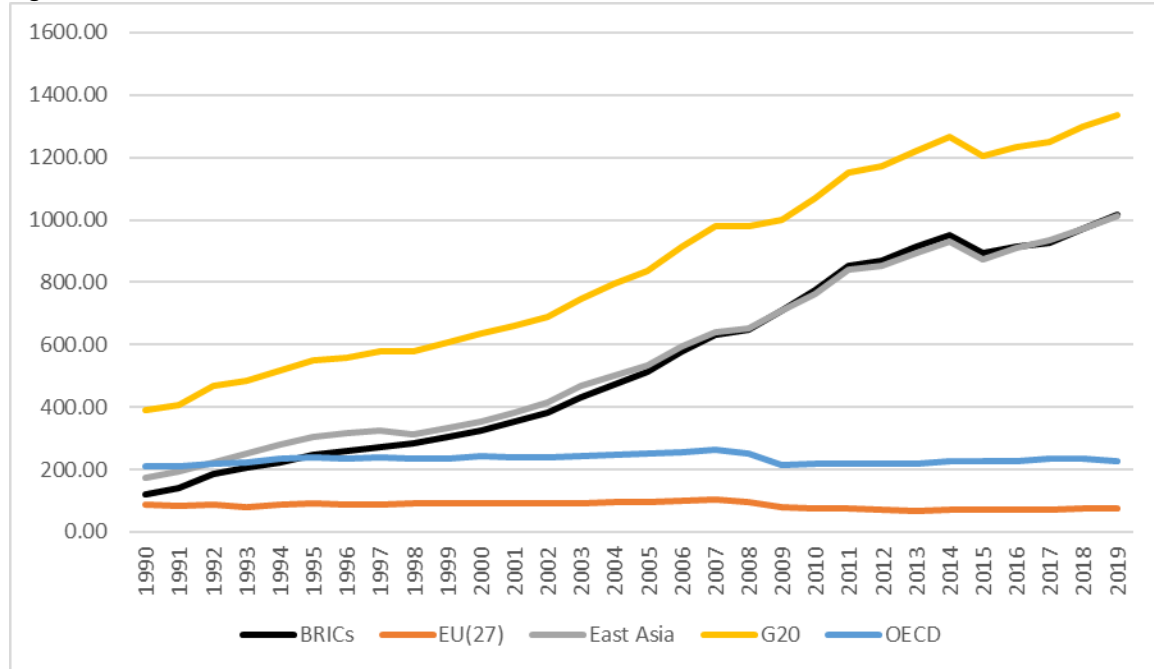
Abstract: This study explores the relationship between logistics performance and environmental concerns, particularly focusing on industrial pollution in developing countries. It fills a critical gap in the existing literature and offers insights that can inform policymaking for sustainable economic and environmental policies. According to results Logistics performance, as measured by the Agility variable, is found to have an inverse relationship with industrial pollution in countries. This suggests that countries with better logistics competencies tend to have lower levels of industrial pollution. However, this effect is less pronounced in countries with already high pollution levels. Low environmental standards and inadequate regulatory control are identified as significant contributors to rising industrial pollution. In countries with high pollution levels and weak environmental regulations, industries driven solely by profit motivates tend to have a more detrimental impact on the environment. On the other hand The study highlights that the impact of logistics on industrial pollution depends on the strength of the link between logistics processes and industrial production. If these links are weak, logistics improvements may have a limited effect on pollution, necessitating a broader examination of pollution sources.

Key Words: Logistics, Environment, Emerging Markets, Panel Data

1.INTRODUCTION

Although there is a trend towards renewable and clean energy sources today, industrial production around the world is largely carried out using various fossil fuels. In addition, there are disruptions in recycling processes. For this reason, industrial production, the production process in which raw materials are transformed into intermediate products and then into final products, causes environmental pollution by both producing waste and consuming energy.

Figure 1:Industrial Pollution*



Source: climatewatchdata.org

*Total CO₂ from industrial activities.

Although the table above shows that environmental pollution caused by industrial production has followed a stagnant course in OECD and European Union countries, it shows that this pollution has increased in important production powers of the world such as BRICs, East Asia and G20. This picture shows in which countries industrial production is more environmentally friendly and in which countries it is more polluting. And it is clear

that the industrial processes of key productive forces such as the BRICs, East Asia and the G20 are not environmentally friendly. The reason why this problem arises and its relationship with other parameters is a subject worth investigating.

The expansion of industrial production, especially manufacturing, is accompanied by the development of other sectors. The foremost of these sectors is the logistics industry. The increase in manufacturing industry production, which causes significant environmental pollution with the wastes it produces and the amount of energy it uses, significantly increases the demand for logistics services that use fossil fuels. This feature of the manufacturing industry has led researchers such as (Guerrieri & Meliciani, 2005) and (Lin & Lin, 2012) to deduce that there is a coordination between the sophistication of the manufacturing industry and the logistics industry. This relationship between the manufacturing industry and the logistics industry is considered as a reference. As an extension of this relationship, it is widely accepted that the developments in the manufacturing industry are the main dynamics in the development of the services offered in the logistics sector (Chan, 2005). Because in the historical process, logistics services have been excluded from manufacturing activities and started to be procured through outsourcing. The fact that the manufacturing industry outsources its logistics needs has caused the logistics industry to be considered a derivative of the manufacturing industry (He, Yang, Wang, & Li, 2020). According to this idea, productivity increases in the services sector, including the logistics industry, are a very important factor in the development of production processes in the manufacturing industry (Gordon, & McCann, 2000) (Choi, Wallace, & Wang, 2016). According to this point of view, the logistics industry reduces the amount of stock, increases the capital turnover rate and improves the competitiveness of the manufacturing companies (Sandberg & Abrahamsson, 2011). A stronger version of this view is that productivity gains in the manufacturing industry are prerequisite for productivity gains in services, such as the logistics industry (Sanders, Locke, Moore, & Autry, 2007) ve (Arnold, Javorcik, Lipscomb, & Mattoo, 2016).

Although it is a common approach to give position the logistics industry, which also carries out activities that pollute the environment due to the vehicles and fuels it uses, before or after the manufacturing industry activities according to the degree of importance, chain/network approaches that have developed in recent years consider the logistics industry as a part of industrial production processes. (Gereffi & Sturgeon, 2013) can be cited as an example. The reason why the logistics industry is handled in this framework is that logistics services have been transformed in line with the needs of the market economy and the international division of labor. As the international division of labor has improved, manufacturing processes have become more complex and dispersed across countries (Li, Wang, & Zhao, 2018). The production of a product has become inclusive of countries and regions. As environmentally polluting production processes are scattered around the world, it has become much more important to deliver the components of the product to the points in the supply chain on time. Production processes that have become more complex and spread over wide geographies have led to the establishment of deeper relations with the logistics industry. Thus, manufacturing processes and logistics processes have turned into complementary activities (Dicken, 2015, s. 541).

The main motivation of this study is whether the close mutual connection established between the manufacturing industry and the logistics industry in the historical process affects the pollution level of the manufacturing industry. Because the performance of the logistics industry affects the efficiency of manufacturing industry activities. Whether the manufacturing industry works efficiently or not determines the amount of waste it will produce and release to the environment. In other words, the relationship between logistics and the manufacturing industry has consequences for environmental pollution (Lessard, 2013). Therefore, the pollution level of the manufacturing industry is expected to be affected by the performance of the logistics industry, which complements it and ensures its efficient operation. In such a framework, while logistics performance can be increased despite environmental pollution, as revealed by (Min & IIsuk , 2010), it is also possible to say the opposite (Liu, Yuan, Hafeez, & Yuan, 2018).

Also, it may be wrong to treat industrial wastes separately from wastes generated as a result of other activities and to take precautions only for industrial wastes. Industrial wastes and the pollution caused by them can be significantly affected by the quality, accessibility and performance of logistics services, especially reverse logistics activities (Zhou & Zhang, 2009). For a manufacturing industry that does not harm the environment or manages to keep this damage within certain limits, coordination with service industries such as the logistics industry is necessary. If such a coordination is developed, it can be expected that the amount of waste generated as a result of industrial production will decrease and energy will be used more efficiently. At this point, the performance of transportation and supply logistics can be an important parameter in the waste and environmental pollution caused by all industrial activities (Toshko, Bernadette, & Richard, 2007). Virtual

coordination will also increase the interaction between customers and manufacturers, allowing industrial manufacturers to meet, increasing and regularizing the information flow between manufacturers, making the information in question more accessible and making it easier for manufacturers to agree. Thus, consumer satisfaction can be increased and environmental pollution can be reduced by reducing the number of logistics operations (Dell’Orco, Sassanelli, & Tiso, 2009).

Therefore, the pollution of industrial production by producing waste or operating at low efficiency is not only caused by the production processes of industrial production itself (Gabriela , Peter , & Helena , 2012). The pollution generating capacity of industrial production is also affected by the efficiency of stakeholders such as the logistics industry (Cagno, Trucco, & Tardini, 2005). (Shi, Li, Yang, Li, & Choi, 2012) emphasized the importance of reverse logistics applications when analyzing environmental pollution caused by industrial production. Thanks to reverse logistics, the flow of information about industrial production and the use of electric batteries has the potential to reduce environmental pollution (Shi, Li, Yang, Li, & Choi, 2012).

Bu çalışma pek çok açıdan özgün niteliğe sahiptir. Özgün niteliği lojistik performans ile endüstriyel kirlilik değişkenleri arasındaki ilişkiyi dinamik bir şekilde ampirik olarak ele almasından kaynaklanmaktadır. Endüstriyel üretim, GDP, nüfus, kentleşme, istihdam ve yenilenebilir enerji tüketimi parametreleri de çalışmanın çerçevesine yerleştirildi. İktisadi gelişme patikalarında lojistik yetkinliğin oldukça önemli olduğu 45 gelişmekte olan ülkenin 2013-2019 yılları arasındaki verilerini topladık. Bu çalışmada kullanılan değişkenler arasındaki ilişkiler dinamik panel veri ve quantile regresyon tahmincileri kullanılarak ampirik olarak incelendi. Kullanılan tahminciler çeşitli kriterlere göre seçildi. Veri setinin 45 (N) ülkeden 7 (T) yıldan oluşması ($N > T$) olması GMM tahmincisinin tercih edilmesine belirleyici oldu. Öte yandan kantil Regresyon tahmincisi, parametrik özellikler taşımayan tahmin sonuçlarının sağlamlığı test edilirken yaygın bir şekilde kullanıldığı için tercih edildi. Elde edilen sonuçların lojistik sektöründe faaliyet gösteren firmalara, endüstriyel faaliyetler içinde yer alan yöneticilere ve çevresel politika yapıcılarına iktisadi ve çevresel çözüm arayışında yardımcı olacağı düşünülmektedir.

This work is unique in many aspects. Its originality stems from its dynamic empirical analysis of the relationship between logistics performance and industrial pollution variables. Industrial production, GDP, population, urbanization, employment and renewable energy consumption parameters are also included in the framework of the study. We collected the data between 2013 and 2019 of 45 developing countries where logistics competence is very important in the economic development paths (Hoffmann et.al.,2009). The relationships between the variables used in this study have been examined empirically using dynamic panel data and quantile regression estimators. The estimators used were selected according to various criteria. The fact that the data set consisted of 7 (T) years and 45 (N) countries was decisive for the opt for of the GMM estimator. On the other hand, the quantile Regression estimator was preferred because it is widely used when testing the robustness of estimation results that do not have parametric properties. It is thought that the results obtained will help companies operating in the logistics sector, managers involved in industrial activities and environmental policy makers in search of economic and environmental solutions.

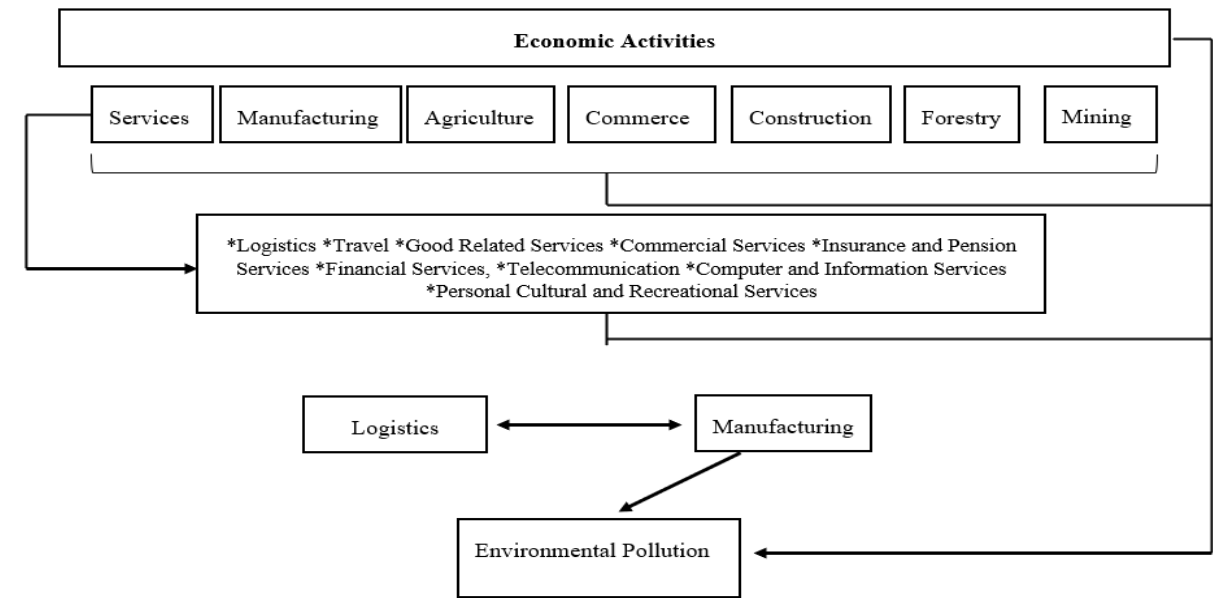
The discusses the relationship between industrial production, logistics, and environmental pollution. It highlights that the expansion of industrial production, particularly manufacturing, increases the demand for logistics services, which can contribute to environmental pollution due to their reliance on fossil fuels. The study aims to empirically examine the connection between logistics performance and industrial pollution, considering various economic and environmental parameters. In sum, this study tries to contribute to the current literature in a few ways. First, to our knowledge, this paper is the first to constitute a connection between the industrial pollution and logistics performance at country level. Second, it asks whether industrial pollution and logistics performance connection change with development level by country groups. The third, it also contributes to the literature theoretically as it considers logistics activities as a component of the industrial production process. The rest of the paper is organized as follows. Section 2 presents theoretical framework and the relevant literature. Section 3 describes the data and the empirical methodology. Section 4 displays and discusses the empirical results. And, section 5 gives concluding remarks and suggests some policy implications.

2.THEORETICAL FRAMEWORK AND LITERATURE REVIEW

Logistics has come to such a key point in the production process that the disruptions in logistics processes or the poor quality of logistics services affect the functioning of the production process. The performance of the logistics industry can affect the environmental impact of industrial production, particularly in the manufacturing industry, in several different ways. (Xiaoye & Miao, 2009) gathered these paths under three

headings. Accordingly, the performance of the logistics industry affects the amount of raw materials that the manufacturing industry can process in a certain period of time. The process of processing the raw material includes the use of energy and indicates the stage where the wastes are produced. Failure to deliver the raw materials to be used in the production process on time, disruptions in customs procedures in case of using imported inputs, inadequacy of the logistics infrastructure (highways, railways, ports and airports), and disruptions in the tracking and traceability of the raw material being transported can cause energy waste and waste production in the raw material processing process. Tracking and traceability of freights directly affects the stock management of companies in the manufacturing industry. The inability to track the freights effectively causes unnecessary stock keeping and warehouse usage. Warehouses are designed in different ways according to perishable and durable products and are areas where large amounts of energy are used. In cases that effective and timely freight tracking cannot be performed, warehouses are used inefficiently and may cause environmental pollution due to unnecessary energy use. The logistics sector, which affects the environmental pollution rate of the manufacturing industry through the raw material processing and stocks, also causes environmental pollution by affecting the entire operation process of the manufacturing industry. The performance of the logistics industry weakens the dominance of the manufacturing industry over the production processes. Disrupted shipments, long customs clearance times, lack of carrier vehicles and infrastructure, and ineffective tracking and monitoring practices prevent adequate and accurate information flow to the production process of the manufacturing industry. The inadequacy of the information flow causes the decisions taken in the production process to deviate from the optimal and the inefficient use of resources causes environmental pollution to increase.

Figure 2:Logistics and Environment Relations



Source: Designed by author

When we look at the literature, the effects of logistics performance are generally examined within the framework of the economic performance of countries. There are many studies in the literature examining the relationship between logistics performance and economic growth. Here we would like to refer to the studies on logistics performance. But first of all, it should be emphasized that not examining the relationship between logistics performance and industrial pollution is a major deficiency.

How logistics performance affects exports, international trade and competitiveness is one of the most important questions in the literature. (Hausman, Lee, & Subramanian, 2013) examined how logistics performance affects bilateral trade in terms of time, cost and flexibility in a study covering 80 countries. The results revealed that logistics performance had statistically significant effects on the volume of bilateral trade. (Martí, Puertas, & García, 2014) and (Puertas, Martí, & García, 2014) the same group of researchers also examined how logistics performance affects international trade in developing countries and export competitiveness in 26 EU countries, respectively. The results showed that logistics performance has a statistically significant effect on both international trade and export competitiveness. (Civelek, Uca, & Çemberci, 2015) using the data between 2007 and 2014, it has been revealed that the level of production is also affected by logistics performance along with competitiveness. Its found similar results on competitiveness

with a large dataset covering Asian, African and EU countries with (Sergi, ve diğerleri, 2021) and using mixed estimation methods with (Kabak, Önsel Ekici, & Ülengin, 2020). (Gani, 2017) determined that all logistics performance indicators of World Bank affect exports and imports positively and statistically.

(Çelebi D. , 2019) examined the relationship between logistics performance and international trade within the framework of the gravity model. The effects of logistics on international trade are estimated according to income groups. The results revealed that logistics performance affects international trade more radically in low-income countries. It has been revealed that increasing logistics performance in high-income countries increases imports rather than exports. (Töngür, Türkcan, & Ekmen-Özçelik, 2020) examined the relationship between logistics performance and export diversity within the framework of Turkey's 174 trade partners using the gravity model with the data set covering the years 2007-2017. It has been determined that logistics performance has a positive effect on Turkey's export volume. In addition, logistics is one of the basic components of the supply chain. In his study (Wang M. , 2018) observed that high logistics performance is a factor that reduces risks in the supply chain. Also (Aharonovitz, Vieira, & Suyama, 2018) found that supply chain performance and logistics performance act together with the help of the structural equation model.

The relationship between economic growth and logistics performance is another question examined in the literature. (Çelebi, Civelek, & Çemberci, 2015) examined the relationship between foreign direct investments, economic growth and logistics performance. And, they showed the existence of statistically significant relationships between logistics performance, foreign direct investments and economic growth. (Munim & Schramm, 2018) using a data set consisting of 91 developed and developing countries, with the help of structural equation modeling, revealed that logistics performance affects economic growth, but this relationship weakens as the level of development rises. A similar study was carried out by (Tang & Abosedra, 2019) using the data of 23 Asian countries between the years 2010-2016 and found that logistics performance is a factor that positively affects export-led growth that will increase exports.

The relationship between social, institutional and environmental factors and logistics performance is another topic in the literature. For example (Koh, Wong, Tang, & Lim, 2018) examined the relationship between corruption, government efficiency and logistics performance with 2007-2014 data set in the context of 26 Asian countries. The results show that there is a strong relationship between corruption and logistics performance, while the relationship between government efficiency and logistics performance is weaker. (Larson, 2020) showed that there is an inverse relationship between logistics performance, corruption and gender inequality. On the other hand (Khan, ve diğerleri, 2019) examined the relationship between logistics performance, environmental and social factors for selected south Asian countries. It has been determined that low logistics performance has negative effects on the environment while high logistics performance has a positive effect on financial development. (GMM) These results on financial development support the results obtained from the study conducted by (Töyli, Häkkinen, Ojala, & Naula, 2008) on 424 SMEs operating in Finland in 2006.

On the other hand, it is seen that the relationship between logistics performance and environment has been examined more intensively in recent years. (Mariano, Gobbo Jr., Camiato, & Rebelatto, 2017) examined the relationship between logistics performance and carbon emissions for the transportation sector. This study, which covers 104 countries, revealed that higher logistics performance reduces carbon emissions in the transportation sector. (Liu, Yuan, Hafeez, & Yuan, 2018) used the data of 42 Asian countries between 2007 and 2016 to examine the relationship between logistics performance and environmental degradation with the GMM method. The results revealed that environmental degradation is affected by logistics performance. (Karaduman, Karaman-Akgül, Çağlar, & Akbaş, 2020) determined that there is a positive relationship between logistics performance and carbon emissions in the Balkan countries. (Magazzino, Alola , & Schneider, 2021) analyzed the relationship between logistics performance, economic and environmental variables with GMM and quantile regression method for 25 countries with the highest logistics performance. The results showed that there is a significant relationship between logistics performance and technological innovation, human development index, urbanization and trade openness. However, it has been revealed that logistics performance negatively affects economic growth performance. In addition, the negative impact of logistics performance on the environment was determined by increasing carbon emissions. These results support the finding of (Larson, 2021) that high logistics performance reduces environmental degradation.

In addition to these studies, it is seen that there are studies in the literature that examine how logistics performance affects pollution caused by industrial production. However, these studies are quite limited. For example in their study (Liu, Yuan, Hafeez, & Yuan, 2018) examined the relationship between general environmental pollution, including pollution from industrial production, and the logistics performance of 42

Asian countries. The World Bank's Logistics Performance Index was used to represent the logistics performance of the countries and any variable such as carbon emission or greenhouse gas originating from industrial production was not used. However, factors that increase environmental pollution are discussed like industrial production and urbanization. The results revealed that logistics performance is an important parameter on environmental pollution. For example, while competence in international shipments is a parameter that reduces carbon emissions, timely shipments increase this emission in Asian countries. Although these results do not clearly show how the environmental pollution caused by industrial production is affected by logistics performance, they are very important in terms of showing that logistics performance affects environmental pollution and its components. (Ashfaq, ve diğerleri, 2020) evaluated the environmental impact of the activities of small and medium-sized manufacturing companies in Malaysia in the context of logistics performance. For this purpose, 346 manufacturing industry companies were included in the research by questionnaire method. The Smart-PLS method was used as the analysis method. According to the results obtained, one of the ways for manufacturing industry companies to reduce carbon emissions is to increase the performance of the logistics industry. It has been determined that green logistics practices are an important practice in reducing the negative impact of the manufacturing industry on the environment. It has been revealed as one of the important results of the study that improving the performance of the logistics industry will contribute to the sustainability of the Malaysian economy as well as reducing the negative impact of the manufacturing industry on the environment.

(Wen-Long, ve diğerleri, 2021) examined the relationship between manufacturing industry, logistics industry and unpredictable environmental pollution, using manufacturing industry and logistics industry data from three cities in China between 2009 and 2016. Tobit Regression method was used as the analysis method. Results Show that the degree of relationship between the manufacturing industry and the logistics industry differs according to the cities. In terms of our study, the most important result of their work is the increase in the relationship between the manufacturing industry and the logistics industry, the growth of economic scales and support for regional development. In addition, it has been revealed that the efficient combination of the manufacturing industry and the logistics industry increases the efficiency in energy use per unit and causes less damage to the environment. Although one of the most recent studies (Magazzino, Mele, & Schneider, 2022) does not establish a direct relationship between environmental pollution caused by industrial production and logistics performance, it is a very important study. In the study, the relationships between energy demand, logistics performance and environmental pollution are examined within the scope of 27 EU countries. The striking result is that the performance of the supply chain, including logistics activities, is not significantly correlated with the overall environmental pollution, including environmental pollution caused by industrial activities. This result contrasts with the results obtained from (Liu, Yuan, Hafeez, & Yuan, 2018) covering 42 Asian countries. From this point of view, the development differences of countries and their position in the international division of labor are an important parameter that affects the results.

3.DATA AND EMPIRICAL METHODOLOGY

In order to apply the empirical method, a variable was needed to represent the logistics capabilities of developing countries. One of the commonly used indicators is the logistics performance index created by the World Bank. However, this index has been criticized in many ways (Beysenbaev and Dus 2020). For this reason, the Agility index was used which only was designed to measure the logistics capabilities of developing countries. This index was first published in 2013 and is currently calculated for 50 developing countries. The full list of countries is provided in the appendix.

The main variables whose effects are examined apart from logistics performance are GDP, industrial value added, population, urbanization, employment and renewable energy use. All variables, their definitions and sources are presented in the table below.

Table 1: Variables' description

	Indicator		Definition	Source
ICE	MtCO ₂ e		Carbon emmisions from industrial process	Climate Watch Data- Global Historical Emission
AGL	Agility Index		From 1=low to 10=high	Agility Emerging Markets Logistics Index
GDP	Gross Domestic Product		Constant 2015 US\$	World Development Indicator from World Bank

IND	Industrial Production	Industry (including construction), value added (annual % growth)	World Indicator from World Bank	Development
POP	Population	Population growth (annual %)	World Indicator from World Bank	Development
URB	Urbanization	Urban population (% of total population)	World Indicator from World Bank	Development
EMP	Employment	Employment to population ratio, 15+, total (%)	World Indicator from World Bank	Development
REC	Renewable Energy Consumption	% of total final energy consumption	World Indicator from World Bank	Development

How logistics performance affects industrial pollution has been estimated with this data set. The GDP calculated with the 2015 fixed prices has been used to show the economic performance. The growth rate in industrial production, including the construction sector, has been used to represent industrial production. There is a natural link between industrial production and population, especially urban population. For this reason, the annual growth rate in the population and the ratio of the urban population to the total population have been included in the model. Renewable energy is also included in the forecast model, as it is an element that reduces emissions in production processes, especially in consumption and industrial production.

Logistics performance has been used to explain many different macroeconomic variables as set forth in the literature section. However, in this study, it is aimed to explain industrial pollution by using a different logistics performance indicator. Within this framework, how logistics performance affects industrial pollution and its meaning in terms of environmental sustainability goals of developing countries are examined as follows:

$$ICE = f(AGL, GDP, IND, POP, URB, EMP, REC)$$

The System GMM and Quantile Regression for robustness testing was used to examine the above functional relationship like in (Töyli, Häkkinen, Ojala, & Naula, 2008) and (Liu, Yuan, Hafeez, & Yuan, 2018). The system GMM approach can be implemented as one-step or two-step according to the weight matrix. In datasets with insufficient sample size, the standard errors of two-step GMM estimators will have a certain error (Bond, Hoeffler, & Temple, 2001). In addition, the increased time dimension weakens the specification tests while the number of sections is constant, because the GMM estimator produces excessive instrument variables (Roodman, 2009). For this reason, while a one-step GMM estimator is preferred for samples with long time dimension and large number of sections, as in this study, two-step GMM estimator is preferred for samples with a higher number of sections than the time dimension (Teixeira & Queirós, 2016).

If there is autocorrelation the GMM estimator gives consistent results. It should be noted that the number of endogenous variables for moment conditions must be greater than the generated instrumental variables. In order to be used as a tool variable, the residues obtained from the endogenous and exogenous variables should not contain autocorrelation. This indicates that there should be a first-order AR(1) autocorrelation but not a second-order AR(2) autocorrelation. The results of the autocorrelation give information about the moment conditions. Rejecting the hypothesis that the error terms are uncorrelated at higher orders after AR(1) means that the moment conditions are not met (Baltagi, 1998). For this reason, AR(1) and AR(2) results of the system GMM estimator are reported in this study. In addition, as in many other studies, the validity of moment conditions will be tested with the help of Sargan and Hansen tests.

For the robustness test, the same model has been re-estimated with the quantile regression estimator as recommended by (Machado & Silva, 2019). The quantile regression estimator considers the effect of heterogeneity and extremes over a period of time (Lasisi, ve diğerleri, 2021). Another strength of the quantile regression estimator is that it is resistant to deviations from the normality assumption, as well as giving stronger results than the conditional mean and median distribution estimations (Mosteller & Tukey, 1977).

5. EMPIRICAL RESULTS

Variables	GMM	Quantile Regression		
		Q25	Q50	Q75
ICE.L1	2.134*** (0.201)			
AGL	-20.569 ** (8.507)	-6.555** (2.904)	-4.871*** (.876)	-3.304*** (0.620)

GDP	-5.940* (3.510)	5.580*** (1.760)	5.970*** (4.010)	6.390*** (4.210)
IND	-0.093* (0.055)	0.043 (0.083)	0.062 (0.056)	0.023 (0.040)
POP	0.594 (0.396)	1.401* (0.739)	0.533** (0.229)	0.271 (0.172)
URB	3.738 (2.283)	-0.193* (0.111)	-0.085** (0.030)	-0.063* (0.033)
EMP	2.345 ** (1.104)	0.143** (0.069)	0.019 (0.032)	-0.024 (0.020)
REC	1.042* (0.547)	-0.198** (0.082)	-0.107*** (0.031)	-0.063*** (0.021)
CONS		27.665** (11.415)	23.718*** (4.076)	19.473*** (2.781)
Sargan	$\chi^2 = 0.49(0.783)$	$R^2 = 0.31$	$R^2 = 0.59$	$R^2 = 0.73$
Hansen	$\chi^2 = 1.27 (0.531)$			
AR(1)	z=-1.30 (0.192)			
AR(2)	z= 1.56(0.118)			

In the table above, the estimation results made with the two-step system approach of Arrelona-Bond are reported. Information loss is reduced by making predictions with the Roodman code. This estimation was adjusted for variance and autocorrelation using a two-step estimator. In addition, the backward difference equation is used and the moment conditions are reduced for the number of instrument variables produced. When the results of the autoregressive process are examined, it is seen that there is no autocorrelation of the first AR(1) and the second AR(2). The main hypothesis that excessive definition constraints are valid in the Sargan test was not rejected. It is seen that the probability value obtained from the Sargan test is 0.78. This value is well above the 0.25 value, which is the acceptance limit of the validity of the instrument variables. Therefore, the instrumental variables produced in the estimation method used are strongly valid. The results of the Hansen test are very important because the estimation is carried out in two-step. The outputs obtained from the Hansen test make it possible to make comments similar to the Sargan test for the Hansen test.

When we evaluate the results obtained from the estimator, it is seen that the lagged value of the dependent variable is significant at the 1% significance level. This result shows that the estimator is significant. Essentially, the variable whose effect on industrial pollution is examined is the logistics performance represented by AGILITY. It is seen that the coefficient of logistic performance is negative and significant at the 5% significance level. Accordingly, it will be insufficient to explain industrial pollution with the internal dynamics of industries. Because according to the results, industrial pollution is adversely affected by logistics performance. To put it more clearly, higher logistics performance does not only contribute to the economic performance for the country group examined. At the same time, it reduces the damage of industrial activities to the environment. Thus, the countries that are the subject of the study increase their chances of achieving environmental sustainability targets by accessing cleaner and less damaging industrial processes.

The GMM estimator showed remarkable results for other explanatory variables that make up the prediction model. It has been observed that GDP and industrial production have the effect of reducing industrial pollution. However, it should not be overlooked that this result is significant at the 10% significance level. Employment, on the other hand, has been observed as a factor that increased industrial pollution. In this study, which covers developing countries, the linear interaction between employment level and industrial pollution is remarkable. This result has 5% probability value and statistical significance level is reasonable. It is seen that renewable energy consumption increases industrial pollution, but this result is valid only at 10% significance level.

The quantile regression results are reported in the same table. Results for three quantile levels (25%, 50% and 75%) are shown. It is seen that R^2 , which is the indicator of the explanatory level of the estimation model, increases as the quantile level increases. First, it is understood that the effect of logistics performance on industrial pollution at low and high quantile levels does not differ. In developing countries with both low industrial pollution values and high industrial pollution values, the coefficients of logistics performance are negative. The coefficients of logistic performance are statistically significant at the 5% and 1% significance levels. Accordingly, increasing logistics performance reduces industrial pollution. However, the coefficient of logistics performance decreases in absolute value at high quantile levels. This means that in countries with relatively low industrial pollution, such as Kuwait, Bahrain, Jordan, Bangladesh and Paraguay, the pollution reduction effect of logistics performance is weakened. In this respect, it is possible to say that the relationship between industrial pollution and logistics performance is heterogeneous for the country group in this study. It appears that GDP is a component that increases industrial pollution at all quantile levels. In addition, in countries with high industrial pollution levels, the pollution-increasing effect of GDP is even higher. The coefficients of GDP are statistically significant at 1% significance level. Although the effect of industrial

production is obtained with positive coefficients and homogeneous just like GDP, these coefficients are statistically insignificant.

The expected linear relationship between population and industrial pollution is also observed in the quantile regression results. However, this effect is heterogeneous. In countries with low levels of industrial pollution, population increases industrial pollution more strongly. This effect decreases in countries with low industrial pollution levels. In addition, at high industrial pollution level, the linear relationship between population and industrial pollution becomes statistically insignificant. On the other hand, urbanization, which is statistically insignificant in the GMM estimator, is significant in the quantile regression estimator. Contrary to (Gu & Zhang, 2018), urbanization emerges as a factor that reduces industrial pollution. The coefficients of urbanization are statistically significant with negative coefficients at all quantile levels. In addition, in underdeveloped countries with a high level of urbanization, the reducing effect of urbanization on industrial pollution is weakening. In less developed countries with low industrial pollution, the increase in employment increases industrial pollution. This result is also statistically significant. However, in less developed countries with higher pollution levels, this positive coefficient first loses its statistical significance (0.50Q) and then turns negative. In short, in the quantile regression results for the relationship between employment and industrial pollution, it is observed that there is variability in the size, sign and statistical significance of the coefficient. This makes it difficult to make a general assessment of the relationship between employment and industrial pollution in underdeveloped countries. Finally, it is observed that renewable energy consumption contributes to environmental sustainability by reducing industrial pollution as expected. While renewable energy consumption reduces industrial pollution more strongly in countries with low industrial pollution, this strong effect is weakened in countries with high industrial pollution. The coefficients of renewable energy have statistically acceptable levels of significance.

6.CONCLUDING REMARK

The relationship between logistics performance and the environment has not been questioned for a long time. The relationship between these two variables has been questioned in recent years and investigated with empirical studies. Although various empirical findings have been obtained from previous studies on the relationship between logistics performance and the environment, there was a significant gap in the literature on the interaction between logistics performance and industrial pollution. Industrial pollution is a subcategory of general pollution. This study fills the gap in the literature and provides important evidence to the governments of countries and the international community that have problems in creating sustainable environmental and economic policies. In addition to answering the impact of logistics performance on industrial pollution, it also provides evidence on how industrial pollution is affected by other variables such as GDP, industrial production, population, urbanization, employment and renewable energy consumption.

Estimates made in the study are based on macroeconomic data collected from 45 developing countries and covering the years 2013-2019 and corresponding to 315 observations. Our dynamic panel data estimates are based on assumptions of two-step, backward difference and (3-8) lag lengths. And also, quantile regression estimator was implemented for robustness testing. Therefore, empirical analyzes were built on multivariate and two different estimation methods.

Some results seem quite interesting while some of the empirical results are affirmative the expectations. First, logistics performance clearly affects industrial pollution in the countries. The results obtained from both GMM and Quantile regression estimators show that there is an inverse relationship between industrial pollution and Agility variable, which is used as a logistics performance indicator. Accordingly, higher logistics competencies of countries reduce industrial pollution and contribute to making industrial production processes more environmentally friendly in those countries. But the evidence from the quantile regression estimator showed that the industrial pollution reducing effect of high logistics performance was less in countries with high industrial pollution levels.

The reasons of this result can be evaluated as follows: low environmental standards and inadequate control play a significant role in the rise of industrial pollution. In countries with high industrial pollution, low environmental standards and insufficient control may distract from the environmental protection axis of competition in the market. Thus, industries clustered by companies that only pursue profits, without regard for the environment, pollute the environment more. In such an industrial environment, where the concern and goal of environmental protection is weak, high logistics performance can make a limited contribution to the reduction of industrial pollution while increasing the output levels and profit rates of the companies. Another reason for the weakening of the pollution reduction effect of logistics performance in countries with high

industrial pollution may be the large number of pollution sources. The ability of logistics to reduce industrial pollution depends on the strength of the relationship between logistics processes such as storage, transportation, distribution, etc. and industrial production. If the links between industrial activities and logistics services are weak, that is, logistics needs are not supplied from the logistics sector, the improvement of logistics performance may weakly affect industrial pollution. In such a case, other sources of industrial pollution like raw materials and energy use, recycling, waste management etc. should be investigated.

Although it has been determined that GDP and industrial production reduce industrial pollution, this result is outside the limits that can be considered econometrically significant. Indeed, the quantile regression estimator supports this by revealing that GDP is a component that increases industrial pollution as determined by (Liu, Wang, Lu, Wang, & Ren, 2016), (Gu & Zhang, 2018) and (Wang, Duan, Wang, & Zou, 2022). In addition, it is seen that the results of industrial production cannot be accepted econometrically in the quantile regression estimator. On the other hand, employment increased industrial pollution in parallel with (San, Spoann, & Schmidt, 2018), (Li, Lu, & Li, 2020) and (Collins, Pulver, Hill, & Manski, 2023), while renewable energy consumption increases industrial pollution, contrary to studies such as (Zhu, Wang, & Zhu, 2021), (Akhtar, ve diğerleri, 2022) and (Lee, Zhang, & Hou, 2023). Population and employment increase industrial pollution, but urbanization and renewable energy consumption reduce it. Evidence in this study that employment increases industrial pollution contradicts findings (Xue, ve diğerleri, 2019), (Li X., Wang, Zhou, & Shi, 2020) and (Ash & Boyce, 2018) that highly polluting plants do not provide more jobs. The impact of population on industrial pollution challenge with the findings from studies like (Connell, 2018) and (Liu, ve diğerleri, 2018)

These findings may be useful in some ways for policy makers. There is a pollution caused by the polluting tendencies of the goods and service production activities arising from intra-industry dynamics (waste generation, fossil fuel use, etc.), as well as the performance of other manufacture branches and industries. Industrial pollution is not just a pollution caused by the industrial activities. Competence level of logistics activities is a determining factor on the pollution level of industrial activities. This indicates that policy makers should broaden the scope of the measures they take and the search for solutions, especially against industrial pollution and environmental problems caused by this pollution. Industrial pollution is produced in conjunction with other industries and business lines that work with industrial activities and is affected by their performance. In this study, it is seen that policy makers should consider environmental pollution caused by industrial activities as a function of logistics performance. For this reason, it is very important to invest in infrastructure that will increase logistics performance, fleet renewal expenses, reduce customs transit times by simplifying customs procedures, and ensure load optimization with artificial intelligence-supported tracking and supply applications. Policy makers can contribute to environmental sustainability by reducing industrial pollution by investing in or encouraging investments in these areas. In addition, it will be very important to develop logistics villages/regions or various platforms that will strengthen the interaction between the manufacturing industry activities and the logistics sector.

Of course, this study was carried out under some constraints. Identifying these constraints will guide future studies. First of all, this study uses a panel of macroeconomic data from 45 developing countries. Future studies should examine the findings of this study with firm-level microeconomic data. Because microeconomic data will more clearly reveal the stages that cause pollution at the firm level. In addition, in this study, industrial pollution is considered as the sum of all industries. Therefore, dissimilarities between industries have been overlooked such as agriculture, industry, construction, tourism etc. However, the degree to which each industry is affected by the performance of the logistics sector may differ. For this reason, it would be useful for future studies to consider the differences between industries. In addition, the findings obtained in the study are the result of the estimation methods used. The findings obtained in this study should be compared with the results obtained from the estimations made by different methods.

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APPENDIX

Table Appendix-1: Sample of the Country

Algeria	China	Kazakhstan	Nigeria	Saudi Arabia	Uganda
Argentina	Colombia	Kenya	Oman	South Africa	Ukraine
Bahrain	Ecuador	Kuwait	Pakistan	Sri Lanka	Uruguay
Bangladesh	Egypt	Lebanon	Paraguay	Tanzania	Venezuela
Bolivia	Ethiopia	Libya	Peru	Thailand	Vietnam
Brazil	India	Malaysia	Philippines	Tunisia	
Cambodia	Indonesia	Mexico	Qatar	Turkey	
Chile	Jordan	Morocco	Russia	UAE	

Yüksek Sıcaklığa Mukavemetli İzolasyon ve Dolgu Malzeme Üretimi

Makine Mühendisi. Necati YALMAN¹

Elektrik ve Elektronik Mühendisi. Mert AYDOĞDU²

Yönetici. Erhan AYDOĞDU³

Yönetici. Furkan AYDOĞDU⁴

¹İstanbul Aydın Üniversitesi, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, necati.yalman@hotmail.com

²Bahçeşehir Üniversitesi, Mühendislik Fakültesi, Elektrik Elektronik Mühendisliği Bölümü, mert.aydogdu@ayd-insulation.com

³Beykent Üniversitesi, Fakültesi, Güzel Sanatlar Fakültesi,

⁴Anadolu Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, İşletme Bölümü, info@ayd-insulation.com

Özet: Yüksek sıcaklığın olduğu endüstriyel üretim tesislerinde ısı kayıpları kabaca iletim, taşınım ve ışıınım yolu ile meydana gelmektedir. Ortaya çıkan ısı kayıpları enerji maliyetlerini arttırmaktadır. Sıcaklık farkının (iç ortam ve dış ortam) var olduğu yapı ve mekanizmalarda yüzeylerdeki ısı kaybı, sıcaklık farkı yükseldikçe önemli derecede artar; bu nedenle ısı yalıtımının önemi bu noktada ortaya çıkmaktadır.

Sanayide “asbestiz fiber millboard” olarak adlandırılan izolasyon malzemesi; yüksek sıcaklığın olduğu metal eritme fırınlarında izolasyonda, savurma döküm yapan üreticilerde dolgu malzemesi olarak, ayrıca bağlantı ekipmanlarında conta olarak kullanıcılar tarafından tüketilmektedir. Yerelde “asbestiz fiber millboard” olarak bilinen farklı katışkılardan oluşan izolasyon malzemesi hem yurt içi hem de yurtdışı üretimi sanayimizde tüketilmektedir.

İzolasyon malzemeleri yerli üretiminde kullanım alanlarına kabaca bakıldığında; metal eritme fırınlarında ısı kaybını minimize etmek için kullanılır. Ayrıca savurma döküm ile ürün üreten işletmelerde kalıp koruyucu dolgu malzemesi şeklinde ve muhtelif yüksek sıcaklığa mukavemet gerektiren keçe işlevi gören mekanizmalarda kullanılmaktadır. İzolasyon malzemesi kompozit yapıdadır. Üretimde kullanılan katışkılar sayesinde; malzemenin ısı iletim katsayısını düşük, kısmi plastik şekil alma kabiliyeti ve geri dönüştürülebilirlik gibi özellikleri mevcuttur. Asbestiz fiber millboard arz edici ve son kullanıcı arasında maliyet faktörü paylaşırsa izolasyon atıkları %90 oranında geri dönüştürülebilmektedir.

Bu çalışmada izolasyon malzemesi imalatı yapan firmaların üretim prosesi ve portfeyi (farklı geometrik yapıda ve kalınlıkta ürün) değerlendirilmiştir. Ayrıca izolasyonun malzemesi kullanıcılarının üretim maliyetleri üzerine etkileri değerlendirilmiştir. Tespit edilen maliyet düşürücü veriler hem tedarikçiler hem son kullanıcılara çözüm ve önerisi olarak sunulmuştur.

Anahtar Kelimeler: Isı iletim katsayısı, Isı kaybı, Savurma döküm, İzolasyon, Geri Dönüşüm

Abstract: In industrial production facilities where there is a high temperature, heat losses occur roughly by transmission, transport and radiation. This situation increases energy costs. In structures and mechanisms where there is a temperature difference (indoor and outdoor environment), the heat loss on surfaces increases significantly as the temperature difference increases; therefore, the importance of thermal insulation becomes apparent at this point.

In the industry, “asbestos-free fiber millboard” products are consumed by enterprises that build structures (metal melting furnaces where high temperature occurs), as well as manufacturers that use them as filling materials (tossing casting), as well as gasket users. Insulation material consisting of different impurities, locally known as “asbestos-free fiber millboard”, is consumed in both domestic and international production industry.

Insulation materials are used to keep heat loss to a minimum in metal melting furnaces, roughly looking at the areas of use in domestic production. In addition, it is used in enterprises that produce products with tossing casting in the form of mold protective filling material and in mechanisms that function as felt, which require various high temperature resistance.

The insulation material is composite structure. Thanks to the impurities used in production; the properties of the material such as low transmission coefficient, partial plastic forming and recyclability are revealed. If the cost factor is shared between the supplier of asbestos fiber millboard and the end user, insulation waste can be recycled by 90 Dec

In this study, the production process and fabric (product with different geometric structure and thickness) of the companies manufacturing insulation materials were evaluated. In addition, the effects of insulation material users on production costs were evaluated. The identified cost-reducing data has been presented to both suppliers and end users as a solution and suggestion.

Keywords: Isı transmission coefficient, Isı loss, Tossing casting, Isolation, Recycling

1. GİRİŞ

Sıcaklık farkının olduğu her ortamda hemen hemen her yapı ve mekanizmalarda ısı kayıpları meydana geldiği ortaya konduğunda ısı yalıtım arayışı ortaya çıkmıştır. Günümüzde yalıtım endüstriyel yapılarda enerji maliyeti azaltıcı bir unsurdur. Ayrıca kullanılan makine ve mekanizmaların korunması için kullanılması gereken bir yardımcı ürün olarak karşımıza çıkmaktadır. Yerelde yüksek sıcaklıklarda kullanılmak üzere üretilen asbestiz fiber millboard farklı katışkılar kullanılmaktadır. Kullanıldığı alanlarında ısı kayıplarını sınırlaması, enerji maliyetlerinin düşmesine sebep olmaktadır. Üretim sürecinde farklı makine ve mekanizmalar kullanılmaktadır. Üretilen malzeme kompozit yapıda olup kısmi plastik şekil değiştirmeye müsaittir. İzolasyon, dolgu ve keçeler geri dönüşüme uygundur. İşlevini yerine getiren parçanın kalan kısmının yaklaşık %90 'ı geri dönüştürülebilir. Dönüştürme işlemi dairesel hareketli BTPK kırıcılar ile yapılmaktadır. (Yalman, Akata, 2019: 586-596)

2. İZOLASYON, KEÇE ve DOLGU MALZEMESİ

Yüksek sıcaklığa mukavemetli izolasyon malzemeleri farklı katışıklardan meydana gelmiş kompozit yapılardır. Üretim tekniklerinde bakıldığında sıkıştırma metodu kullanılarak şekillendirme yapılır. Üretimde kullanılan katışıklar yüksek sıcaklık dayanımı, bağlayıcılık özelliği olan hammaddelerdir.

Kullanım alanlarına bakıldığında; bu tür ürünler sıcaklığın var olduğu alanlarda kendine yer bulmaktadır. Bu ürün üç alanda; yalıtım, dolgu ve keçe olarak karşımıza çıkmaktadır. Yalıtımda kullanım amacı üretim maliyetlerini birim zamanda minimize etmek. Dolguda kullanılan makinelerde hem ürün maliyet düşürmek hem de mekanizmanın zarar görmesini engellemek. Keçe olarak ise yüksek sıcaklıklara sahip bağlantı mekanizmalarının aralarında deformasyonu önlemek amaçlı kullanılırlar. Tablo 1'de kullanım alanları gösterilmiştir.

Tablo 1: Kullanım alanları

Kullanım Alanları (İzolasyon, Keçe, Dolgu)	
1-İzolasyon ürünleri	Yüksek ısı kayıplarının yaşandığı endüstriyel yapılar (metal eritme pota ocağı)
2-Keçe Ürünleri	Bağlantı aksamaları (farklı bileşenleri olan yapılarda)
3-Dolgu ürünleri	Savurma döküm prosesi (Ürün kalıp yapılarında)

Kaynak: AYD YALITIM (2023: 1)

2.1. İzolasyon malzemesi ölçü aralığı

Yalıtım malzemesi olarak; yüksek ısı kayıplarının yaşandığı endüstriyel yapıda olan metal eritme pota ocaklarında taban ve yüzey alanlarında ara yalıtım malzemesi olarak kullanım alanları mevcuttur. (Sakarya, vd. , 2019:1-2) Tablo'2 de izolasyon malzemesinin üretilen bazı plaka ebatları şekil 1'de ise plaka görselleri verilmiştir.

Tablo 2: İzolasyon Malzeme Ölçüleri

Yalıtım Malzemesi Ölçüleri (mm)	Boy	Genişliği	Kalınlığı
A	1000	1000	2
B	1000	1000	3
C	1000	1000	5
D	1000	1000	10

Kaynak: AYD YALITIM (2023: 1).

Şekil 1: Plaka Yapılı İzolasyon Malzemesi Görselleri



Kaynak: AYD YALITIM (2023:1)

2.2. Farklı Geometrideki Keçe Ölçüleri

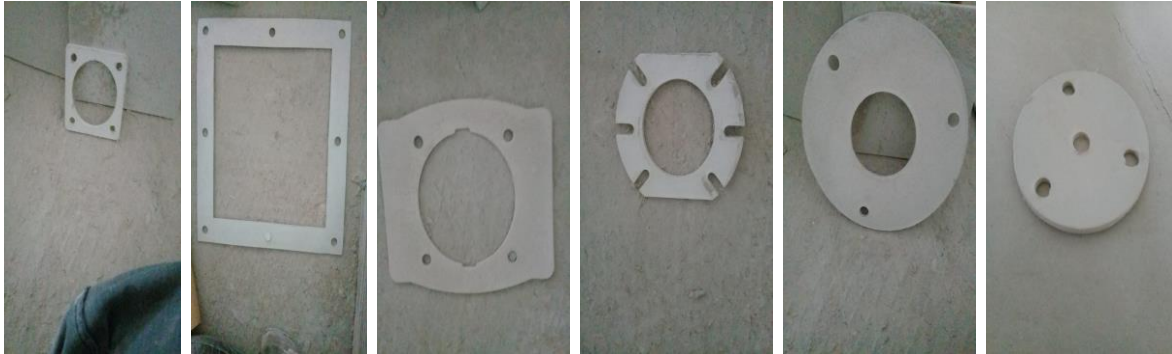
Yüksek sıcaklıkların olduğu en az iki ve daha fazla bağlantının işlevinin devamlılığını sağlamak amacı ile kullanılır. Yanmaz özelliğinden dolayı genelde metal bağlantı ekipmanlarının arasında (egzoz, iki farklı mekanizma, vb) kompozit bir yapı oluşturarak istenmeyen deformasyonunun engellenmesinde kullanılır. Keçe farklı katışkılarından oluşan yapısı ile yüksek sıcaklıklara dayanıklıdır. Ayrıca alev alması neredeyse mümkün değildir. Tablo 3 'de Keçe ölçüleri, Şekil 2' de Görselleri verilmiştir.

Tablo 3: Keçe Üretimi Ölçüleri

Farklı şekilli Keçeler	Çapı	Köşe Sayısı	Kalınlık
Kare	-	4	2-3-4-5
Dikdörtgen	-	4	2-3-4-5
Diresel	100-120-150-200-.....	-	2-3-4-5
Altıgen	-	6	2-3-4-5

Kaynak: AYT YALITIM (2023: 1)

Şekil 2: Farklı Geometrideki Keçelerin Görselleri



Kaynak: AYT YALITIM (2023:1)

2.3. Silindirik Dolgu Malzemesi Ölçüleri

Silindirik dolgu malzemeleri genelde savurma döküm yapan sanayi kollarında kalıp deformasyonunun önlenmesinde kullanılmaktadır. Kalıp içerisinde dolgu olarak kullanılarak kalıp ömrü uzatılmaktadır. Tablo 4'de üretilen bazı dolgu malzeme ölçüleri ve Şekil 3 'de görselleri verilmiştir.

Tablo 4: Silindirik Dolgu Malzemesi Ölçüleri

Dolgu malzemesi	Çap	Delik	Kalınlık
A	200	80	3-4-5-.....
B	300	80	3-4-5-.....
C	400	90	3-4-5-.....

D	500	100	3-4-5-.....
E	600	200	3-4-5-.....10

Kaynak: AYD YALITIM (2000: 1).

Şekil 3: Silindirik Dolgu Malzemesi Görselleri



Kaynak: AYD YALITIM (2023:1)

3. İzolasyon Malzemesi ve Metal Eritme Ocakları

Isı kayıpları kabaca iletim, taşınım ve ışınlım şeklinde meydana gelmektedir. Bu durum göz önünde bulundurulduğunda yalıtımı yapılan potalardaki incelenen durum, iletim yolu ile oluşan ısı kayıpları olacaktır. Yalıtım malzemelerinin durumuna irdelendiğinde; yüksek ısı kayıplarının yaşandığı endüstriyel yapıda olan, metal eritme potalarında ara yalıtım malzemesi olarak kullanım alanı bulmaktadır. Metal hurdaların eritme potalarının taban ve yüzey alanlarında ara yalıtım malzemesi olarak kullanılmaktadır. Farklı geometrik şekillerde ve kalınlıkta uygulaması yapılmaktadır.(Sakarya, vd. , 2019:1-2) Şekil '4 de (Sakarya O, Ekin Burak, Cengiz U, Bilgiç M)' nın yaptıkları uygulama çalışmadan alınan potanın görselleri verilmiştir.

3.1. İzolasyon Malzemesinin Kullanım Alanı

Şekil 4: İzolasyon Görselleri



Kaynak: https://www.bilecikdemircelik.com.tr/wp-content/uploads/2021/02/farkli_izolasyon_pratigi.pdf

4. Keçe Malzemesi ve Bağlantı Mekanizmaları

Fırın bağlantı elemanlarında ısı aktarımı, deformasyon, bakım, ayarlama gibi fonksiyonların yerine gelmesi için keçe kullanımı gerekmektedir. Keçe ürünleri genelde kullanım alanları çeşitli fırın tiplerinde (seramik, medikal, mekik,rulolu ısıl işlem ve dövme, vb) kullanılır.

4.1. Keçe Malzemesinin Kullanım Alanları

Fırında ısı aktarımını minimize etme amaçlı kullanılan keçeler "ısı tranferi azaltıcısı" işlevi görmektedirir. Şekil '5-6-7 de görüldüğü üzere yapılan ölçümde keçe kullanımı iki farklı sıcaklık ölçümü ortaya çıkarmıştır.

Şekil 5: Farklı Geometrideki Bağlantı Keçe Görseli



Kaynak: <https://www.pbi-company.com/wp-content/uploads/2021/02/Tapping-siphon-gaskets-02.jpg>

Şekil 6: Farklı Geometrideki Isı Kesici Keçe Görseli



Kaynak: <https://www.pbi-company.com/wp-content/uploads/2021/02/PHOTO-PBI-ETANCHEITE-OUVREAU-4-gain-02.jpg>

4.2. Keçe Malzemesinin Kullanım Alanları

Brülör ile kazan kapağı arasında ısı transferini en aza indirmek için şekil 7’de izolasyon keçesi kullanılmaktadır.

Şekil 7: Farklı Geometrideki Temas Kesici Keçe Görseli



Kaynak: <https://tr.vincigenerator.com/Content/upload/2018293771/201801051308477073044.png>

5. Dolgu Malzemesi ve Savurma Döküm

Yatay, düşey veya açılı eksen etrafında dairesel hareket yaptırılarak metal ve alaşımların kalıba dökme sureti ile biçim verilme metoduna “Savurma Döküm” denir. Savurma dökümde ergiyik sıcaklığı ve imalatı yapılacak ürünün ölçüleri (malzeme çapı ve hız) önem arz etmektedir. Yöntemde kalıba dökülen ergiyik merkezkaç kuvvetinin etkisi ile oluşan basınç ergiriyi kalıp içi dış çapına iter ve biçim alma gerçekleşir. Biçim alma sırasında metal ,kum, cüruf, metal olmayan kalıntılar ve gazlar arasında var olan yoğunluk farkından dolayı kum ve cüruf merkeze gelerek parça yüzeyinin gözeneksiz, temiz ve ince taneli olması sağlanmış olur. Kalıbın dönme hızı ise parça çapına bağlıdır. Bu durum aktarma organları ile ayarlanmaktadır.(MEB,2011: 1-29)

5.1. Dolgu Malzemesinin Kullanım Alanı

Silindirik dolgu malzemeleri genelde savurma döküm yapan sanayi kollarında kalıp deformasyonunun önlenmesinde kullanılmaktadır. Şekil 4’de savurma döküm yönetemi ile elde edilmiş ürünler görülmektedir.Bu

örnekler yatayda çalıştırılmış bir kalıbın alın yüzey hasarını minimize etmek amaçlı ile kullanılmıştır. Kalıp ile ergiriyik arasına konan dolgu malzemesi her işlemde tekrarlanarak kalıbın zarar görmesinin önüne geçmektedir. Dolgu malzemesi yüksek sıcaklıklara mukavemetli bir yapıya sahiptir. Dolgu malzemesi olarak kullanılan ürün %90 BTPK kırıcılarda geri dönüştürülmektedir. (Küçükali ve Yalman, 2020: 37-53) Şekil 8’de savurma döküm imalatıda kullanılmış dairesel şeklinde dolgu malzemesi görselleri verilmiştir. Bahsedilen dolgu malzemesi parçanın alın yüzeyinde işlevini yerine getirdikten sonraki halidir.

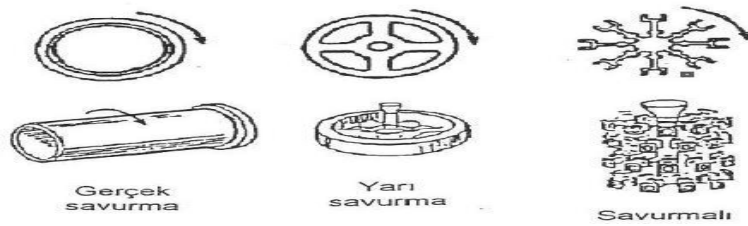
Şekil 8: Silindirik Dolgu Malzemesinin Savurma Dökümdeki Görselleri



Kaynak: AYD YALITIM (2023:1)

Çalık, Bıçaklı ve Zerentük ‘ün “Savurma ve Kum Kalıba Döküm Yöntemi ile Üretilen GG-25 Dökme Demirin Mikroyapısal ve Mekanik Özelliklerinin Karşılaştırılması” adlı çalışmalarında üretim yöntemi karşılaştırılmış. Savurma döküm yöntemi ile yüksek mekanik özelliklere sahip malzemeler üretilebileceği belirlenmiştir.(Çalık vd., 2022:1-22). Savurma ve kum kalıbı yöntemleri ile ergiyik metal şekillendirme işlevi maliyetlerin yön vermesiyle gelecekte yol bulacağı açıktır.

Şekil 9: Silindirik Dolgu Malzemesinin Savurma Dökümdeki Görselleri



Kaynak: <http://www.atacelik.com/images/savurmadokum.jpg>

5.2. Dolgu Malzemesinin Kullanım Alanı

Diğer kullanım alanlarında biri de endüstriyel mutfak ürünleri, kompozit rögar kapakları üretimidir. Mutfak araçları üretim sürecinde sıcak hidrolik pres makinasında dolgu malzemesi olarak kullanılmaktadır. Bu makinalarda dolgu malzemesi ısı transferi sınırlar ve oluşan basıncı absorbe eder. Diğer muadil ürünlere kıyasladığımızda fiberli yapısı sayesinde kısmi plastik şekil alma kabiliyetine sahiptir. Şekil 10’da endüstriyel mutfak ürünleri üretim mekanizması kısmi olarak gösterilmiştir.

Şekil 10: Silindirik Dolgu Malzemesinin Mutfak Ürünlerinde Kullanımı



Kaynak: <https://ayd-insulation.com/wp-content/uploads/2023/01/seramik-levha-resim2.jpeg>

6. Dolgu, İzolasyon ve Keçe Malzemelerinin Çevreye Etkisi

Dolgu, İzolasyon ve Keçe malzemeleri geri dönüştürülebilmektedir. İzolasyon atıkları, işlev sonrası deformasyona uğramış keçe ve dolgu malzemelerinin geri dönüştürme maliyetleri sağlandığında tekrar nihai üretimde kullanılmaktadır. Geri dönüşüme alınan deformasyona uğramış atık 90% oranında üretime dahil edilir. Dönüşüme alınan atık çevresel etkileri ortadan kaldırılarak sürdürülebilir üretim yol açılır. Dönüştürme maliyetleri karşılanan atık nihai üretimde karşımıza ekonomik eder olarak tekrar çıkar. Dönüştürme işlemi üretim tesisinde BTPK tipi kırıcılar ilave yapılmaktadır. (Yalman, 2019: 1-138) Şekil 11’ de geri dönüştürülmeye müsait atık malzemelerin görselleri verilmiştir.

Şekil 11: Dolgu, İzolasyon ve Keçe Tabaka Üretimi



Kaynak: AYD Yalıtım(2023:1)

6.1 Dolgu, İzolasyon ve Keçe Tabaka (asbestiz fiber millboard) Üretimi

Yerelde yüksek sıcaklıklarda kullanılmak üzere üretilen asbestiz fiber millboard farklı katışılardan oluşturulmaktadır. Üretim süreci farklı makine ve mekanizmalardan kullanılarak gerçekleştirilmektedir. Üretilen malzeme kompozit yapıda olup kısmi plastik şekil değiştirmeye müsaittir. Şekil 12 ‘de üretim prosesinde silindirik mekanizmaya sarılma anı görülmektedir. Ayrıca silindirden çıkmış plakanın preste susuzlaştırma işlemi yapılmaktadır. (Yalman, 2019: 1-138). Şekil 12’de katışkının silindire sarılması ve silindirden çıkan yaş plakanın pres ile susuzlaştırma görseli verilmiştir.

Şekil 12. Dolgu, İzolasyon ve Keçe Tabaka Üretimi



Kaynak: <https://ayd-insulation.com/seramik-levha/>

7. SONUÇ

Endüstrilerde basit anlatımla sıcaklık farkının meydana geldiği ortamlarda (Üretim binasının içi ve dışı) ısı kayıpları olacaktır. Ortamın içinde bulunan makinelerde yapılan üretim maliyetlerini (elektrik, bakım, vb.) düşürme amaçlı kullanılan makine ve mekanizmaların yalıtımı çok büyük önem arz etmektedir. Yüksek sıcaklığa mukavemetli izolasyon malzemeleri farklı katışıklardan meydana gelmiş kompozit yapılarıdır. İzolasyon, dolgu ve keçeler geri dönüşüme uygundur. Bu çalışmada izolasyon malzemesi imalatı yapan firmaların üretim prosesi ve portföy (farklı geometrik yapıda ve kalınlıkta ürün) değerlendirilmiştir. Ayrıca izolasyonun malzemesi kullanıcılarının üretim maliyetleri üzerine etkileri değerlendirilmiştir. Tespit edilen maliyet düşürücü veriler hem tedarikçilere hem son kullanıcılara çözüm ve önerisi olarak sunulmuştur.

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Evaluation of Negative Effects of Stubble Fires on the Environment

Assoc. Prof. Dr. Nurcan Özkan¹

¹ University of Trakya, Faculty of Education, Department of Mathematics and Science Education,
nurcanozkan@hotmail.com, ORCID: 0000-0001-5045-6186

Abstract: The stubble remaining in the soil after the harvest in the agricultural fields cultivated with cereals is the source of the organic matter of the soil, which remains in the soil for a long time. However, as a wrong practice in our country, stubble smoke rises in most fields after the grain harvest. Especially in our country, it has come to the fore in the recent past, with mechanized agriculture and the alternation system that eliminates the fallow with the desire to obtain second crops, and the structural changes in agriculture that have taken place in the last 50-60 years. For this reason, it is desired to eliminate the time required for the harvested stems and roots to mix with the soil naturally or to rot and turn into humus. Stubble burning is a big problem in terms of environmental pollution. In addition, with the burning of the stubble, the forest areas near the field, telephone poles and all living creatures living in the soil are destroyed. As a result of stubble fires, the ecosystem, which offers very important benefits for the society, is damaged and serious losses occur. As the soil's organic matter source is destroyed, the soil is more eroded. In this study, it is aimed to increase environmental awareness by emphasizing the negative aspects resulting from stubble fires.

Keywords: Stubble, Stubble Burning, Effects on the Environment

Anız Yangınlarının Çevrede Oluşturduğu Olumsuz Etkilerin Değerlendirilmesi

Özet: Hububat ekili tarım alanlarında hasat sonrası toprakta kalan anız, toprakta uzun süre kalıcı olan toprağın organik maddesinin kaynağıdır. Ancak ülkemizde yanlış uygulama olarak hububat hasadından sonra çoğu tarlada anız dumanları yükselmektedir. Özellikle ülkemizde makineli tarım ve beraberinde gelen ikinci ürün elde etme isteği ile nadası ortadan kaldıran münavebe sistemi gibi son 50-60 yılda gerçekleşen tarımdaki yapısal değişiklikler ile yakın geçmişte gündeme gelmiştir. Bu nedenle hasat artığı sap ve köklerin doğal yollardan toprağa karışması veya çürüyerek humusa dönüşmesi için gereken süre ortadan kaldırılmak istenmektedir. Anız yakma, çevre kirliliği açısından büyük bir sorundur. Ayrıca anızın yakılmasıyla beraber tarlanın yakınında yer alan orman alanları, telefon direkleri ile toprakta yaşayan bütün canlı varlıklar yok olmaktadır. Anız yangınları sonucunda toplum için çok önemli faydalar sunan ekosistem zarar görmekte ve ciddi kayıplar ortaya çıkmaktadır. Toprağın organik madde kaynağı yok edildiğinden toprak daha çok erozyona uğramaktadır. Bu çalışmada anız yangınları sonucu ortaya çıkan olumsuz yönler vurgulanarak çevre bilincinin artırılması amaçlanmaktadır.

Anahtar Kelimeler: Anız, Anız Yakma, Çevre Üzerinde Etkileri

1. INTRODUCTION

The straw, straw and unplowed field remaining in the field after the harvest of grains such as wheat, barley and corn is called stubble. The amount of stubble remaining in the field after the wheat is harvested may vary from year to year and according to the variety. While some of the producers use the stubble in the soil as straw and then burn the remaining part on the soil, others burn all the straw left in the field directly. Stubble burning is widely used in agricultural land management to remove crop residues and provide other benefits such as pest control and ash formation for fertilization (Figure 1) (Arzuman, 2019).

With stubble burning, it is desired to eliminate the time required for the harvested stems and roots to mix with the soil naturally or to rot and turn into humus. Keeping the shape length high in areas harvested mostly with combines makes all areas where this tool is used a potential hazard area. It is also a real problem in terms of environmental pollution (Bulut, 2005).

Undoubtedly, the willingness of agricultural land owners is not the only reason for all stubble fires. It is possible to add dozens of behaviors that can be avoided with a little care, such as sparks from construction machines, picnic fires that are unconsciously lit and left unchecked, and cigarette butts that are not extinguished. The main point here is to emphasize the importance of results rather than causes (Bulut, 2005).

Looking at the developed countries, the harms of burning stubble were explained to the farmers and alternative methods were started to be applied (Akbolat and Güzel, 1995). However, the point that should be especially noted is that stubble burning is not only a regional method, but also a widely used method in many parts of our country (Turkey). In addition, the problem is not only our country's problem, but has become a global problem. According to the frequency of agricultural fires, it is seen that it is a frequently encountered situation in the Americas, especially in African and Asian countries (Arzuman, 2019; Çiçek, 2012).

Reasons for burning stubble by farmers in our country;

- Very easy, inexpensive and quick destruction,
- If the planting of another product is to be started immediately after the harvest, to ensure that the seeder can sow as desired,
- To prepare a better seed bed,
- Reduction of incoming cereals and weeds (especially wild oats, bromine, foxtail and other grasses),
- Reduction of snails, centipedes, some ticks, wireworms, spiders and other insects,
- Reduction of various diseases (leaf spot, stem and root rot, early seedling blight and wilt),
- Higher yield expectations (URL 1; URL 2).

Figure 1. Stubble view in the field in Edirne province Lalapaşa district (2023).



1.1. Harms of Burning Stubble

The 2.5 cm thick section formed on the surface of the soil is agriculturally called vegetative soil. This vegetative soil is a layer rich in minerals and vitamins necessary for the plant to grow and develop. The formation of 2.5 cm of vegetative soil takes about 100 years. As a result of burning the stubble, this part is damaged at a rate of 90 to 100 percent (Figure 2) (Yalçın Sever, 2018).

With the burning of stubble, soils are degenerated, destroyed, products are degraded, ecosystems are deteriorated, ecological balances in the world are changing negatively, biodiversity is decreasing, and nutrition is becoming artificial. The soil on which we are cultivated, which nourishes and feeds us, is a living entity that has been formed over tens of thousands of years. It usually contains more living things (bacteria, fungi, actinomycetes, algae, etc.) than the human population in the world per gram. For this reason, it breathes and exhales like us living things. In other words, it breathes. The source of life for these microorganisms, which add life and vitality to the soil, are organic compounds that are given or reached to the soil in various ways. These organic compounds are plant roots, harvest residues, or animal manure and similar materials that remain in the soil after harvest. In a fertile soil, this material, which we call organic matter, should be around 5%. However, this rate is around 1-2% in our lands. In our country's agricultural system, the main source of organic matter in the soil is generally cereal group plants. Because, in about half of the cultivated areas in our country, cereals are produced, and in one third of them only wheat is produced. In these areas, the stubble remaining in the soil after harvest constitutes the source of soil organic matter, which is actually long-lasting in the soil (Çiçekler, 2012; URL 2; URL 3; URL 4).

As the soil's organic matter source is destroyed, the soil is more eroded. However, the most important problem of our country's soil is erosion. 73% of our country's lands are under the threat of severe erosion. With erosion, 500 million tons of agricultural land and 1.4 billion tons of surface soil from the whole country are destroyed annually in our country. For example, the soil is eroded as much as the island of Cyprus once a year. This is a

serious threat to the desertification of Turkey. Due to the reduction of the organic matter source of the soil, it reduces the fertility of the soil and requires the use of more mineral fertilizers. Some mineral fertilizer derivatives (nitrite, nitrosamine) that reach the human body through the food chain trigger cancer events. Some of the mineral fertilizers, which have to be applied more, reach the stratosphere layer in gaseous form (NO, N₂O), causing the decomposition of ozone, such as chlorofluorohydrocarbon and similar gases, thus depletion of the ozone layer. As it is known, the amount of short-wavelength rays that reach the earth as a result of the thinning and perforation of the ozone layer, which is a factor of skin cancer, is increasing. The ability of the soil to neutralize toxic compounds decreases. Because microorganism activity decreases in soils with low organic matter content, and as a result, the decomposition of agricultural pesticides thrown into the soil by microorganisms in the soil slows down. In this way, the amount of pesticides entering the food chain also increases, resulting in an increased risk of carcinogenic events in humans and animals (Çiçekler, 2012; URL 1; URL 2; URL 3; URL 4).

Figure 2. The image of burned stubble in the field within the provincial borders of Edirne (2023).



The soils of our country are in the first degree erosion zone. The negative effects of burning stubble on soil properties are also valid for erosion. Studies on this subject have gained weight in the direction of soil and water loss in arid and semi-arid regions. In stubble covered agriculture, plant residues protect the soil from the direct effects of raindrops, and prevent the soil from splashing and drifting. Absorption of precipitation, creating a cool and moist soil environment, reducing evaporation, increasing humus and ultimately increasing yield are listed as the benefits of stubble cover agriculture (URL 5).

The stubble burned on the roadside shortens the visibility on the highways and can cause fatal traffic accidents. Stubble fire burned in agricultural areas close to forests, on the other hand, can reach forested areas with the effect of the wind and cause fires. Stubble burning also damages unharvested crops, fruit and vegetable gardens in neighboring fields. Stubble fires also burn the crop grains that fall to the ground during harvesting, and this causes the animals in the ecosystem of that region to be deprived of these nutrients. It was also observed that wooden telephone poles were burned as a result of the stubble fire. As a result, the burning of stubble causes material and moral losses for our country and displays a bad image in terms of landscape together with the lost natural resources. It causes irreversible damages (Arzuman, 2019). At the same time, burning stubble causes the species on which the predators feed to be unable to find food, and there is a decrease in the number of these creatures. As a result, the number of predators decreases as a result of the inability to feed the predators, which are part of the wild life. Thus, it harms the ecological balance (Arzuman, 2019).

Stubble fires, which are unconsciously created every day in the world, can turn into large-scale fires. As a result of these fires getting out of control, huge amounts of agricultural and forest lands are damaged. It is essential that firefighters respond to the fire as soon as possible from the moment of the fire. In this case, taking advantage of the developing technology, it is vitally important for the fire departments to direct the herd firefighting drones to the fire zones from the moment the fire notification arrives, in order to prevent the spread of the fire (Arzuman, 2019).

At the same time, the amount of carbon dioxide in the atmosphere is also increasing. The increase in carbon dioxide in the atmosphere is also an important factor in global warming. With stubble burning, 150-200 kg of carbon dioxide is sent to the atmosphere from an area of one decare. Smoke from burning stubble increases air pollution.

Considering the damage it causes to the environment, one of the visible effects of air pollution is the decrease in visibility (visibility). Decreased visibility is among the causes of problems caused by agricultural fires and many traffic accidents, especially in our country. In periods when fires are intense, there may be disruptions in air traffic due to the decrease in visibility in air traffic. The biggest risk here is death and injury events resulting from these traffic accidents. From time to time, residential areas are also burned by stubble burning, which is a major environmental risk. Other serious dangers include the burning of telephone poles and, worse, the reduced visibility of passing cars, causing fatal accidents (Arzuman, 2019).

1.2. Effect of Burning Stuff on Soil Nutrients

While the amount of C in the straw varies according to the type of straw, the amount of C remaining in the ash also varies according to the degree of combustion and the burning season. In a fifty-year long-term study on this subject in the natural grasslands of South Africa, organic carbon was significantly reduced in only the top 0-2 cm of the soil in annual and biennial winter and autumn burnings, and it was not significantly affected by spring burning (Fynn et al., 2003).

Nitrogen content is often different from other compounds. The variation in the nutrient content of hay reflects the variation in fertilization regimens and management systems under growing conditions. While the nitrogen concentration in the ash is compatible with the nitrogen ratio in the straw, unlike N, P, K and S are 2-10 times higher in the ash than in the straw (Heard et al. 2001).

With combustion, the nutritiveness of the soil is not only at the elementary level, but also some changes occur in the nutritional parameters of the soil. Soil pH, which is one of the basic parameters in this regard, changes with burning. In this regard, a control plot of 30 kg, 90 kg, 120 kg of stubble per square meter was burned at the Uyo University Education and Research Farm in Nigeria. The pH value has increased in the burned soils and the ash formed as a result of burning, acidification due to combustion, and the buffer capacity of the soils have been shown to cause this increase. Many researchers on this subject have observed in their similar observations that this change is caused by the effect of ash. The ash formed as a result of the burning of vegetal masses also has a high cation content (Edem et al., 2014). Again in the same study, the electrical conductivity value in the burned soil decreased significantly in all burned plots and followed an inverse trend in contrast to the pH. After combustion, there is a remarkable increase in the cation exchange capacity of the soil.

Another effect of burning is the loss of fertilizers applied to the soil. For example, if the fertilizers applied before the stubble fire have encountered a rainy season or the soil has been tilled, this damage is minimal. Urea decomposes into ammonium and nitrogen oxide in an environment warmer than 135 °C, and when the wheat stubble is burned, the temperature on the soil surface varies between 120 and 330 °C depending on the amount of burning stubble (Rasmussen et al., 1986). If the fire occurs before the urea pellets dissolve, the loss may be less. Among the phosphorus fertilizers, DAP (18-46-0) and MAP (11-52-0) decompose at 154 and 190 °C respectively. Phosphorus loss from inorganic fertilizers is also considered low, since the phosphorus loss is lower than the organic phosphorus in the stubble source.

2. DISCUSSION AND CONCLUSION

After the grain is harvested, the straws left behind by the combine can be baled with a baler and used as animal feed or as litter in barns or used in industry for paper and cardboard production. After this stem and straw is removed from the field, the remaining stubble should be crushed by straw shredding machines and mixed into the soil. In this way, mixing the stubble with the soil provides many benefits to the soil and the damages caused by burning the stubble are prevented (URL 2; URL 6).

The decrease in the raw materials used for paper pulp production in the world and in our country has led the paper pulp producers to seek new raw material sources. Particularly in countries with an agriculture-based economy and limited forest resources, interest in the use of agricultural residues and cultivated or uncultivated annual plants in pulp production has increased. The fact that our country is also an agricultural country shows that it has an important potential in terms of agricultural residues. Therefore, the use of agricultural residues for pulp production rather than burning is seen as a suitable solution (Akgül, 2007; Cheng, 1993; Çiçekler, 2012;

Eroğlu, 1983; Tutuş, 2000). For further utilization of stubble in pulp production, equipment, sanctions and incentive laws should be enacted to provide economical transportation opportunities. Cheaper energy supply should be provided to paper mills with high energy consumption.

The most fundamental change as a result of combustion is the irreversible change of soil fauna and flora. The decrease in organic matter and microorganisms that will make new synthesis with combustion is the heaviest bill that burning presents to our producers. Burning stubble can be described as the most important environmental disaster caused by agriculture, especially considering the dense smoke layer it creates, which threatens the life of living things and reduces their comfort (Dilber and Güler, 2015).

It is inevitable to say that burning stubble affects the physical, chemical and biological properties of the soil, soil fertility and biological balance negatively. In that case; Stubbles should not be burned in areas where there is wind and water erosion, where land fallow is applied, and where decomposition is rapid. If stubble residues are to be burned, it should be kept in mind that this is an application that reduces the organic matter content of the soil; It can be done on irrigated bottom lands, in the fight against diseases and pests, field preparation for the second crop, phytotoxicity concerns, better seed bed preparation. However, it would be useful to decide on this by experts.

Burning stubble is a crime against nature. Burning stubble both creates destruction against nature and destroys living things living in the soil. Stubble burning harms everything from soil-aerating maggots to plants and beneficial bacteria. High temperatures prevent the development of the plant by causing damage to the root part of the plant. The chemical aggregate of the soil changes with the heating caused by the fire, which leads to the need to cultivate the soil and enrich the soil with different materials. Therefore, it means a serious economic burden to the farmer (URL 7).

Farmers burn the stubble for the second crop for convenience in plowing the field. However, combine harvesters can now cut the crops more deeply thanks to the new system technical equipment. In other words, both the re-plowing of the soil becomes easier and the farmers can further increase the productivity of their crops. For the farmer, deep cutting not only provides convenience in plowing, but also becomes a more advantageous job due to the increase in straw. No one has the right to burn stubble and cause great damage to the soil just because of ease in cultivation. No one should bear such a plague. In fact, in general, our farmers can reach this awareness. However, the measures to be taken by the governorships to prevent stubble burning remain important (URL 7).

It is necessary to take measures to reduce the input costs of the farmers. Because farmers are experiencing serious problems. There are serious deficiencies in the agricultural policy due to the fact that the supports are not at the desired level and the input costs are very high. The Ministry may give extra support to farmers who do not burn stubble, such as to cover some of the fuel they use while plowing their fields (URL 7). In order to prevent and combat stubble burning, training should be given to farmers and the extent of the damage should be explained. Farmers should be directed to alternative methods that can be done instead of burning stubble.

Institutions also have duties to prevent stubble fires. The Ministry of Agriculture has a responsibility to raise awareness of farmers against the harms of stubble fires. All these, such as Provincial Directorates of Agriculture, National Education, local governments, municipal police measures, and legal sanctions, have to act as a coordination. The activity of raising awareness of the public about burning stubble should not be limited to the periods when stubble burning takes place. When the stubble is burned, the arrival of the fire brigade, the Gendarmerie going to the area and keeping a record are important. Despite this, a serious warning should be made in the area without a fire. 70-80 percent of the farmers do not face criminal sanctions in case of stubble fires. Because it cannot be proven. In general, only a determination can be made that the stubble is burned.

Warnings against stubble fires only with brochures or public service announcements are insufficient in this regard. When farmers who burn stubble are detected, there are legal sanctions ranging from fines to imprisonment. It is also known that the support of farmers who burn stubble is cut off. However, the percentage of farmers facing criminal sanctions is quite low (URL 7).

In fact, we carry the trust of the next generations on land and nature. In other words, we are talking about a situation that has been entrusted and must be delivered. By burning stubble, we betray a land, nature, which has been cultivated for thousands of years and entrusted to us in an immaculate and pure form. However, we have a responsibility to hand over that trust to the next generations as it was handed over to us. When we pollute and destroy this land, we will leave a problematic land for the next generations. This is a conscientious

sin, a responsibility. Just as these lands were handed over to us in a clean way, we must also deliver them cleanly.

Currently, the Ministry of Food, Agriculture and Livestock, the Ministry of Environment and Forestry, the Ministry of Internal Affairs, Governorships, Municipalities and related security units, through the Environment Law No. 2872, Forest Law No. 6831, Provincial Administration Law No. 5442 and Articles 383 and 526 of the Turkish Penal Code, and it is tried to be struggled by applying the circulars issued on this subject and penal sanctions. 109.49 TL per decare for those who burn stubble for 2022. Administrative fine was imposed. If the stubble burning act is committed in areas adjacent to forests and wetlands and in residential areas, the penalty is increased by five times (URL 8).

Persons burning stubble should be reported to ALO 177.

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Gossip in Action: How Academic Managers Use “Gossip” as an Instrument in Managerial Processes?

Prof. Dr. Oktay KOÇ¹

Assist. Prof. Abdullah KIRAY²

¹ University of Health Sciences, Hamidiye Faculty of Health Sciences, Department of Health Administration, oktaykocalioglu@gmail.com, ORCID: 0000-0002-0612-6929

² Çanakkale Onsekiz Mart University, Faculty of Political Science, , Department of Business Administration, abduallahkiray@gmail.com, ORCID: 0000-0003-1734-8364

Abstract: In this study, we examine gossip in workplaces as an organizational phenomenon at the management level that has not been blatantly addressed before. In fact, the benefits and harms of gossip in workplaces and other issues related to communication have been widely discussed by researchers to date. However, it is difficult to come across studies based on the use of gossip as a managerial tool at the management level. Furthermore, it can also be stated that there are more studies on gossip in non-academic business organizations than in academic organizations. Depending on all this, we attempted to investigate the problematic of how academic administrators in academic organizations use gossip purposefully as a managerial tool. For this purpose, we collected data through interviews with a sample of 8 academic staff. Our study was designed in accordance with the qualitative research design. We used the phenomenological analysis method, one of the qualitative methods, for analysis. In the analysis processes, the first author coded the collected data in accordance with coding procedures. The second author, who conducted the interviews, examined the codes and tested whether they were consistent with the data obtained. In the end of these processes, we determined that gossip is deliberately used as an effective tool by administrators in academic organizations. In addition, we have also surprisingly found that academic managers in some cases deliberately started the gossip within the organization and allowed it to circulate for their own sake. Our data also revealed that managers' purpose in doing this was to strengthen their hands in administrative processes and to manage the problems they encountered more easily.

Keywords: Gossip, Rumor, Academic Managers, Managerial Processes

1. INTRODUCTION

Gossip, as a social phenomenon frequently encountered in organizations, is the exchange of personal information in an evaluative way about absent third parties” (Foster, 2004). According to this definition - beyond general acceptance- gossip does not have to be negative. And again, according to the definition, gossip is an action that can only be carried out in the absence of the person being gossiped about. Another aspect of gossip that concerns this study is "dissemination of information". Although this dissemination is a situation that not only the gossiped person but also people in general do not want, gossip spreads very quickly in organizations and it can even be claimed that some employees seek it out.

Gossiping is one of the most pervasive activities within organizations yet rarely does it receive serious attention by organization theorists (Noon and Delbridge, 1993). The general moral ambiguity towards gossip and the instrumental uncertainties it entails call for serious socio-cognitive and psychophysiological explanations of how gossip is produced, perceived, processed and used (Foster, 2004). In fact, gossip has received attention in relation to its role for individuals and for groups (Michelson et al., 2010). Yet, an interesting paradox of gossip is that it is ubiquitous, though there are numerous social sanctions against it (Foster, 2004) and academic organizations are not immune. Studies show that gossip is also encountered in academic organizations. In this sense, according to the results of Bektaş's study (2019), academics who declared that they were affected by gossip in various ways stated that the gossip and rumor network circulated in the corridors of the organization in the units where they worked. Altuntaş et al., (2017) conducted a study on gossip with nurse, doctor and dentist academics. According to the findings of this research, academics stated that they gossip about their working conditions and that they mostly gossip because they are angry and share it with their friends face to face. On the other hand, Leblebici et al., (2009) in the conclusion of their research on gossip in academic organizations, they argued that there is no strong acceptance of the instrumentality of gossip in individual and organizational aspects. On the contrary, the current study, based on a research conducted especially with academic administrators, shows that gossip is used as a remarkable managerial tool in academic organizations. Furthermore, based on qualitative methods, it differs from the literature in that it reveals different findings.

2. LITERATURE REVIEW

Gossip, in a specific manner, can be defined as a way of talking -written or spoken texts- that enables the communication of emotions, opinions, beliefs and attitudes about the experience of work and organizational life (Michelson et al., 2010). The commonly accepted understanding about gossip is that gossip is idle talk, tittle-tattle, malicious tales, scandal and rumor. The term 'gossip' often carries with it negative associations (Noon and Delbridge, 1993). From a different perspective, Paine (1967) mentions that gossip is a purposeful behavior, while Michelson et al. (2010) define gossip as related to unmanaged parts of the organization. In fact, people become able to look at pieces of information from different perspectives and interpret it according to their own knowledge base through gossip (Kuo et al., 2015). According to Michelson et al., (2010) gossip is a type of storytelling discourse that exists in the 'unmanaged spaces' of organizations.

Wax et al., (2022) draw attention to the following points about gossip in their meta-analysis study: First, the outcomes of workplace gossip have yet to be systematically categorized based on conceptual commonalities. Second, one variable that seems likely to moderate the relation between gossip and work-relevant outcomes is gossip valence. Third, gossip is a social phenomenon, implying that individuals play different roles in a gossip exchange.

The particular situation, shared understandings, and interpersonal trust are pertinent here in order for gossip to occur as an 'accepted' exchange of information. Social and group norms influence the extent to which gossip is either acknowledged as a type of organizational communication, or is vilified as stigmatized talk (Michelson et al., 2010). To put in a nutshell, the purpose of gossip is to entertain and to amuse. Following this logic, if the gossip per se is not related to the job but to someone's personal life, an employee may not necessarily attribute the pressure of that gossip to his/her colleagues or organization (Kuo et al., 2015). In fact, communication networks, which are managed properly, serve many purposes that can be beneficial to the organization, such as improving employee morale in any business environment, ensuring socialization within the organization, and being a guide to group norms (Akduru and Semerciöz, 2017).

3. METHODOLOGY

3.1. Data and Sample Set

In the study, the phenomenological analysis method (Giorgi, 1997), one of the qualitative research methods, was used. It is a type of analysis by which researcher attempts to understand how people evaluate the events happening around them (Wade and Tavris, 1990). Accordingly, academic administrators shared their experiences in their own lives with the interviewees by going backwards. A total of 6 academics who are currently administrators or have been administrators in the past were interviewed. When looking at sample determination methods in qualitative research, there are signs that this number may be sufficient in cases where the data obtained is satisfactory. Interviews were conducted face to face as much as possible, but if managers could not be reached, they were conducted via e-mail and Interviews were held face to face as much as possible, but if managers could not be reached, they were held via e-mail and transcribed by the second researcher.

3.2. Analysis and Findings

Open coding was primarily used in the analysis, and no further analysis was performed at this stage. The techniques suggested by Charmaz (1998) were used in open coding. The findings obtained as a result of coding are presented below. In addition, the statements obtained from the interviews are given as short passages to support the findings.

According to the findings, academic administrators state, at first sight, that they are against gossip. However, it was a surprising finding specifically in some cases that they produced the rumors themselves purposively and acted to calm, reconcile and manage the parties by using it. One of our interviewee states that in this direction:

"Unfortunately, if there is no transparent management approach and practices based on competence and merit, the manager has to use some excuses, even if they are artificial and invalid such as rumor or gossip!" What is even more interesting in this sentence is that the respondent sees the use of gossip as a necessity for their managers. Moreover, another interviewee, more interestingly, stated that managers tend to use gossip "if

the subject of the gossip is someone they do not like." This is important as it shows that managers act selectively (or purposively) in some situations. In this sense, one interviewee said that such a situation arises because managers cannot separate their own characters from management work. One interviewee even suggested that managers enjoy listening to gossip.

Another interviewee explains shortly the reason and process of using gossip as a managerial tool as such: *"The manager planned to create rumors about a friend of ours whom he wanted to fire but could not do it in a mass dismissal, and spread rumors through the security guard, saying that either she should leave or I would fire her based on the rumors."* This means that managers can deliberately produce gossip for their own purposes and spread it by instrumentalizing other personnel. However, Leblebici et al., (2009) mention that gossip does not have an instrumental role. Contrary to this, the findings of this research define an instrumental role. On the other hand, more abstract instruments such as gossip are not mentioned in studies on managerial tools (e.g. Baladi, 2000).

4. CONCLUSION

The issue of how and why academic administrators use gossip as a managerial tool has not yet attracted the attention of researchers. However, due to the characteristics of academic organizations, this problem seems quite important.

According to the results obtained from the study, academic administrators can purposefully create gossip and use it as a managerial tool that has not been defined before. Additionally, they can also spread the gossip within the organization by using organizational resources such as personnel. By doing so, they attempt to manage organizational issues (e.g., pertinent to personnel) easily and for their own sake.

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Sürdürülebilir Depolama Kavramı ile İlgili Bibliyometrik Bir Analiz

Onur ÇETİN¹

¹Trakya Üniversitesi, İktisadi İdari Bilimler Fakültesi, ORCID: 0000-0003-1835-3333

Özet: Tedarik zincirindeki lojistik faaliyetler içerisinde temel faaliyetlerden birisi depolamadır. Depolama taşımacılıktan sonra en çok enerjinin kullanıldığı lojistik faaliyet olarak ele alınabilir. Buna rağmen, geleneksel depolamada çok yüksek miktarda enerji tüketilmektedir ve çevresel etki yüksektir, buna rağmen sürdürülebilirlik kavramı nadiren dikkate alınmıştır. Sürdürülebilir depolama, depolama faaliyetlerinde çevresel etkilerin minimum seviyeye indirilmesi olarak tanımlanabilmektedir. Sürdürülebilirlik, çevresel, ekonomik ve sosyal boyutlarını içeren birçok disiplini içeren bir kavramdır. Dolayısı ile sürdürülebilir depolama da çok disiplinli bir kavram olarak ortaya çıkmıştır.

Sürdürülebilir depolama kavramı hem tedarik zinciri yönetimi hem de sürdürülebilirlik literatürü açısından önemli bir kavram olmakla birlikte kavram ile ilgili gerçekleştirilmiş bibliyometrik analiz sayısı sınırlıdır. Bu çalışmanın amacı kavram ile ilgili yapılan çalışma sayısındaki trendleri gözlemlemek ve kavram ile diğer kavramlar arasındaki ilişkileri incelemektir. Dolayısı ile bu çalışmada sürdürülebilir depolama ve yeşil depolama ile ilgili bibliyometrik analiz gerçekleştirilmiştir. Çalışma Vosviewer programı kullanılarak Web of Science ve SCOPUS veri tabanlarında gerçekleştirilmiştir. Bulgulara göre yapılan çalışmaların sayısında zamana göre artan bir trend gözlemlenmiştir. Kavram ile ilgili yapılan tüm çalışmaların yarısından fazlası son dört yıl içerisinde gerçekleşmiştir. Anahtar kelime analizlerine göre beklendiği üzere çalışmalar çevresel sürdürülebilirlik literatürü ve sürdürülebilir tedarik zinciri yönetimi literatürü içindeki kavramlar öne çıkmıştır. Bunun yanında, literatür tarafından desteklendiği şekilde, teknoloji temelli kavramlar da sürdürülebilir depolama kavramı ile ilişkili olarak ortaya çıkmıştır. Bunun yanında bulgular, kavram ile sürdürülebilirliğin ekonomik ve sosyal boyutu ile ilgili ilişkisini inceleyen yayınların sınırlı olduğunu göstermektedir. Çalışmanın başka bir önemli bulgusu ise kavram ile pazarlama arasındaki ve kavram ile yasal düzenlemeler arasındaki ilişkiyi inceleyen çalışma sayısının çok çok sınırlı olmasıdır.

Anahtar Kelimeler: Sürdürülebilir lojistik, sürdürülebilir depolama, bibliyometrik analiz.

A Bibliometric Analysis On Sustainable Warehousing Concept

Abstract: Warehousing is one of the essential logistics activities in supply chain. Transportation activities has the first place in energy consuming through the logistics activities, and warehousing activities takes the second place. However, in conventional warehousing activities enormous amount of energy were consumed, and high environmental effect was common however, the environmental effect of warehousing activities was rarely considered. Sustainable warehousing can be defined as minimizing the environmental effects. The sustainability concept has environmental, economic and social aspects, and includes several disciplines. So sustainable warehousing emerged as a multi discipliner concept.

While sustainable warehousing is a vital concept in supply chain management and sustainability literature, bibliometric analysis conducted regarding the concept is limited. The aim of the research is to demonstrate the trend in the number of research and to analyze the interrelations between the concept of sustainable warehousing and other concepts. So, in this research a bibliometric analysis is conducted for the concepts of sustainable warehousing and green warehousing. The research was conducted in Web of Science and SCOPUS databases using Vosviewer software. According to the findings, there is a dramatic increase in the number of research regarding the subject. The number of research conducted in last four years is more than the half of all research conducted regarding the concept. In keyword analysis, as expected, the most related concepts with sustainable warehousing were the concepts incorporated by environmental sustainability literature and green supply chain management literature. Besides this, as supported by the literature, technology based concepts were found to be related to the sustainable warehousing concept. Besides this, findings suggests that the research analyzing the link between the concept and economic and social aspects of sustainability were limited. Another important findings of the research is that, the research searching the link between the concept and marketing management and legal regulations were much more limited.

Keywords: Sustainable logistics, sustainable warehouse, bibliometric analysis

1. GİRİŞ

Günümüzde artan hızlı nüfus artışıyla birlikte hızlı kentleşme ve sanayileşme süreçlerinin yaygınlaşması doğal kaynakların tükenmesi gibi birtakım çevresel sorunlara neden olmaktadır. Bu da sürdürülebilirlik kavramının daha önem kazanmasını sağlamıştır. Sürdürülebilirlik, mevcut nesillerin ihtiyaçlarını karşılarken gelecek nesillerinde ihtiyaçlarını göz önüne alarak çevre dostu yaklaşımı kullanma ve yönetme olarak tanımlanabilmektedir. Firmalara sürdürülebilir ve yeşil faaliyetlerin dahil edilmesiyle birlikte bir ürünün üretim, lojistik, depolama ve dağıtım süreçlerinde çevre dostu bir yaklaşımı benimseyerek tedarik zincirinde sürdürülebilirlik hedeflerine ulaşmayı hedeflemektedir (Mercan, 2022).

Yaşanılan çevre düzeninde sürdürülebilir kavramı işletme süreçlerinin hepsinde ilgi görmeye başlamıştır. Her gün gündemi değişerek ve gelişerek devam eden bu durum birçok işletmeyi zorla olsa da içine çekmektedir. Özellikle Küresel sistemde lojistik ve tedarik zinciri uygulamaları rekabet koşullarını etkileyen en kritik faktör olarak rol oynaması gündemi değişime uğratmıştır. Sonuçta üretim süreçlerinin özellikle lojistik operasyon bölümleri süreçlerde ciddi maliyet artırmaktadır. Üretim süreçlerinde tedarikçilerle olan iş birliklerinin hepsini aslında tedarik zincirlerini oluşturmaktadır. Zincirin yönetilmesi oldukça karmaşık ve zorlu bir süreç olmasının yanı sıra zincirin birleşmesinde ortaya çıkan pozitif tepki maliyetleri azaltmak olsa da dağınıklığın yarattığı olumsuz faaliyetler olan yanlış atık yönetimi ya da sera gazı sorunu çevre kirliliği ve iklim problemini beraberinde getirmektedir. (Khan 2019). Bu durumda en etkili lojistik faaliyeti çevreyle entegre olmuş olan süreçler daha olumlu karşılanmaktadır (Srivastava, 2007).

Tedarik zinciri ve lojistik süreçlerinde vurgulanan ilk aşama depolama uygulamasıdır. Tedarik zinciri yönetimi aşamalarında yer alan depolama, bir ürünün teslim alınmasından talep edilmesine kadarki olan süreçte ürünlerin korunmasını ve saklanmasını sağlamaktadır (Toker & Görener, 2022). Geleneksel depolamada çevre dostu olmayan yaklaşımların benimsenmesi, yüksek enerji tüketimi, atıkların etkili bir şekilde kontrol edilememesi ve sürdürülebilirlik kavramının daha az göz önünde bulunması sürdürülebilir depolama kavramını ortaya çıkarmıştır. Bu bağlamda, sürdürülebilir depolama kavramı, çevre dostu ve sürdürülebilir depolama yöntemlerini geliştirmede büyük bir öneme sahiptir. Bu depolama faaliyetinde teknolojik gelişmelerin olumlu etkisi olarak hayatımıza giren Yeşil depolama süreçleri ekonomik süreci pozitif etkilerken enerji tasarrufunu da sağlamak amaçlarından biridir (Amemba vd., 2013).

Sürdürülebilir yeşil depolama, çevresel etkileri minimum en az seviyeye indirilmesi olarak tanımlanabilmektedir. Sürdürülebilir yeşil depolama yönetimi birçok konuyu içermektedir. Bunlar sırasıyla şöyledir; depo süreçlerinde enerji kullanımı azaltılarak çalışanlar için ideal çalışma şartlarının sağlanması, doğal ışıktan yararlanılarak depo içinde enerji tasarrufu sağlanması, deponun ısıtılması için sıcak-soğuk su sisteminin kullanılması, elleçleme aşamasında modern ve verimli ekipmanlar kullanılarak enerji israfının azaltılması, depo sürecinin verimli ve etkin yönetilebilmesi için talep, üretim ve stok düzeylerinin doğru tahmin edilmesi stok birikiminin önüne geçerek satış ve operasyon süreçlerini verimli bir şekilde gerçekleştirilmesini sağlanması, tedarikçi-üretici-müşteri arasındaki işbirliğiyle birlikte doğru tahminler yapılması ve son olarak bilgi ve iletişim teknolojilerinden yararlanılarak stok seviyelerinin güncellenmesini ve gerçek satış verilerinin paylaşılmasını sağlayacaktır. Sonuç olarak, gelecekte sürdürülebilir depolama yönetimi için bu konuların önemi kaçınılmazdır (Akandere, 2019).

Yüksek sosyal standartların korunması ve finansal verimliliğin artırılmasıyla birlikte çevresel etkinin azaltılmasını amaçlayan, depo süreçlerinin verimliliğini en yüksek düzeye çıkarmak için tasarlanmış teknolojik ve operasyonel çözümleri içeren bir yaklaşım olarak tanımlanabilmektedir. Bu yaklaşım, hem çevresel etkilerin en aza indirilmesi için yenilikçi tasarım prensipleriyle bütünleştirilirken, aynı zamanda da işletme ve toplumun sürdürülebilirlik hedeflerine katkıda bulunacak şekilde bir araya getirilmesini sağlamaktadır (Ölger, 2022).

Sürdürülebilirlik konusunun bu kadar önemli olduğu iş dünyasında, araştırmaların yönünü belirlerken bu konunun dikkat çekmesi kaçınılmazdır. Depolama sistemlerinde sürdürülebilirliği kavramsal olarak literatüre girmiş ve çalışmalara yön verebilmek amacıyla bibliyometrik analiz ile hali hazırda var olan çalışmaların vurgulanan alanları gündeme getirip literatürde boşlukta kalan alanların önümüzdeki süreçte araştırmacılara destek olunarak doldurulması amaçlanmıştır. Sürdürülebilir depolama konusunda bibliyometrik analiz yapılarak gerçekleştirilen bu çalışmanın amacı sürdürülebilir depolama ile ilişkili yayın sayılarındaki trendlerin, kullanılan anahtar kelimeler arasındaki ilişkilerin belirlenerek kavram ile ilgili literatürün analiz edilmesi ve bunun yanında ileriye yönelik araştırma konuları ile ilgili çıkarımlar gerçekleştirilmesidir.

Ulusal literatürde sürdürülebilir depo ile ilgili çalışmalar kısıtlıdır. Bu sebeple, bu çalışmanın amacı uluslararası literatürde sürdürülebilir depolama kavramının bibliyometrik analizini yapmaktır. Araştırma'da Web of Scinece ve Scopus veri tabanında sürdürülebilir depo kavramı konu olarak seçilmiş ve bu veri tabanlarından elde edilen yayınlara odaklanılmıştır. Bununla birlikte ulusal literatürdeki az sayıda çalışmaya da değinilmiştir.

2. ULUSAL LİTERATÜRDE SÜRDÜRÜLEBİLİR DEPOLAMA İLE İLGİLİ ÇALIŞMALAR

Ulusal literatürde sürdürülebilir depo ile ilgili sayıca az olan çalışmaların bazılarını bu bölümde değinilmiştir. Boztepe vd. (2015) Depo yeri seçiminde solar kriterlerin karşılaştırmasını Analitik Hiyerarşi Süreci (AHP) yöntemi ile gerçekleştirmiştir. Boztepe (2018) Analitik Ağ Süreci (ANP) ve TOPSIS yöntemini kullanarak yeşil depo yeri seçimi için bir çok kriterli karar verme modeli oluşturmuş, kriterlerin ağırlıklarını belirlemiş ve farklı depo yerleri arasında en uygun depo yeri seçimini gerçekleştirmiştir.

Akandere (2019), Türkiye'deki lojistik işletmelerin yeşil depo yönetimi uygulamalarının işletme performansı üzerindeki etkilerini araştırmak için bu çalışmayı gerçekleştirmiştir. Yeşil depo uygulamalarının işletmelerin sürdürülebilirlik hedeflerine ulaşmada katkı göstereceği sonucuna varılmıştır. Boztepe ve Çetin (2020) hangi depolarda solar dönüşüm yapılacağını belirlemek için TOPSIS yöntemi ile altı alternatif depo için sıralama gerçekleştirmişlerdir.

Ergün vd. (2020) Giresun'da sürdürülebilir afet lojistiğine yönelik ideal afet depo yeri seçiminin ölçütlerini ve en uygun afet depo yeri seçimini belirlemek için gerçekleştirilen bu çalışmada çok kriterli karar verme tekniklerinden; AHS, MAUT ve SAW yöntemleri kullanılmıştır. ,

Oral vd. (2021), pandemi sürecinde sürdürülebilir tedarik zinciri yönetimi için ilaç deposu ve aşı dağıtım merkezi bölgelerinin karşılaştırılması ve yerinin seçilmesi için bir çalışma gerçekleştirilmiştir. Çalışmada, çok kriterli karar verme tekniklerinden; AHP, ANP ve PROMETHEE yöntemi kullanılmıştır.

Ölger, (2022) Türkiye'de yeşil depo ile ilgili yasal ve kalite sistemlerini incelemek ve firmalar için hangi avantajları sağladığına değinmiştir.

Bozagcı & Çevik (2022), yiyecek ve içecek sektöründeki firmaların sürdürülebilirlik ve inovasyon konularındaki farkındalığı arttırmak ve kontrollü atmosfer depolarının kullanımının avantaj ve dezavantajlarını anlamak amacı ile bir çalışma gerçekleştirmiştir.

3. VERİ VE ANALİZİ

Bibliyometrik analiz ilgili alanın en güncel durumuna ait görselleştirme yazılımları yoluyla akademik yazın izlenmesini kolaylaştıran analitik yöntemdir. Literatür taramasında bütünü görmeye yardımcı olan bir bakış açısı olarak yazınları sistematik sıralamaya sokup çalışma alanlarının kolaylıkla yönetilmesini sağlamaktadır. Çalışma 22.07.2023 tarihinde "sustainable warehousing" ve "green warehouse" anahtar kelimeleri ile "başlık, özet, anahtar kelime" alanları seçilerek yapılan araştırmada Web of Science üzerinden 50 ve SCOPUS üzerinden 304 makaleye ulaşılmıştır. Yıllara göre en eski 2013 ve en yeni 2023 olmak üzere 18 farklı alandan 354 makale incelenmiştir. İnceleme, yazar, atıf, ülke, anahtar sözcük ve özet analizleri üzerinden yapılmıştır. Uygulama karşılaştırmanın rahat gözlemlenebilmesi amacıyla her iki veri tabanı için ayrı ayrı çalışılmıştır. Bulgulara göre düzenlenmekte olan tablolar ve grafikler Vosviewer ve R programları kullanılarak elde edilmiştir.

3.1. Kısıtlılıklar

WOS Core collection'da listelenen çalışmalar üzerinden yapılan analizlere, Türkiye'de Tubitak, Ulakbim, YÖK tez arşivi ve Pubmed gibi veri tabanları ile çevrimiçi donanım girmemiş olan kaynakların dahil edilmemiş olması çalışmanın en kritik kısıtlılığıdır.

3.2. WEB of Science Makalelerinin İncelenmesi

Tablo 1.'de Web of Science'daki yayınların yıllara göre dağılımı görülmektedir. 2008-2019 yılları arasında bu konu hakkındaki çalışmaların nadiren yapıldığının söylemek mümkündür. Daha sonra 2022 yılında %24'lük bir oran ile sürdürülebilir depolama kavramı hakkındaki çalışmaların en yüksek ve en yoğun yıl olduğu ve bu oranı %14'lük oran ile 2021 yılı ve %12'lik bir oran ile 2023 yılının takip ettiği görülmektedir. 2023 yılının henüz tamamlanmadığı düşünüldüğünde bu konunun son iki yılda önem kazandığı görülebilir. Diğer yıllar ise bu konu hakkındaki çalışmaların daha düşük olduğunu göstermektedir.

Tablo 3.2. Web of Science Yayınlarının Yıllara Göre Dağılımı

Yıllar	Frekans	Dağılım
2008	1	%2,0
2010	3	%6,0
2011	1	%2,0
2013	1	%2,0
2015	3	%6,0
2016	3	%6,0

2017	1	%2,0
2018	2	%4,0
2019	3	%6,0
2020	7	%14,0
2021	7	%14,0
2022	12	%24,0
2023	6	%12,0
Toplam	50	%100

3.2.1. WEB of Science Makalelerinin Yazar Atıf Analizi

Tablo 2.'de yazarların atıf sayısı görülmektedir. En çok atıf alan ilk 10 adet yayına toplam 737 adet atıf yapılmıştır. Toplam 737 adet atfın %70'i ilk üç adet makaleye yapılmıştır. Bu verilere baktığımızda en çok atıf alan üç yazar sırası ile şöyledir; Rostamzadeh vd. (268), Ciliberti vd.(195) ve Fichtinger vd. (58). Burada Rostamzadeh ve diğerleri'nin atıf sayısı fazla olduğu için çalışmalarının önemli etkili olduğunu söylemek mümkündür.

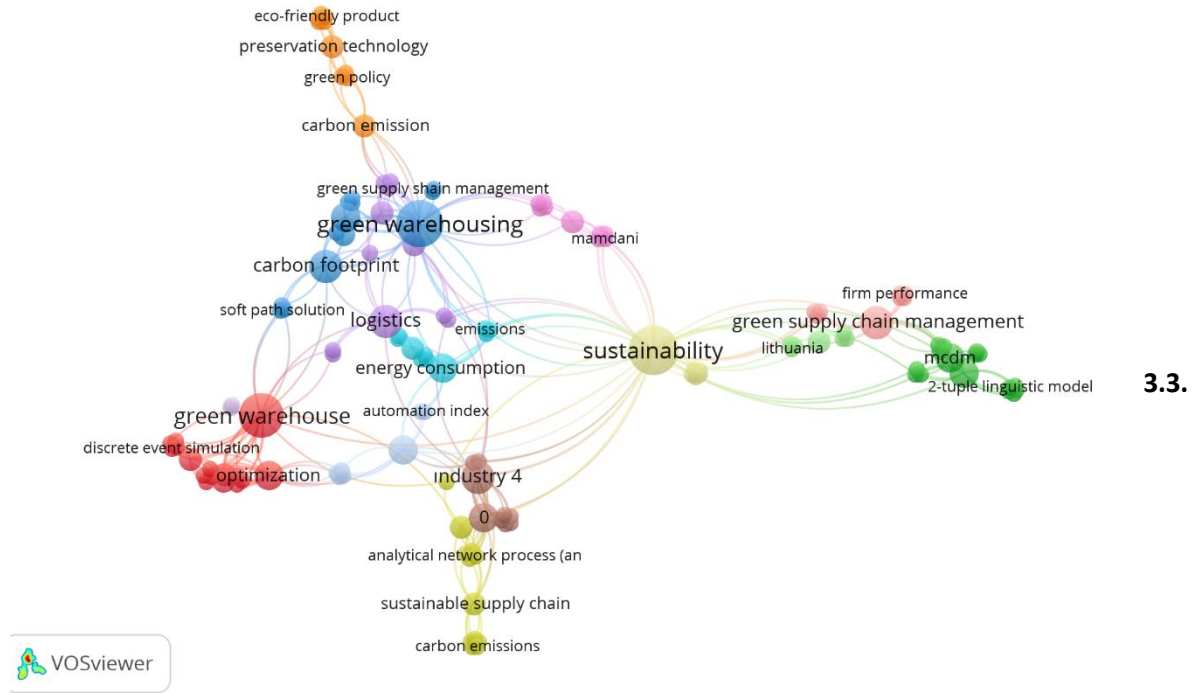
Tablo 3.3. Web of Science Yayınlarının Yazarlara Göre Atıf Sayısı

Yazar Grubu	Atıf Sayısı
Rostamzadeh, R; Govindan, K; Esmaili, A; Sabaghi, M	268
Ciliberti, F; Pontrandolfo, P; Scozzi, B	195
Fichtinger, J; Ries, JM; Grosse, EH; Baker, P	58
Chen, X; Wang, XJ; Kumar, V; Kumar, N	50
Agyabeng-Mensah, Y; Ahenkorah, E; Afum, E; Dacosta, E; Tian, ZX	43
Mashud, AM; Pervin, M; Mishra, U; Daryanto, Y; Tseng, ML; Lim, MK	26
Trivellas, P; Malindretos, G; Reklitis, P	25
Nantee, N; Sureeyatanapas, P	25
Dukic, G; Cesnik, V; Opetuk, T	24
Torabizadeh, M; Yusof, NM; Ma'aram, A; Shaharoun, AM	23
Toplam	737

3.2.2. WEB of Science Makalelerinin Anahtar Sözcük Analizi

Makalelerde kullanılan anahtar sözcüklerin kullanıma yoğunlukları ve birbirleri ile ilişkiler incelenmiştir. Buna göre çalışmalarda kullanılan anahtar sözcükler ve birbirleri ile ilişkileri ile ilgili Vosveiwier programından alından ekran görüntüsü Şekil 1.'de görülmektedir. Buna göre en fazla kullanılan anahtar kelimeler yeşil depo, yeşil depoculuk, sürdürülebilirlik olarak ortaya çıkmıştır ve bu durum gayet normaldir. Lojistik, enerji tüketimi, karbon ayak izi, karbon emisyonları, endüstri 4.0, yeşil tedarik zinciri kelimeleri de önemlidir ve en fazla kullanılan anahtar kelimeler ile bağlantılıdır. Kullanılan yöntemler incelendiğinde, çok kriterli karar verme ve analitik ağ süreci farklı kelimeler olarak yer almıştır. Optimizasyon, çok kriterli karar verme yöntemleri ve simülasyon da yöntemler arasında öne çıkmıştır.

Şekil 3.1. Web of Science Yayınlarının Anahtar Kelime Analizi



SCOPUS İncelemesi

Scopus'daki yayınların yıllara göre dağılımı Tablo 3.'de görülmektedir. Yıllara baktığımızda genel olarak yayın sayısında artış yaşanmıştır. Toplam 302 adet yayının %56'sı 2020 yılı ve sonrasında yayınlanmıştır. Hem Web of Science hem de Scopus için yüzdelik bazda sonuçlar benzer şekildedir. Sürdürülebilir depolama ile ilgili yayınlar 2020 yılından sonra önemli ölçüde artmaya başlamıştır. İki veri tabanında da konunun son yıllarda popülerleşmeye başlaması konunun gelecek araştırmalar için bir çalışma alanı vaat ettiğini göstermektedir.

Tablo 3.4. SCOPUS Yayınların yıllara göre dağılımı

Yıllar	Frekans	Dağılım
2010	5	%1,7
2011	2	%0,7
2012	9	%3,0
2013	4	%1,3
2014	6	%2,0
2015	13	%4,3
2016	16	%5,3
2017	21	%7,0
2018	26	%8,6
2019	29	%9,6
2020	26	%8,6
2021	53	%17,05
2022	56	%18,5
2023	36	%11,9
Toplam	302	%100

3.3.1. SCOPUS Makalelerinin Yazar Atıf Analizi

Tablo 4.'de yazar atıf sayıları görülmektedir. Scopus veri tabanında incelenen atıf sayılarının daha fazla olduğu ve sayıların birbirine yakın olduğu görülmektedir.

Tablo 3.5. Scopus Yayınlarının Yazarlara Göre Atıf Sayısı

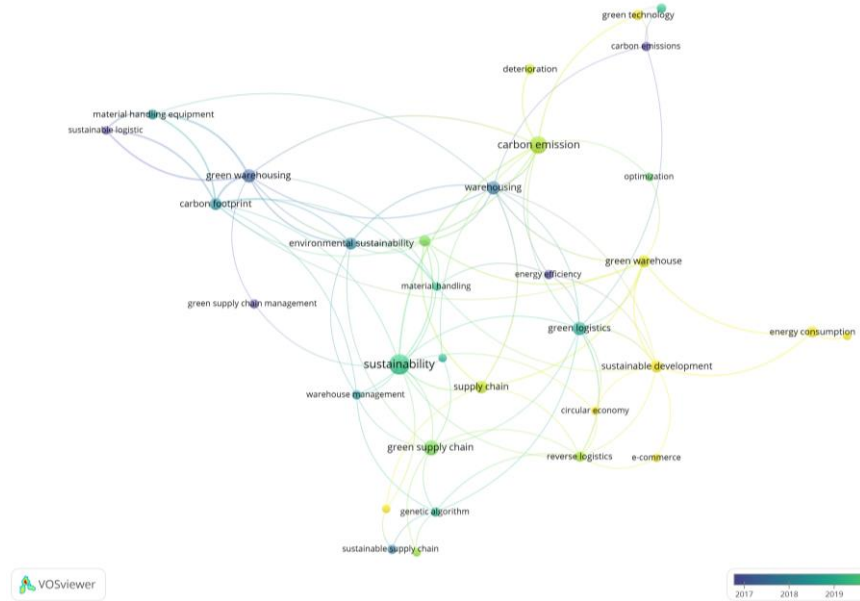
Yazar Grubu	Atıf Sayısı
Rostamzadeh R.; Govindan K.; Esmaili A.; Sabaghi M.	324
Soleimani H.; Govindan K.; Saghafi H.; Jafari H.	208
Gharaei A.; Karimi M.; Hoseini Shekarabi S.A.	199
Mavi R.K.; Goh M.; Zarbakhshnia N.	172
Fahimnia B.; Sarkis J.; Eshragh A.	166
Tiwari S.; Daryanto Y.; Wee H.M.	157
Kazemi N.; Abdul-Rashid S.H.; Ghazilla R.A.R.; Shekarian E.; Zaroni S.	143
Bai Q.; Gong Y.Y.; Jin M.; Xu X.	136
Singh R.K.; Gunasekaran A.; Kumar P.	121
Dadhich P.; Genovese A.; Kumar N.; Acquaye A.	108
Toplam	1734

Hem Web of Science hem de SCOPUS veri tabanında en çok atıf alan makale aynıdır. Bu makale SCOPUS'taki atıfların %19'unu almışken, Web of Science'deki atıfların %36'sını almıştır.

3.3.2. SCOPUS Makalelerinin Anahtar Kelime Analizi

Scopus veri tabanında gerçekleştirilen anahtar kelime analizi ile ilgili bulgular Şekil 2.'de görülmektedir. Şekil 2.'ye göre en çok tekrar eden anahtar kelime grupları yeşil depolama, sürdürülebilir depolama, karbon ayak izi, endüstri 4.0, yeşil tedarik zinciri yönetimi, enerji tüketimi, enerji etkinliği, yeşil teknoloji şeklindedir. Anahtar kelimeler ile ilişkili yöntem olarak, optimizasyon ve genetik algoritma daha çok öne çıkmıştır.

Şekil 3.2. Scopus Yayınlarının Anahtar Kelime Analizi



4. TARTIŞMA VE SONUÇ

Sürdürülebilir depolama konusunda Web of Science ve SCOPUS veri tabanlarında gerçekleştirilen bu çalışmada amacı sürdürülebilir depolama ile ilişkili yayın sayılarındaki trendlerin, kullanılan anahtar kelimeler arasındaki ilişkiler incelendiğinde yapılabilecek ilk çıkarım konu ile ilgili yapılan çalışma sayısının son 4 yıl içinde dramatik olarak artmasıdır. Bir veri tabanı için çalışmaların %64'ü, diğer veri tabanı için çalışmaların %56'sı son 4 yıl içinde gerçekleştirilmiştir ki 2023 yılının henüz tamamlanmadığı düşünüldüğünde bu rakamın daha fazla olması beklenebilir. Sürdürülebilir depolama ile ilgili çalışmaların ileriki yıllarda artarak devam edeceği çıkarımını yapmak zor olmayacaktır.

Anahtar kelimeler ve aralarındaki ilişkiler analiz edildiğinde beklendiği üzere çevre ile ilgili kavramlar ön plana çıkmıştır. Bunların yanında her iki veri tabanında da teknoloji ile ilgili kavramlar da yer almaktadır. Endüstri 4.0, yeşil teknoloji, koruyucu teknoloji gibi kavramların ortaya çıkması literatürle uyumludur. Zira literatürde teknolojinin çevresel performansa ve sürdürülebilirliğe ulaşmada en iyi yol olduğu belirtilmektedir (Hervas-Oliver vd., 2018; Son vd., 2018; Ryu vd., 2016). Bu durum da sürdürülebilir depolama ile ilgili çalışmaların teknolojik inovasyonları da içerecek şekilde çok disiplinli olarak devam edeceği düşünülebilir ve gelecek çalışmalar için, teknolojik inovasyonlar ve sürdürülebilir depolama ilişkisini inceleyen çalışmaların gerçekleştirilmesi önerilebilir.

Yöntem olarak çok kriterli karar verme ve ANP, optimizasyon, genetik algoritmalar ve simülasyon öne çıkmıştır. İleriki çalışmalarda farklı veri analizi yöntemlerinin, veri madenciliği yöntemlerinin ve anket yöntemlerinin de daha fazla kullanılması önerilebilir.

Çalışmanın çıkarımlarından biri de ekonomik konuların ve performans ile ilgili kavramların anahtar kelimeler arasında çok az yer bulmasıdır. Halbuki sürdürülebilirliğin üç temel ögesinden bir tanesi ekonomik sürdürülebilirliktir. Karbon vergisi ve karbon piyasası gibi uygulamaların iş dünyası açısından konunun ekonomik önemini arttıracığını tahmin etmek güç değildir. İleriki çalışmalarda sürdürülebilir depolamanın da performans açısından özellikle ekonomik sürdürülebilirlik açısından incelenmesi beklenmektedir.

Çalışmanın bir diğer çıkarımı pazarlama ile ilgili kavramların ve müşteri ile ilgili kavramların yer almamasıdır. İleriki çalışmalar sürdürülebilir depolamanın pazarlama açısından ve müşteriler açısından endüstriyel müşteriler açısından incelenmesi ile ilgili gerçekleştirilebilir.

Çalışmanın bir diğer çıkarımı da sosyal konular ile ilgili kavramların çok az yer alması, yasal düzenlemeler ile ilgili konuların ise hemen hemen hiç yer almamasıdır. Yeşil depolama uygulamalarında kullanılan yöntemlerden bir tanesi de depo çatılarına güneş panellerinin konmasıdır (Boztepe, Özçakar ve Çetin, 2015; Boztepe, 2018; Boztepe ve Çetin, 2020). Bu uygulamalarda Türkiye'deki devletin üretilen elektrigi satın alması yeşil depolamanın ilerlemesi açısından önemli bir motivasyon olmuştur. İleriki çalışmalar için, sürdürülebilir depolama ve yeşil depolama ile ilgili yasal düzenlemeler ile ilgili çalışmaların yapılması önerilebilir.

Araştırmada gerçekleştirilen bibliyometrik analize Tubitak, Ulakbim, YÖK tez arşivi gibi ulusal veri tabanları ile çevrimiçi donanım girmemiş olan kaynakların dâhil edilmiş olmaması en kritik kısıtlılık olarak görülebilir.

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Comparing Turkey's Medium-Term Economic Programs: Strategies to Tackle Inflation and Foster Sustainable Growth

Rasim YILMAZ¹

¹ Tekirdağ Namık Kemal University, Faculty of Economics and Administrative Sciences, rasimyilmaz@nku.edu.tr,
ORCID: 0000-0002-1084-8705

Abstract: This article compares Turkey's most recent Medium-Term Programs (MTPs): the Medium-Term Program (MTP) for 2023-2025 and the newly introduced MTP for 2024-2026. The primary difference between the two MTP programs lies in their monetary policies to combat inflation. The previous program relied on an unorthodox approach of maintaining a low interest rate policy and a low short-term policy rate at the central bank. In contrast, the new program aims to combat inflation through tight monetary policies, embracing a return to orthodox policies. The central bank has commenced this shift by increasing the short-term policy rate.

Another significant difference between the two MTP programs is their approach to the composition of the growth rate. The new program acknowledges that Turkey's recent economic growth is inflationary due to its domestic demand-oriented nature. Consequently, the new MTP program aims to alter the growth composition, shifting from a domestic demand-oriented growth to an export-oriented growth in order to curb the inflation rate. The objective is to transform the composition of growth in a manner that does not exacerbate inflation.

Keywords: medium-term programs, orthodox policies, tight monetary policy, inflation rate

1. INTRODUCTION

The first Medium-Term Program (MTP) in Turkey was prepared for the period 2006-2008 and published in the Official Gazette on May 31, 2005. The main aim of these programs is to formulate public policies and allocate resources based on strategic objectives in accordance with Law No. 5018, dated 10/12/2003, on Public Financial Management and Financial Control. Since then, 16 MTPs have been prepared (Presidency of Strategy and Budget, 2005).

Turkey announced its most recent Medium-Term Program on September 6, 2023, covering the period from 2024 to 2026. The program was prepared by the Ministry of Treasury and Finance in collaboration with the Presidency of the Republic of Türkiye Presidency of Strategy and Budget. It was officially published in the Official Gazette on September 6, 2023, and inaugurated during a ceremony at the Presidential Complex in Ankara (Investment Office, 2023).

The failure of the Medium-Term Program for 2023-2025, especially in reaching inflation targets, prompted the introduction of a new MTP program for 2024-2026. The MTP for 2023-2025 was published in the Official Gazette on September 4, 2022. It projected Turkey's GDP to grow by 5 percent in 2023, and by 5.5 percent in 2024 and 2025. The MTP for 2023-2025 envisaged a decrease in inflation to 24.9 percent in 2023, 13.8 percent in 2024, and finally 9.9 percent by 2025 (see Table 1).

Comparing the Medium-Term Program (MTP) projections for 2023-2025 with the updated MTP for 2024-2026, it's apparent that the latter revises GDP growth forecasts downward while simultaneously revising inflation forecasts upward (Investment Office, 2022). The new MTP for 2024-2026 anticipates Turkey's GDP growth at 4.4 percent in 2023, 4 percent in 2024, 4.5 percent in 2025, and 5 percent in 2026. In contrast, inflation is expected to decline to 33 percent in 2024, 15.2 percent in 2025, and then drop to single digits, reaching 8.5 percent in 2026 from the high of 65 percent recorded in 2023 (Investment Office, 2023).

Table 1: Growth and Inflation Forecasts in MTPs

	2023		2024		2025		2026	
	Growth	Inflation	Growth	Inflation	Growth	Inflation	Growth	Inflation
MTP for 2023-2025	5	24.9	5.5	13.8	5.5	9.9		
MTP for 2024-2026	4.4	65	4	33	4.5	15.2	5	8.5

The primary distinction between the two MTP programs lies in their respective monetary policies to combat inflation. The previous program relied on a low-interest rate policy and maintained a low short-term policy rate at the central bank. Conversely, the new program is oriented towards combating inflation through the

implementation of stringent monetary policies. This entails a return to orthodox policies, symbolized by the central bank's initiation of raising short-term policy rates.

The previous program was based on the belief that reducing interest rates would simultaneously lower inflation and stimulate investment, exports, and employment. This strategy anticipated that a reduction in the short-term policy rate would prompt an increase in the exchange rate, resulting in boosted exports, reduced imports, a decline in the current account deficit, an upswing in domestic production, ultimately fostering macroeconomic stability, and curbing domestic inflation (Hürriyet Newspaper, 2021; Euronews, 2021).

In contrast, the new program seeks to combat inflation by embracing orthodox economic policies. The objective of this approach is to drive inflation down to single digits and enhance the current account balance through the implementation of tight monetary and fiscal policies. Given the escalating inflation rate, orthodox policies posit that interest rates, particularly the central bank's short-term policy rate, should be elevated to manage domestic spending and deter capital outflows. Failure to do so could lead to currency depreciation and an inflationary spiral.

Another significant difference between the two MTP programs lies in their approach to the composition of the growth rate. The new program acknowledges that Turkey's recent economic growth is inflationary due to its domestic demand-oriented nature. Consequently, the new MTP program aims to reshape the composition of growth by shifting from a domestic demand-oriented model to an export-oriented one, thereby curbing the inflation rate. Its objective is to alter the composition of growth in a manner that avoids further inflationary pressures (Milliyet Newspaper, 2023).

2. INFLATION

Turkey has grappled with an inflation rate exceeding 10 percent since 2017. The inflationary pressures in Turkey have been exacerbated by several factors, including subsidized loan extensions to domestic firms, heightened health expenditures, unemployment subsidies, and wage increases—implemented as part of efforts to combat the challenges stemming from the Covid-19 pandemic. Additionally, the nation faces cost-push inflation due to escalating costs of imported goods, coinciding with the onset of optimism regarding the pandemic's end in 2021. Since 2019, Turkey has witnessed a steady rise in its inflation rate, surging to 14.6% in 2020, a significant leap to 36.08% in 2021, and a striking peak at 64.7% in 2022 (see Table 2).

Table 2: Consumer Price Index and Producer Price Index of Turkey

Year	CPI	PPI
2010	6.4	8.87
2011	10.45	13.33
2012	6.16	2.45
2013	7.4	6.97
2014	8.17	6.36
2015	8.81	5.71
2016	8.53	9.94
2017	11.92	15.47
2018	20.30	33.64
2019	11.84	7.36
2020	14.60	25.15
2021	36.08	79.89
2022	64.27	97.72
08-2023	57.45	49.41

Source: The Central Bank of the Republic of Turkey, <https://www.tcmb.gov.tr/>

While the primary objective of the previous Medium-Term Program (MTP) was to reduce the inflation rate, the unorthodox policies pursued under this MTP proved ineffective in achieving this goal. Instead of achieving a decline in inflation, these unconventional measures actually led to an acceleration of the inflation rate in Turkey. Despite the intent to manage inflation through these policies, they seemed to have inadvertently contributed to the contrary effect, exacerbating the inflationary situation within the country.

3. SHORT-TERM POLICY RATE OF THE CENTRAL BANK

In the face of a rising inflation rate, conventional economic theory posits that increasing interest rates becomes imperative to exert control over domestic spending and discourage capital outflows. Failing to do so, it is argued, may set in motion a series of events, including currency depreciation and the onset of an inflationary spiral. However, during the period between 2019 and February 2023, in alignment with the previous Medium-Term Program, the Central Bank of Turkey took an unconventional approach by continuing to lower its short-term policy rate (see Table 3).

The plan, however, remained vague on the potential consequences for the inflation rate during the transition process. The transformation process was predicated on the belief that an increase in the exchange rate would dampen domestic demand, with the hope that this would, in turn, alleviate inflationary pressures. Nevertheless, the theoretical outlook regarding whether an increase in the exchange rate would effectively reduce the inflation rate remains ambiguous. With a low short-term policy rate and a high inflation rate, the situation essentially translates to negative real interest rates. In the context of decreasing and negative real interest rates, an open economy typically experiences a surge in the exchange rate, as savers are inclined to invest in foreign currencies as a means of safeguarding their investments against the backdrop of negative real interest rates. According to the standard economic argument, an increase in the exchange rate has the potential to fuel inflation. The underlying policy argument in conventional economics suggests that a low short-term policy rate tends to yield a higher inflation rate, given that such a policy decision often triggers an increase in the exchange rate, which, in turn, results in an uptick in inflation rates.

With the launch of the new Medium-Term Program, the Central Bank of Turkey has embarked on a significant transformation in its monetary policy approach. This shift is highlighted by the noteworthy decision to raise the short-term policy rate, marking a substantial departure from the previous strategy. The short-term policy rate has witnessed a substantial increase, surging from its previous level of 8.50% to a substantial 25% within six months, reflecting the implementation of a rigorous and tight monetary policy stance. This move underscores the central bank's commitment to addressing the economic challenges at hand and maintaining macroeconomic stability.

Table 3: Short-term Policy Rate of the Central Bank of Turkey

Date	Short-term Policy Rate
20.05.2010	7
17.12.2010	6.5
21.01.2011	6.25
05.08.2011	5.75
19.12.2012	5.5
17.04.2013	5
17.05.2013	4.5
29.01.2014	10
23.05.2014	9.5
25.06.2014	8.75
18.07.2014	8.25
21.01.2015	7.75
25.02.2015	7.5
25.11.2016	8
01.06.2018	16.5
08.06.2018	17.75
14.09.2018	24
26.07.2019	19.75
13.09.2019	16.5
25.10.2019	14
13.12.2019	12

17.01.2020	11.25
20.02.2020	10.75
18.03.2020	9.75
23.04.2020	8.75
22.05.2020	8.25
25.09.2020	10.25
20.11.2020	15
25.12.2020	17
19.03.2021	19
24.09.2021	18
22.10.2021	16
19.11.2021	15
17.12.2021	14
19.08.2022	13
23.09.2022	12
21.10.2022	10.50
25.11.2022	9
24.02.2023	8.50
23.06.2023	15
21.07.2023	17.5
24.08.2023	25

Source: The Central Bank of the Republic of Turkey, <https://www.tcmb.gov.tr/>

3. THE GROWTH RATE

As seen in Table 4, the average growth rate of Turkey has been 5.5% over the last 20 years. The new MTP foresees an average growth rate of 4.5% in the next three years. In other words, the growth rate projection for Turkey has been reduced by 1% below the 20-year average growth rate. This adjustment is due to the fact that Turkey's recent economic growth has been inflationary due to its domestic demand-oriented nature (Milliyet Newspaper, 2023).

The Turkish economy demonstrated a year-on-year expansion of 3.8% during the second quarter of 2023, a slight dip from the 3.9% growth observed in the preceding period. This growth was primarily propelled by household spending, which witnessed a remarkable surge of 15.6%. Notably, household spending has now shown seven consecutive quarters of double-digit growth. Additionally, government final expenditure recorded a 5.3% increase, and there was a 5.1% growth in gross fixed capital formation. In terms of sectors, significant growth was noted in other service activities (6.6%), services (6.4%), construction (6.2%), and public administration, education, human health, and social work activities (5.1%). Conversely, the industrial sector experienced a contraction of 2.6%, and professional, administrative, and support service activities declined by 0.7%. In the trade sector, there was a noteworthy decline in exports by 9%, while imports surged substantially by 20.3%. In comparison to the previous quarter, the economy expanded by 3.5% (Turkish Statistical Institute, 2023).

Table 4: Growth Rate of Turkey

Year	Growth Rate
2000	6.9
2001	-5.8
2002	6.4
2003	5.8
2004	9.8

2005	9.0
2006	6.9
2007	5.0
2008	0.8
2009	-4.8
2010	8.4
2011	11.2
2012	4.8
2013	8.5
2014	4.9
2015	6.1
2016	3.3
2017	7.5
2018	3.0
2019	0.8
2020	1.9
2021	11.4
2022	5.6
2023-1	3.9
2023-2	3.8

Source: The Central Bank of the Republic of Turkey, <https://www.tcmb.gov.tr/>

4. CONCLUSION

The first Medium-Term Program (MTP) in Turkey was prepared for the period 2006-2008 and published in the Official Gazette on May 31, 2005. The main aim of these programs is to formulate public policies and allocate resources based on strategic objectives in accordance with Law No. 5018, dated 10/12/2003, on Public Financial Management and Financial Control. Since then, 16 MTPs have been prepared (Presidency of Strategy and Budget, 2005).

This article compares Turkey's most recent Medium-Term Programs (MTPs): the Medium-Term Program (MTP) for 2023-2025 and the newly introduced MTP for 2024-2026. The primary difference between the two MTP programs lies in their monetary policies to combat inflation. The previous program relied on an unorthodox approach of maintaining a low interest rate policy and a low short-term policy rate at the central bank. In contrast, the new program aims to combat inflation through tight monetary policies, embracing a return to orthodox policies. The central bank has commenced this shift by increasing the short-term policy rate.

Another significant difference between the two MTP programs is their approach to the composition of the growth rate. The new program acknowledges that Turkey's recent economic growth is inflationary due to its domestic demand-oriented nature. Consequently, the new MTP program aims to alter the growth composition, shifting from a domestic demand-oriented growth to an export-oriented growth in order to curb the inflation rate. The objective is to transform the composition of growth in a manner that does not exacerbate inflation.

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Green Transformation of Turkey

Rasim YILMAZ¹

¹Tekirdağ Namık Kemal University, Faculty of Economics and Administrative Sciences, rasimyilmaz@nku.edu.tr,
ORCID: 0000-0002-1084-8705

Abstract: This study aims to analyze green transformation efforts of Turkey. Turkey faces significant vulnerability to climate change due to its geographical positioning and natural resources. Moreover, its extensive integration into the global economy leaves it notably impacted by international policies and advancements in the ongoing battle against climate change.

Turkey has demonstrated its determination to transition to a low-carbon economy by becoming a signatory party to the Paris Agreement and setting the target of reducing its greenhouse gas (GHG) emissions by 41% through 2030 and achieving net-zero emissions by 2053. Turkey demonstrated its commitment to climate action and a long-term commitment to greener growth by renaming the "Ministry of Environment and Forests" as the "Ministry of Environment, Forests and Climate Change". Turkey also introduced the "Green Deal Action Plan" (GDAP) in alignment with the European Green Deal set forth by the European Union, its primary trading partner. Turkey's climate change policy is shaped by a variety of sectoral, local, and national policy documents, strategies, and action plans focused on both mitigation and adaptation. Moreover, Turkey's National Development Plans and Medium Term Plans reflects its determination to accelerate the country's green transformation.

In comparison to the MTP for 2022-2024, the MTP for 2024-2026 addresses green transformation in a more comprehensive manner. Notably, the latter MTP incorporates a greater number of policies and actions pertaining to green transformation than the former. The Green Transition section of the MTP for 2024-2026 encompasses thirty-one policies and actions, while the Green Transition section of the MTP for 2022-2024 comprises seven policies and actions.

Keywords: Green transformation, circular economy, green deal action plan

1. INTRODUCTION

The environmental, social and economic destructive effects of climate change, the changes caused by the Covid-19 epidemic in production and consumption patterns, and disruptions in the energy supply and demand balance due to the recent Russia-Ukraine war have increased the importance of transition to green economy and the need for sustainability-oriented policies and practices in a worldwide scale. In this context, renewable resources, energy efficiency, electrification and circular economy policies have become priorities in all areas, especially in the energy, industry, transportation and agriculture sectors (Türkiye Cumhuriyeti Strateji ve Bütçe Başkanlığı, 2023).

Turkey faces significant vulnerability to climate change due to its geographical positioning and natural resources. Moreover, its extensive integration into the global economy leaves it notably impacted by international policies and advancements in the ongoing battle against climate change (Türkiye Cumhuriyeti Strateji ve Bütçe Başkanlığı, 2023).

Turkey is significantly susceptible to the adverse effects of climate change, with tangible impacts already being observed. The nation is grappling with heightened temperatures, decreased precipitation, and a surge in climate-related disasters like floods and droughts. These changes are detrimentally affecting agriculture output, imperiling food security, and posing a substantial threat to the safety and well-being of numerous individuals across Turkey (World Bank, 2022).

The significance of integrating climate change considerations into economic policies is growing on a global scale, particularly led by developed nations like those spearheading initiatives such as the EU-European Green Deal in 2019. Continued efforts to align regulations with international initiatives will bring progressive guidance and elevated standards. Consequently, this will influence consumer preferences and investor attitudes, steering them toward embracing a more circular economy. As a result, there will be a notable reduction in market acceptance of products and services originating from carbon-intensive economies like Turkey (Türkiye Cumhuriyeti Strateji ve Bütçe Başkanlığı, 2022; World Bank, 2022).

Given its strong emphasis on export led growth strategy, Turkey stands to benefit by aligning itself with the ongoing global efforts aimed at addressing climate change, promoting sustainability, and fostering green growth. This alignment is particularly vital, aligning well with initiatives like the European Green Deal. This

circumstance underscores the need for a green transformation of the Turkish industry and economy, aligning with new policies introduced by countries, notably within the EU—Turkey's primary export market (Türkiye Cumhuriyeti Strateji ve Bütçe Başkanlığı, 2022; World Bank, 2022).

2. TURKEY'S COMMITMENT TO CLIMATE CHANGE

On the 22nd of April 2016, Türkiye signed the Paris Agreement and later ratified it on the 7th of October 2021, as published in the Official Gazette dated 07.10.2021, No. 31621. This formal ratification marked Türkiye's official entry as a party to the agreement on the 10th of November 2021.

After ratifying the Paris Agreement, as a party to the United Nations Framework Convention on Climate Change (UNFCCC) and a signatory to the Paris Agreement, Turkey published its Intended Nationally Determined Contributions (INDC) to the Paris Agreement, aiming for up to a 21 percent reduction in GHG emissions from the Business as Usual (BAU) level by 2030. Later, Turkey updated its NDC to reflect its updated Nationally Determined Contribution. With this updated NDC, Turkey commits to reducing its greenhouse gas (GHG) emissions by 41% through 2030 (695 Mt CO₂ eq in the year 2030) compared to the Business as Usual (BAU) scenario outlined in Turkey's initial NDC, considering the year 2012 as the base year (United Nations Framework Convention on Climate Change, 2023).

The Paris Agreement presents a distinctive chance to facilitate a green and just transition while aiding Turkey in executing its mitigation and adaptation strategies. Additionally, being an accession country to the European Union (EU), Turkey closely monitors EU policies and formulates legislation on climate change and environmental matters to align with the relevant acquisition (United Nations Framework Convention on Climate Change, 2023).

The European Green Deal takes on climate and environmental challenges comprehensively and with increased efficacy. This approach encompasses the EU's plan to attain net-zero greenhouse gas emissions by 2050, all while fostering job creation, enhancing the quality of life, and curbing emissions. On the 16th of July 2021, Turkey also unveiled the "Green Deal Action Plan" (GDAP) through the Presidential Circular numbered 2021/15, aligning with the European Green Deal set forth by the European Union. As a component of Turkey's Green Deal Action Plan, Turkey has established a target to achieve net-zero emissions by 2053. This Action Plan outlines 32 objectives and 81 actions categorized under nine main headings, emphasizing the green transformation of Turkey's industries and the implementation of measures, particularly in trade and industry sectors (United Nations Framework Convention on Climate Change, 2023).

The Green Deal Action Plan of Turkey serves as a roadmap aimed at facilitating green transformation across all pertinent policy domains. This plan is intended to align with the European Green Deal, fostering Turkey's shift towards a more sustainable, resource-efficient, and green economy. Importantly, this transition aims to uphold and further the existing integration of Turkey within the scope of the EU Customs Union.

Turkey's climate change policy is shaped by a variety of sectoral, local, and national policy documents, strategies, and action plans focused on both mitigation and adaptation. In line with this, Turkey demonstrated its commitment to climate action and a long-term commitment to greener growth by renaming the "Ministry of Environment and Forests" as the "Ministry of Environment, Forests and Climate Change" (United Nations Framework Convention on Climate Change, 2023; World Bank, 2022: 4).

Turkey's National Development Plans and Medium-Term Plans reflect the country's determination to accelerate its green transformation. Both the 11th National Development Plan (2019-2023) and the 12th National Development Plan (2024-2028) of Turkey share a long-term objective: to protect the environment and natural resources, improve their quality, ensure effective, integrated, and sustainable management, implement environmentally and climate-friendly practices across all sectors, and enhance environmental awareness and sensitivity across society through a sustainable development approach (World Bank, 2022).

The Medium-Term Plan (MTP) for 2022-2024, MTP for 2023-2025 and the MTP for 2024-2026 also call for policies and measures in support of green transformation. These policies and measures demonstrate a dedication to attaining sustainability objectives, addressing climate change, and promoting environmentally friendly economic growth in an ever-changing global scenario.

3. GREEN TRANSFORMATION AND MEDIUM-TERM PLANS

The first Medium-Term Program in Turkey was prepared for the period 2006-2008 and published in the Official Gazette on May 31, 2005. The main aim of these programs is to formulate public policies and allocate resources based on strategic objectives in accordance with Law No. 5018, dated 10/12/2003, on Public Financial Management and Financial Control. Since its inception, a total of 16 MTPs have been prepared (Presidency of Strategy and Budget, 2005).

For the first time in the series of MTPs, the concept of “green transformation” was introduced among the key macroeconomic targets and policies in the MTP for 2022-2024. This emphasis on “green transformation” persisted in the subsequent MTP for 2022-2024 and MTP for 2024-2026, where it remained a focal point within the programs’ main macroeconomic targets and policies.

The Medium-Term Program for 2022-2024, a collaborative effort of the Ministry of Treasury and Finance and the Presidency of Strategy and Budget, was published in the Official Gazette in September 2021. The MTP for 2022-2024 includes a section on “Green Transformation” which emphasizes the implementation of targets and actions included in the Green Deal Action Plan of Turkey. Green Transformation section of the MTP for 2022-2024 includes the following seven policies and actions:

1. New approaches in the fields of industry, trade, transportation, environment and energy, which supports the transition to green transformation and circular economy will be implemented within the framework of support and credit incentive mechanisms as well as considering foreign financing opportunities. Export competitiveness will be increased in line with climate change policies in the international trade by supporting investments, which target to increase productivity and limit the increase of greenhouse gas emissions.
2. Necessary technologies for green production will be developed and spread by supporting R&D to accelerate green transformation.
3. Creation of eco-friendly and sustainable industry and economic zones will be accelerated by completion of green industrial zone certification system with Green Organized Industry Zone.
4. Regulatory framework of financial sector will be developed to facilitate green transformation of industry.
5. Green bond and sukuk issues will be encouraged by preparing guideline complying international standards for financing of environmentally sensitive investments.
6. Environment friendly investments, which use efficient energy and resources, will be supported to minimize the adverse effects of global climate change.
7. Zero waste practices will be expanded to cover households, and measures will be taken to reduce the import of waste, excluding those in critical areas of production.

Turkey announced its most recent Medium-Term Program on September 6, 2023, covering the period from 2024 to 2026. The program was prepared by the Ministry of Treasury and Finance in collaboration with the Presidency of the Republic of Türkiye Presidency of Strategy and Budget. It was officially published in the Official Gazette on September 6, 2023 (Investment Office, 2023).

The MTP for 2024-2026 also includes a dedicated section on Green Transformation. In comparison to the MTP for 2022-2024, the MTP for 2024-2026 addresses green transformation in a more comprehensive manner. Notably, the latter MTP incorporates a greater number of policies and actions pertaining to green transformation than the former. The Green Transition section of the MTP for 2024-2026 encompasses thirty-one policies and actions, while the Green Transition section of the MTP for 2022-2024 comprises seven policies and actions.

Green Transformation section of the MTP for 2026-2026 consists of the following thirty-one policies and actions:

1. Foundational legislation preparation that addresses climate change-related practices in a holistic manner will be completed.
2. The legal framework of the National Emission Trading System (NETS) will be completed and developed in a structure compatible with the European Union Border Carbon Regulation Mechanism (EUBCRM). The transition period will be realized effectively and the necessary preparations will be made for the financial liability phase.

3. In line with the 2053 net zero carbon emission target, a long-term low-emission development strategy will be carried out in line with development plans.
4. Within the scope of the 4th European Green Deal, sectoral road maps will be prepared for companies on issues such as resource, process and energy efficiency and digitalization, and awareness-raising activities will be carried out.
5. The Green Deal Action Plan will be updated in order to increase competitiveness in export markets, especially in the EU, and to enhance Turkey's position in supply chains.
6. In line with the goals of combating climate change, infrastructure will be established to monitor and price greenhouse gas emissions.
7. Within the scope of the Border Carbon Regulation Mechanism and the 2053 net zero emission target, technologies such as energy storage, hydrogen and carbon capture, utilization and storage that support energy transformation, as well as R&D and innovation activities for the development of micro-grid management and digitalization will be supported.
8. A National Circular Economy Action Plan will be prepared by making an impact assessment regarding compliance with the legislation, which is being prepared within the framework of the EU's circular economy policies. Material recovery and waste management will be prioritized by prioritizing resource efficiency within the framework of sustainable production and consumption. Industrial symbiosis practices will be encouraged.
9. In line with the dissemination of the circular economy model and the EU Green Deal, a legislation will be developed to calculate and monitor carbon footprint and other environmental indicators by following the legislation on eco-design and sustainable products in the manufacturing industry. The required digital infrastructure will also be supported.
10. Zero waste practices will be expanded.
11. The standards for recycled secondary products will be determined, the incentive and guidance system will be developed, and regulations will be made in the legislation.
12. Measures will be implemented to protect the health, safety and economic interests of the consumer. Within the context of the sustainable consumption model, the prevalence of the renewed product system will be enhanced.

The prevalence of the renewed product system will be increased within the scope of protecting the health, safety and economic interests of the consumer and the sustainable consumption model.
13. The effects of the transition to a green and circular economy on labor markets will be analyzed, and the competency of the workforce will be increased for new professional groups that will emerge, taking into account the fair transition.
14. Green public procurement strategies will be developed and purchasing criteria that support green transformation will be determined.
15. Environmentally friendly multi-modal transportation terminals will be created.
16. The use of environmentally harmful machinery and equipment will be reduced by providing incentives for green port implementation.
17. In order to popularize electric vehicles, a charging station network will be developed, and especially the use of domestic electric vehicles will be supported.
18. The use of technologies and materials with low noise levels and greenhouse gas emissions in road construction projects will be expanded.
19. Projects aimed at the sustainability of transportation will be implemented that will facilitate the transition to low-carbon systems in urban transportation.
20. Projects will continue to be developed conditional on the use of domestic products with the Renewable Energy Resource Area model.
21. Necessary legislative arrangements regarding heat supply will be made in order to evaluate Turkey's heat potential and the use of waste heat.

22. New Energy Efficiency Strategy Document and II. the National Energy Efficiency Action Plan will be implemented.
23. Energy efficiency studies in public buildings and services will continue and the necessary technical and administrative infrastructure will be developed for more widespread use of energy performance contracts.
24. Regulations will be made to popularize the Almost Zero Energy Buildings (NSEB) approach, which aims to achieve high energy performance as well as use a certain amount of renewable energy in public, commercial and residential buildings.
25. Within the framework of sustainable forest management, new sink areas will continue to be created by protecting and expanding forest assets, and industrial plantation activities will continue on suitable lands.
26. More effective use of soil and water resources will be ensured by disseminating climate change-resistant agricultural practices and new technologies.
27. Financing opportunities for green transformation will be increased, existing support mechanisms will be reviewed, the institutional capacity on sustainable finance will be increased and the green finance ecosystem will be developed.
28. Legislative studies will be carried out to create a National Green Taxonomy that is compatible with international taxonomy examples, especially the European Union taxonomy, and takes into consideration the needs of Turkey.
29. Regulations will be made to accelerate the banking sector's transition to sustainable banking practices and to manage financial risks arising from climate change.
30. With the development of new regulations and practices on the basis of sustainability in capital markets, companies' sustainability reporting principles will be updated in line with international standards, a third-party assurance and verification system for Environmental, Social and Governance reporting will be established and the data within this scope will be integrated into the system to be created.
31. Participation in international financial markets will be accelerated within the framework of Environmental, Social and Governance criteria, and the financing needs of investments will be met by developing innovative and sustainable financing tools for green transformation.

4. CONCLUSION

This study evaluates green transformation efforts of Turkey. Turkey faces significant vulnerability to climate change due to its geographical positioning and natural resources. Moreover, its extensive integration into the global economy leaves it notably impacted by international policies and advancements in the ongoing battle against climate change.

Turkey has demonstrated its determination to transition to a low-carbon economy by becoming a signatory party to the Paris Agreement and setting the target of reducing its greenhouse gas (GHG) emissions by 41% through 2030 and achieving net-zero emissions by 2053. Turkey demonstrated its commitment to climate action and a long-term commitment to greener growth by renaming the "Ministry of Environment and Forests" as the "Ministry of Environment, Forests and Climate Change". Turkey also introduced the "Green Deal Action Plan" (GDAP) in alignment with the European Green Deal set forth by the European Union, its primary trading partner. Turkey's climate change policy is shaped by a variety of sectoral, local, and national policy documents, strategies, and action plans focused on both mitigation and adaptation. Moreover, Turkey's National Development Plans and Medium Term Plans reflects its determination to accelerate the country's green transformation.

The Medium-Term Plan (MTP) for 2024-2026 displays a more robust approach to green transition compared to the MTP for 2022-2024 and the MTP for 2023-2025. It notably emphasizes and incorporates a comprehensive set of policies and actions aimed at fostering sustainability and environmentally-friendly practices across various sectors. In contrast, the MTP for 2022-2024, while also recognizing the importance of green transition, encompasses a smaller number of policies and actions in this domain. The MTP for 2024-2026 demonstrates a

heightened commitment to achieving sustainability goals and promoting a greener economy, as evidenced by its more extensive array of policies and actions addressing the green transition.

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The Influence of the European Green Deal on the Turkish Industry

Rasim YILMAZ¹

¹ Tekirdağ Namık Kemal University, Faculty of Economics and Administrative Sciences, rasimyilmaz@nku.edu.tr, ORCID: 0000-0002-1084-8705

Abstract: The European Green Deal (EGD) is a flagship initiative of the European Union (EU), illustrating the union's commitment to achieving climate neutrality by 2050. The EGD encompasses a wide array of policies and measures aimed at significantly reducing greenhouse gas emissions and promoting sustainability across various sectors. For Turkey, a neighboring and important trade partner of the EU, the EGD's implications on its industrial sector are substantial. This article explores the potential impact of the European Green Deal on the Turkish industrial sector.

The European Green Deal (EGD) presents risks and opportunities Turkish industry. Given the EU's position as a major market for Turkish exports, the EGD's stringent environmental requirements may affect the cost of exporting goods to the EU. New regulations will also create new opportunities, from which Turkish industry can benefit. Adopting eco-friendly sourcing and production practices is vital for staying competitive in the EU market and the supply chains in the EU. They are also a vital for safeguarding and enhancing competitiveness in exports, position in value chains, and share in international direct investments.

Keywords: The European Green Deal, Turkish Exports, Turkish Industry

1. INTRODUCTION

The European Green Deal is an ambitious and holistic strategy that addresses climate change and environmental degradation by fostering a sustainable, circular, and inclusive economy. Key objectives include a 50-55% reduction in greenhouse gas emissions by 2030 and achieving carbon neutrality by 2050. The deal also aims to transition to a more sustainable energy system, promote energy efficiency, and enhance biodiversity and sustainable agriculture.

The Carbon Border Adjustment Mechanism is an integral part of the European Green Deal. The EU's Carbon Border Adjustment Mechanism (CBAM) serves the purpose of establishing a justifiable cost for the carbon emissions associated with the production of carbon-intensive goods imported into the EU. Its aim is to incentivize environmentally cleaner industrial practices outside the EU (See Figure 1).

Given the EU's heightened climate aspirations and the prevalence of less rigorous climate policies in numerous non-EU nations, the threat of "carbon leakage" remains a significant concern. This term refers to the scenario where EU-based companies move their carbon-intensive production overseas to jurisdictions with less strict climate regulations than the EU, or where EU-made goods are substituted by imports with higher carbon footprints. Although emissions pricing can drive industrial decarbonization, it carries the risk of carbon leakage, wherein EU firms relocate their production to regions with laxer climate policies. The CBAM is specifically crafted to mitigate this carbon leakage phenomenon, which entails a shift in production to areas with less stringent climate regulations, leading to a global upsurge in emissions (European Commission, 2023; European Parliament, 2023).

Figure 1: The EU's Carbon Border Adjustment Mechanism



Source: European Commission, 2023

The EU possesses the world's largest carbon-pricing system, known as the emissions trading system (ETS). While emissions pricing can drive industrial decarbonization, it poses a risk of carbon leakage, where EU companies shift production overseas. Currently, the EU mitigates this risk through free allocations to specific industries, but with heightened climate ambitions and increased carbon prices, they are phasing out these free allocations. A new carbon border adjustment mechanism (CBAM) is set to be introduced, necessitating EU importers, starting in 2026, to buy certificates equivalent to the weekly EU carbon price (European Parliament, 2023).

The Carbon Border Adjustment Mechanism (CBAM) necessitates a reduction in the carbon and environmental impact of exported products. Its goal is to establish import prices for specific sectors based on the carbon content of the goods. The European Commission recommends commencing implementation from January 1, 2023, with an optional three-year transition period until 2026. The Carbon Border Adjustment Mechanism (CBAM) will begin its transitional phase from October 1, 2023, targeting specific goods and precursors known for their carbon-intensive production and a high risk of carbon leakage. These include cement, iron and steel, aluminum, fertilizers, electricity, and hydrogen. As CBAM is fully phased in, it is anticipated to cover over 50% of emissions in sectors under the EU Emissions Trading System (ETS). The transition period aims to function as a pilot phase for all stakeholders, enabling them to gather valuable data on embedded emissions to improve the methodology for the definitive CBAM period (European Commission, 2023).

The implementation of the EU's Carbon Border Adjustment Mechanism (CBAM) to ensure a smooth and predictable transition for both EU and non-EU businesses, as well as public authorities. The initial phase involves importers reporting greenhouse gas emissions embedded in their imports without financial payments or adjustments. This reporting covers both direct and indirect emissions, with certain sectors like cement and fertilizers incorporating indirect emissions after a defined transitional period.

Flexibility is granted in the methodology for calculating embedded emissions during the early implementation phase, offering three reporting options. However, starting from January 1, 2025, only the EU method will be accepted. The European Commission is developing dedicated IT tools, guidance, training materials, and tutorials to aid importers in performing and reporting these calculations.

By January 1, 2026, when the permanent system is fully operational, importers will annually declare the quantity of goods imported into the EU in the previous year along with their embedded greenhouse gas emissions. They will then surrender the corresponding number of CBAM certificates, with certificate prices linked to the weekly average auction price of EU ETS allowances in €/tonne of CO₂ emitted. Simultaneously, the phasing-out of free allocation under the EU ETS will align with the phasing-in of CBAM from 2026 to 2034.

There will be a review of CBAM's functionality during the transitional phase before the definitive system's commencement. Additionally, a product scope review will assess the feasibility of incorporating other goods produced in sectors covered by the EU ETS into the CBAM mechanism, with a timetable aiming for their inclusion by 2030.

The Circular Economy Action Plan is another central component of the EU's broader Green Deal initiative, designed to achieve a circular economy by 2050. With the goal of establishing a dominant circular economy model within EU market, it advocates for reducing waste and ensuring that products and materials remain in use for as long as possible through recycling, reusing, and remanufacturing. This model seeks to minimize raw material and resource consumption, optimize the effectiveness of clean technologies, and prolong the product lifecycle. The plan covers various sectors, including manufacturing, waste management, product design, and consumer behavior (European Commission, 2020). Under sustainable product policies, the EU aims to enhance circularity and reduce environmental impact by focusing on product design in various sectors, including textiles, electronics, furniture, plastics, batteries, food, packaging, and building materials, for supply to the EU market (Hurriyet Daily News, 2021).

2. THE IMPACT ON EXPORTER COUNTRIES TO THE EU

The Carbon Border Adjustment Mechanism introduced by the European Union is a significant step toward ensuring that the EU's carbon reduction efforts do not inadvertently shift carbon-intensive production to other regions. However, this policy may have substantial implications for exporter countries, affecting their economies and trade relations with the EU.

Exporter countries to the EU may experience economic repercussions due to the CBAM. The mechanism could potentially increase the cost of exporting goods to the EU, making these products less competitive in the EU market. This could lead to a decrease in demand for these goods from EU countries, impacting the economies of exporter nations.

The extent of this impact will depend on the carbon intensity of the exported products and the competitiveness of the affected industries. Sectors heavily reliant on carbon-intensive processes may face significant challenges, necessitating adjustments to maintain market share in the EU. Industries heavily reliant on carbon-intensive processes, such as manufacturing and energy production, may face additional challenges in adapting to the CBAM's implications. They will need to invest in carbon-reducing technologies and sustainable practices to maintain their competitiveness in the EU market.

Exporter countries to the EU will also be affected by The Circular Economy Action Plan. The Circular Economy Action Plan's phased approach, starting with sustainable product standards, is a proactive step towards achieving a more sustainable and circular economic model while addressing specific sectors that have a substantial impact on trade balances and the environment. Expanding on this initiative, the introduction of sustainable product standards entails setting criteria that products must meet to be deemed environmentally friendly and socially responsible. These standards may encompass aspects such as the use of recycled materials, energy efficiency, reduced emissions, eco-friendly manufacturing processes, and durability.

The Turkish industrial sector is likely to feel the economic impact of the carbon border adjustment mechanism (CBAM). With the EU being a significant market for Turkish exports, the introduction of a carbon price on imports could increase the cost of exporting goods to the EU. Consequently, Turkish products might become less competitive in the EU market, potentially leading to a decline in demand and a reduction in export revenues. Moreover, the CEAP's focus on resource efficiency and circularity might encourage a shift towards a more sustainable supply chain. Turkish industries may need to reevaluate their sourcing practices and materials to align with the circular economy principles, potentially affecting costs and competitiveness.

The proposed cross-border carbon regulation, known as the Carbon Border Adjustment Mechanism (CBAM), is designed to run in parallel with the EU Emissions Trading System (ETS). The European Commission introduced this proposal in July 2021, intending to implement CBAM in phases. Initially, it will focus on direct greenhouse gas emissions (Scope 1) and impact sectors like cement, iron and steel, aluminum, and fertilizer production within the manufacturing industry. As CBAM progresses, it may extend to include other energy-intensive sectors like chemistry, textiles, and paper, broadening its scope to cover indirect greenhouse gas emissions (Scope 2) as well (TSKB, 2021).

It is expected that in the full implementation of the carbon border adjustment mechanism (CBAM) by 2026, Turkey is projected to be the third most adversely affected country, following China and Russia. The aluminum, cement, and iron and steel sectors are expected to experience a significant impact (The Union of Chambers and Commodity of Turkey, 2022). The implementation of the CBAM will impose an additional cost on Turkish exports in specific sectors, unless Turkey establishes an Emissions Trading System (ETS) or a comparable carbon pricing mechanism (Hurriyet Daily News, 2021).

In Turkey, the industrial sector constitutes about 25.3% of the final energy consumption. The primary energy-consuming manufacturing sectors in Turkey are basic metal (27%) and non-metallic mineral products manufacturing (23%), including cement. Following closely are the chemistry, textiles, and paper product manufacturing sectors. An analysis of energy cost ratios to total production costs in Turkey highlights that the cement (55%), ammonia (50%), and aluminum, glass, and steel (30%) sectors are among the highest in terms of energy costs relative to total production costs (TSKB, 2021: 8).

An impact study carried out by TSKB (2021) reveals that Compared to cement plants and aluminum plants in EU countries, Turkish cement plants exhibit higher average greenhouse gas emission intensity for both Scope 1 and Scope 1 and 2 emissions related to clinker, portland cement, and white cement products and aluminum products. Thus, current situation indicates that the Carbon Border Adjustment Mechanism is projected to impose extra costs on cement and aluminum manufacturers based in Turkey who intend to export to the European Union market. Similarly, the anticipated carbon cost associated with the Turkish iron and steel industry's exports to the EU is calculated to be EUR 198 million, calculated at an approximate rate of EUR 50 per ton of CO₂.

The Circular Economy Action Plan will also have effects on the Turkish industry. The objective is to bolster environmental responsibility and optimize resource efficiency across the product lifecycle by setting

sustainable product standards in these sectors. The Circular Economy Action Plan emphasizes sustainable product standards in sectors like furniture, bedding, tires, detergents, paints, mineral oils, iron, steel, aluminum, and textiles. Given Turkey's substantial foreign trade surplus in textiles, this sector holds particular importance (The Union of Chambers and Commodity of Turkey, 2022).

3. RISKS AND OPPORTUNITIES

The future is heavily influenced by digital and green transformations, presenting risks and opportunities for all companies. These transformations entail both potential risks and opportunities that businesses need to navigate and harness effectively. Adopting eco-friendly sourcing and production practices is vital for staying competitive in the EU market and the supply chains in the EU.

The EU's Carbon Regulation at the border will impose an additional carbon footprint-based tax on imported products, potentially resulting in a prohibition of certain items in EU markets. This development implies that the current Customs Union may become ineffective. Adapting to this process strategically can give a competitive edge over other rival countries, especially in the EU market. However, failing to implement necessary transformations could lead to the loss of Customs Union advantages between Turkey and the EU (The Union of Chambers and Commodity of Turkey, 2022).

New regulations will also create new opportunities, from which Turkish industry can benefit. For example, mandatory installation of rooftop solar panels will provide new opportunities for Turkish exporters while the establishment of the Mediterranean Green Hydrogen Platform will enable hydrogen imports, opening up prospects for new investments and partnerships within Turkey's industry (The Union of Chambers and Commodity of Turkey, 2022).

4. POLICY AND REGULATORY ALIGNMENT

The actions for green transformation in Turkey hold significance for maintaining integration with the European Union since the principles of the European Green Deal won't just apply to export standards but also align with the technical legislation for unhindered goods movement in the Customs Union. Additionally, they play a vital role in safeguarding and enhancing the country's competitiveness in exports, position in value chains, and share in international direct investments. The Customs Union will serve as a crucial foundation for Turkey's readiness in the global shift towards green transformation and economic sustainability. The unhindered movement of industrial goods between Turkey and the EU, synchronization of technical regulations, and shared quality infrastructure will offer substantial advantages, positioning Turkey to swiftly adapt to the Green Deal, surpassing many third countries in this transition (Hurriyet Daily News, 2021).

To minimize adverse effects and enhance competitiveness, Turkish industries may consider aligning their policies with the principles of the European Green Deal. This alignment could involve adopting comparable emission reduction targets, transitioning to renewable energy sources, implementing cleaner technologies and investing in renewable energy sources and energy-efficient technologies. Implementing similar circular economy strategies, waste reduction measures, and recycling programs could enhance Turkey's trade compatibility with the EU and its member states.

Moreover, collaboration and information exchange between the EU and Turkey would be crucial to ensure a smooth transition towards a circular economy. The CBAM could act as a catalyst for technological advancements within the Turkish industrial sector. Investments in sustainable technologies and processes could position Turkish industries as more competitive and compliant with the EU's environmental standards. Collaboration could facilitate technology transfer, knowledge sharing, and joint initiatives to advance circularity in both regions. This collaboration between Turkey and the EU on clean energy projects and sustainable initiatives could mitigate potential negative economic impacts on the Turkish industrial sector. Joint ventures and partnerships can facilitate knowledge transfer and technology adoption, fostering a more sustainable industrial landscape.

5. CONCLUSION

The European Green Deal and the Carbon Border Adjustment Mechanism introduced by the European Union is a significant step toward ensuring that the EU's carbon reduction efforts do not inadvertently shift carbon-

intensive production to other regions. However, this policy may have substantial implications for exporter countries, affecting their economies and trade relations with the EU.

Given the EU's position as a major market for Turkish exports, the EGD's stringent environmental requirements may affect the cost of exporting goods to the EU. Turkish industries may experience increased production costs due to the need for sustainable technologies and processes. This could potentially affect the competitiveness of Turkish products in the EU market, necessitating careful strategic planning and investment. Compliance with the EU's green standards could necessitate substantial investments in technology, infrastructure, and practices to reduce carbon emissions and meet environmental regulations. Compliance with circularity principles may require Turkish industries to adapt and invest in sustainable production processes, waste reduction, and recycling capabilities. Thus, it is crucial for Turkish industries to strategize, adapt, and align their policies to mitigate any adverse effects and capitalize on emerging opportunities for a more sustainable future. The implementation of such standards also offers an opportunity for collaboration between the EU and Turkey, facilitating sustainable trade relations and fostering a circular economy ethos on a global scale. By embracing circularity principles and fostering collaboration with the EU, Turkey can navigate this transition successfully and create a sustainable and competitive industrial landscape.

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Piyasalarda Adil Fiyatın Oluşmasında Rekabet Kurumunun Önemi

Doç. Dr. Resül Yazıcı¹

Doç. Dr. Ayla YAZICI²

¹ Bilecik Şeyh Edebali Üniversitesi, İİBF, İktisat Bölümü, 11100-Bilecik, Türkiye, resul.yazici@bilecik.edu.tr,

ORCID: 0000-0002-7875-3331

² Anadolu Üniversitesi, İİBF, İktisat Bölümü, Eskişehir, Türkiye, ayazici@anadolu.edu.tr,

ORCID:0000-0002-7491-8709

Özet: İktisadi bir ürün veya hizmetin piyasadaki değişim değerini veya maliyetini yansıttığı kabul edilen ve tüm paydaşların adaletili bulunduğu fiyat, adil fiyat olarak kabul edilir. Diğer bir bakışla adil fiyat, iktisadi mal veya hizmetlerin, arz ve talep koşullarına uygun olarak belirlenen bir fiyattan el değiştirmesidir. Subjektif bir kavram olan adil fiyatın piyasa ekonomilerinde oluşması, farklı farklı insan, olay, durum, zaman, ilişkiler gibi değişkenler ve piyasa koşulları; tüketici talepleri; girdi maliyetleri gibi birçok faktörü içerdığı için genel olarak karmaşık bir süreçtir. Bu süreçte etkili olan mikro ve makroekonomik, sosyal ve etik faktörler aşağıdaki gibi özetlenebilir:

- Firma Maliyetleri: Bir mal veya hizmetin fiyatını belirlerken kullanılan üretim faktörlerinin maliyetleri, mal veya hizmetin fiyatını doğrudan etkiler.

- Arz ve Talep Koşulları - Tüketici Tercihleri: Üretim maliyetleri yanında piyasadaki arz ve talep koşulları, tüketici tercihleri de mal ve hizmetlerin fiyatlarının belirlenmesinde önemlidir. Kısaca ifade etmek gerekirse mal veya hizmetin talebi yüksek (düşük) ve arzı düşük (fazla) ise fiyatları genellikle yüksektir (düşüktür).

- Çevresel Etkiler - Sosyal ve Etik Faktörler: Günümüzdeki döngüsel ekonomi yaklaşımı nedeniyle mal ve hizmetlerin üretilme sürecindeki çevresel etkilerin azaltılması ve etkilerinin fiyatlandırmaya yansıtılması giderek daha fazla önem kazanmaktadır. Çevresel maliyetlerin veya faydaların hesaba katılması, tüm paydaşlara yansıtılması toplumsal ve etik değerler açısından da, adil bir fiyatın belirlenmesinde önemlidir.

- Kamu Düzenlemeleri - Pazar Gücü ve Rekabet: Kamu, belirli sektörleri, üretici ve tüketicileri korumak amacıyla fiyat kontrolünü sağlamak için asgari ücret, tavan-taban fiyat, vergiler gibi düzenlemeler ile fiyatların oluşumunu etkileyebilir. Aynı şekilde piyasa koşulları, firmaların veya sektörün pazar gücü, rekabet seviyesi fiyatların belirlenmesinde önemli bir faktördür. Doğal olarak firmalar arasındaki rekabet genellikle fiyatları düşürür.

Tüketicilerin lehine olan bu durumun yani ekonomide adil fiyatların oluşumu ve rekabetin sağlıklı bir şekilde işlemesi birbirine bağlı bir süreçtir. Bu süreçlerin her bir aşamasında haksız rekabetin yaşanmaması gibi durumları düzenleyen ve denetleyen Rekabet Kurumu'nun adil fiyat oluşumu konusundaki önemi bu nitel çalışmanın konusunu oluşturmaktadır.

Anahtar Kelimeler: Adil Fiyat, Rekabet, Düzenleyici ve Denetleyici Kurumlar, Rekabet Kurumu, İş Ahlakı

1. GİRİŞ

Bir iktisadi sistemde yer alan bireysel ve tüzel girişimcilerin, üretim faktörlerini bir araya getirerek ürettiği mal ve hizmetlerin bedellerinin değerlendirilmesi, satılacak fiyatlarının belirlenmesi sürecinde birçok faktör etkilidir. Bu faktörler, piyasa koşulları, girdi maliyetleri, tüketici talepleri başta olmak üzere çeşitli etmenlere bağlı olarak değişebilir. Ancak değişimde kullanılacak bedelin adil bir fiyat olması beklenir.

Adil fiyat kavramı, iktisadi mal ve hizmetlerin işlem gördüğü piyasalarda uygun bir şekilde değerlendirilmesini ve satılmasını ifade eder. Diğer bir bakışla, piyasadaki değişim değerini veya maliyeti yansıttığı kabul edilen ve tüm paydaşların adaletili bulunduğu adil fiyat; iktisadi mal ve hizmetlerin, arz ve talep koşullarına uygun olarak belirlenen bir fiyattan el değiştirmesine imkân vermelidir. Zira ekonomik sistemin etkin işleyişinin bir sonucu olarak piyasalarda adil fiyatların oluşması, birçok avantajı beraberinde getirir. Adil fiyat oluşumunun avantajları şu şekilde özetlenebilir:

- Tüketicilerin mal ve hizmetler için adil bir bedel ödemesi sayesinde alım gücü artarak, gelir dağılımında adaletin sağlanması, sosyal adalete katkı verilmesi, refahının korunması veya artması mümkündür.

- Adil fiyatların oluşumu, üretim ve tüketim kararlarını şekillendirerek kaynakların etkin kullanılması ve daha uygun bir şekilde dağıtılmasına yardımcı olarak şirketlerin ve tüketicilerin daha iyi kararlar almasına hizmet eder. Bu işletmelerin daha fazla ürün üretmeleri ve tüketicilerin daha iyi kararlar almaları için teşvik edici olabilir.

- Adil fiyatların olduğu bir sistemde, aşırı fiyat dalgalanmaları ve spekülasyonlar önleneyeği için süreklilik kazanan piyasa istikrarı, ekonomik krizlerin riskini, etkisini azalabilir.

Tüketicilerin lehine olan bu durumun yani ekonomide adil fiyatların oluşumu ve rekabetin sağlıklı bir şekilde işlemesi birbirine bağlı bir süreçtir. Bu süreçlerin her bir aşamasında haksız rekabetin yaşanmaması gibi durumları düzenleyen ve denetleyen Rekabet Kurumu'nun adil fiyat oluşumu konusundaki önemi bu nitel çalışmanın konusunu oluşturmaktadır.

Çalışma, adil fiyatın oluşumunu etkileyen mikro ve makro ölçekteki temel faktörler ile başlamaktadır. Sonraki kısımda bu faktörlerin önlenbilmesinde, piyasaların düzenlenmesi ve denetlenmesinde kapsayıcı kurumlar olarak bağımsız düzenleyici ve denetleyici kurumların, özelde de rekabet kurumunun önemi, sonuç kısmında da öneriler verilerek çalışma bitirilmektedir.

2. ADİL FİYATIN OLUŞUMUNU ETKİLEYEN TEMEL FAKTÖRLER

Piyasalarda adil fiyatlar, arz ve talep koşulları, dış ticaret imkânları, kamu politikaları, iklim koşulları, teknolojik ilerlemeler gibi faktörlerden etkilenir. Hem üreticilerin hem de tüketicilerin refahını etkileyecek adil fiyatların oluşması ve sürekliliği, ekonomik ve sosyal dengelerin kurulması için önemlidir. Fakat üretici ve tüketici boyutundaki farklı tarafların çıkarlarına göre değişebilen, subjektif bir kavram olan adil fiyatın piyasa ekonomilerinde oluşması, farklı insan, olay, durum, zaman, ilişkiler gibi değişkenler ve pazar koşulları; tüketici talepleri; girdi maliyetleri gibi birçok faktörü içerdiği için genel olarak karmaşık bir süreçtir. Bu süreçte etkili olan mikro ve makroekonomik, sosyal ve etik faktörler aşağıdaki gibi özetlenebilir:

2.1. Üretim Maliyetleri

Bir mal ve hizmetin fiyatı belirlenirken kullanılan üretim faktörlerinin maliyetleri, onların fiyatını doğrudan etkiler. Kısacası üretim maliyetleri arttığında veya azaldığında fiyatlar da buna göre ayarlanacaktır. Üretim maliyetlerini etkileyen en önemli faktörlerden biri enerji ve ham madde fiyatlarıdır. Bu faktörlerde dışa bağlı ekonomilerde adil fiyatın oluşumu zordur. Bu zorluğu gidermek, yeşil ekonomik faaliyetlere yönlendirebilmek için enerji verimliliğinin artırılması ve enerji kaynaklarının çeşitlendirilmesi teşvik edilerek, ham madde arzı ve fiyatları üzerindeki olumsuz etkileri azaltmak mümkündür.

2.2. Arz ve Talep Koşulları - Tüketici Tercihleri

İktisadi mal ve hizmetlerin, girdi maliyetleri yanında piyasadaki arz ve talep koşulları, tüketici tercihleri de mal ve hizmetlerin fiyatlarının belirlenmesinde önemlidir. Fiyatlar genellikle arz ve talep dengesi, şirketlerin maliyetleri, rekabet, tüketici tercihleri, piyasa koşulları gibi faktörden etkilenir. Tüketici tercihleri ve piyasa koşulları nedeniyle mal veya hizmetlerin talebi yüksek (düşük) ve arzı düşük (fazla) ise fiyatları genellikle yüksektir (düşüktür). Adil fiyatın oluşumunda, fiyatların değişim yönünde, ekonomideki konjonktürel hareketler de önemlidir.

2.3. Çevresel Etkiler - Sosyal ve Etik Faktörler

Günümüzdeki iklim değişikliği, küresel ısınma nedeniyle doğrusal ekonomiden döngüsel ekonomiye geçiş yaklaşımı sonucu mal ve hizmetlerin üretilmesi sürecindeki çevresel etkilerin azaltılması ve olumsuzluklarının fiyatlandırmaya yansıtılması giderek daha fazla önem kazanmaktadır. Çevresel maliyetlerin veya faydaların hesaba katılması, tüm paydaşlara yansıtılması toplumsal ve etik değerler açısından da, adil bir fiyatın belirlenmesinde önemlidir. Ancak toplumun sosyal dokusunun, etik normlarının veya ahlaki standartlarının zayıflaması iş ahlakını da olumsuz etkilediği için adil fiyat oluşması zordur. Bu zorlukların aşılması için kamusal düzenlemeler gerekmektedir. Bu başlığa geçmeden önce iş hayatındaki ilişkiler üzerindeki etkisi ve önemi nedeniyle ahlak, etik, iş ahlakı gibi temel kavramlar şöyle özetlenebilir:

2.3.1. Ahlak ve Etik

Birbirlerinin yerine kullanılan ahlak ve etik kavramları her ne kadar aynı kökten türemiş olsa da farklı anlamlara sahiptir. İnsan ilişkilerinde “iyi” ya da “doğru” veya “kötü” ya da “yanlış” olarak adlandırılan değer yargılarının (Aktan, 2009: 38) genel olarak iyiye yönelen davranış kuralları bütünü olarak tanımlanan ahlak kavramının iki anlamı vardır. Bunlardan ilki belirli bir insan topluluğunda bu insanların birbirleriyle ilişkilerini düzenleyen eylem modellerini ya da kurallarını ifade ederken, ikincisi ise bu kurallara uymanın insan açısından bir kişilik özelliği olduğunu yansıtmaktadır. Kısaca ahlak bireylerin tutum ve davranışlarını ifade etmek için kullanılmaktadır. Buna karşılık etik kelimesi ise töre, gelenek, görenek gibi anlamlar taşıması yanı sıra, toplumun sahip olduğu

gelenek, görenek, değer yargılarını olduğu gibi benimseyip sorgulayarak, eleştirerek içselleştirme ve benimseyerek kişiliğin bir özelliği haline getirmek anlamına gelmektedir.

Etik, toplum tarafından insan eylemlerine ilâştirilen ahlaki değerler olarak görülebileceği gibi insani amaçlara hizmet ettikleri için kodlar veya bir kontrol sistemi olarak da görülebilirler. Genellikle, etik standartlar yasalarla belirlenir; ancak etik davranış bundan daha fazlasıdır ve devlet düzenlemeleri ile yasalarının ötesine geçer. Dolayısıyla ahlak davranışlara, etik ise usul veya biçim ya da ilkelere odaklanmaktadır. Müftüoğlu'na göre (2001:147) piyasa etiği, bu piyasalarda oynayan teşebbüsleri, kişileri bir yerde ehlileştiren, terbiye eden, hatta bir yerde melekleştiren bir fonksiyona sahiptir. Şayet etik çok iyi sağlanırsa, hukuki kurallara çok fazla gerek kalmayacaktır. Dolayısıyla özgürlüğe daha fazla imkân sağlanacaktır. Halbuki etik kalkarsa, bir ahlaki dejenerasyon ortaya çıkarsa kuralcılığa fazla önem vermek gerekecektir ki bu da piyasa ekonomisinin dominant, birincil derecedeki başarı şartı olan özgürlüğü ortadan kaldıracak, onun yaratıcılık kabiliyetini aşağı seviyelere doğru indirecektir.

2.3.2. İş ahlakı

Ahlak insanların toplumda nasıl davranmaları gerektiği konusuna ilişkin ölçütler koymaktadır. Ahlak aynı zamanda insanlara bir sorumluluk bilinci de yüklemektedir. Toplumdaki değer yargıları ışığında ahlak insanlara bir rol biçmekte; neyin iyi neyin kötü, hangi davranışların erdemli hangi davranışların erdemsiz olduğu da toplumdaki değerlerin bileşimi sonucunda ortaya çıkmaktadır (Sakal ve Kitapçı, 2009: 33).

Toplumdaki değerler bileşiminin yansıması olan iş ahlakı, tüketiciler ve şirketler ile çeşitli piyasa katılımcıları arasında belirli bir temel düzeyde güvenin var olmasını sağlar. Bu bağlamda iş ahlakı terimi, bir firmanın davranışına rehberlik eden ahlaki ilkeler kümesini ifade eder. Bu ilkeler, devlet ve diğer şirketlerle etkileşimi, çalışanlarına davranışı ve müşterileriyle ilişkiler dahil olmak üzere firma faaliyetlerinin her yönünü kapsamaktadır. Özetle iş ahlakı veya işin ahlaki davranışını yöneten ilkeler veya standartlar kümesini ifade eden iş etiği, yasal kurallarla sınırlı değildir; şirketlerin faaliyet gösterdiği topluluklardaki kültür ve uyulması gereken kuralları da içermektedir. Çalışanlarına adil davranmak, müşterilerden adil fiyatlar talep etmek, kaliteli mal ve hizmetler sağlamak konumuz kapsamında iş ahlakına verilebilecek bazı örneklerdir. İş ahlakını içselleştirmiş firmalar uzun dönemdeki kazançlarını İlhan (2005: 58) şöyle özetlemektedir: Örgütsel yapılarını iş ahlaki normlarına dayandıran işletmelerin güvenilirlik düzeyleri yükselmekte, kurumsallaşmaları kısa zamanda gerçekleşmekte, ürünlerinin tercih potansiyeli yükselmekte, geniş ve sürekli bir müşteri tabanı bulabilmekte ve sonuç olarak yüksek bir rekabet gücüne kavuşabilmektedirler.

2.3.2.1. İş Ahlakı Türleri

Genel olarak iş ahlakı; bütün ekonomik faaliyetlerde dürüstlük, güven, saygı ve hakça davranmayı ilke edinmek ve çevreyle temas halinde bulunurken aynı çevreyi paylaşan topluma destek olmaktır (Özgener, 2020: 57). Türkiye gibi gelişmekte olan ülkelerde hükümetler ve yöneticiler, iş normlarını ve ahlaki değerleri uygulamaya yansıtmak için öncü rolü oynamalıdır. Yöneticiler, özellikle üst düzey yöneticiler, kurumsallaşan iş ahlakı sayesinde ahlaki karar vermeyi teşvik edecek ve destekleyecek bir örgütsel ortamı yaratmak için birinci derecede sorumluluğa sahiptirler. Neticede iş ahlakının kurumsallaşmasıyla, ahlaki kavramların veya kuralların günlük eylemlere uygulanması ve entegrasyonu ifade edilmektedir (Özgener, 2020: 152).

Subjektif bir kavram olan piyasalarda adil fiyatların oluşumunu etkileyen temel faktörlerin, davranış şekillerinin iş ahlakı tarafından firmalarda oluşumu için verilebilecek iş ahlakı türleri ki; firmaların topluma ve dünyaya karşı sorumluluğunu ifade eden, kurumsal yönetim ilkeleri içinde de yer alan bazı yaklaşımlar şöyle özetlenebilir:

- Kurumsal sosyal sorumluluk: Firmaların, faaliyetlerini yürütürken çevre, toplum gibi paydaşlar üzerindeki etkileri hesaba katmayı ifade eden bir kavramdır. Uzun dönemde kurumsal yönetim anlayışının ve etik uygulamaların firmaların finansal performansını artıracığı beklentisi yaygınlaşmaktadır.

- Şeffaflık ve Güvenilirlik: Şirketlerin mali performanslarını şeffaf bir şekilde raporlamaları gerekmektedir. Bu sadece gerekli finansal raporlar için değil yatırımcılar ve müşteriler için önemli olan tüm olaylar, iyi ya da kötü haberler için de geçerlidir. Bu raporların, yalnızca düzenleyicilere sunulanları değil aynı zamanda kararların nasıl ve neden alındığını, hedeflere ulaşıp ulaşılmadığını ve performansı etkileyen tüm faktörleri ana hatlarıyla içeren entegre raporlama anlayışı da gittikçe yaygınlaşmaktadır.

- Adalet/Tarafsızlık: Firmaların, çalışanlarının tüm hakları için ırk, din, inanç, yaş veya kimliğe bakılmaksızın kapsayıcı, adil olması beklenir.

- Teknolojik Uygulamalar ve Etik: Özellikle teknoloji ve dijitalleşmenin yaygınlaşması ile günümüzde kişisel verilerin korunması konusu, kişiler, kurumlar için önemli olmaya başlamıştır. Bu bağlamda, firmaların topladıkları müşteri bilgilerini, iş ahlakı çerçevesinde kullanılmasını sağlaması; bilgilerin güvenli bir şekilde saklanması gerekmektedir.

- Sosyal ve Çevresel Sorumluluk: Kurumsal sosyal ve çevresel sorumluluk kapsamında firmaların faaliyetleri, toplum pahasına olmamalıdır. Kısacası firmalar, çevreyi korumaya, sosyal amaçlara ve farkındalığı yaymaya yönelik uygulamaları benimsemelidirler.

2.4. İktisadi ve Politik Konjonktürel Dalgalanmalar

Bir ülke ekonomisinin temel makroekonomik göstergelerinde (üretim, yatırım, istihdam, fiyatlar genel seviyesi vs.) belirli bir zaman diliminde ortaya çıkan iniş ve çıkış hareketlerine “konjonktürel dalgalanmalar” (business cycles) adı verilmektedir. Piyasa ekonomisinin tabii işleyişinde ortaya çıkan iniş ve çıkışların gerisinde muhtelif nedenler bulunmaktadır. Bunların bir kısmı en azından önceden bilinen ve/veya tahmin edilebilen mevsimsel dalgalanmalardır. Diğerleri ise önceden tahmin edilemeyen ve öngörülemeyen iklim koşulları (kuraklık, aşırı yağış, sel, don), savaş, yangın, deprem gibi nedenlere dayalıdır. Gerek “mevsimsel dalgalanmalar”, gerekse “düzensiz tesadüfi dalgalanmalar” temel makroekonomik göstergelerde (üretim, tüketim, tasarruf, yatırım, istihdam, fiyatlar genel seviyesi, faiz oranı, döviz kuru vs.) aşağıya ya da yukarıya doğru yumuşak ya da sert iniş ve çıkışlara neden olabilir (Aktan ve Güdenoğlu, 2023: 38).

Konjonktürel dalgalanmalar ve iş evrimi, birbiri yerine kullanılan kavramlardır. Ancak bu iki kavramın birbirinin tam ikamesi olmadığını belirtmek gerekir. Konjonktür bir an veya süreçtir. Sadece iktisadi değil, siyasi ve politik olaylarla ilgili olarak kullanılmaktadır. İş evrimi ise ekonomide kesinti göstermeksizin yenilenen olaylar dizisi için kullanılmaktadır. Ülkemizde konjonktürel dalgalanma iş evrimi kavramına karşılık kullanılmıştır (Parasız ve Bildirici, 2006: 7).

Konjonktürel dalgalanmaların ya da başka bir ifadeyle konjonktür hareketlerinin muhtelif aşamaları söz konusudur. İktisadi konjonktürel dalgalanmalar nedenlerine bağlı olarak muhtelif evrelere dönüşerek ortaya çıkar, ilerler ve sonra zaman içerisinde bir dengeye kavuşmuş olur. Literatürde konjonktürel evreler genel olarak dört aşamada ele alınarak incelenir. Bu aşamalar; Genişleme aşaması (Canlanma + Toparlanma + İyileşme); Zirve aşaması; Daralma aşaması (Resesyon + Stagnasyon) ve Dip aşamalarıdır. Bu dört aşamanın her biri ayrı bir konjonktürel devreyi oluşturur (Aktan ve Güdenoğlu, 2023: 38). Bu evrelerin genel fiyatlar düzeyine etkilerini şöyle özetleyebiliriz:

Evrelerden genişleme aşamasında genelde ekonomik büyümeyle birlikte arzda ve istihdamda artış görülür. Sonrasındaki zirve aşamasında olumlu süreç devam ettiği için üretim faktörlerine olan talepteki artışla birlikte genelde gelişmekte olan ekonomilerde daha yüksek oranlarda enflasyonist süreç kaçınılmazdır. “Literatürde enflasyonun nedenlerini ve etkilerini dikkate alan farklı tanımlamalar da vardır. Bunlardan biri, enflasyonun çok para ile az mal alınabildiği toplam talep fazlası durumu tanımlarken, bir başka tanım ise enflasyonun, toplam ya da kişi başına para stokunda ya da parasal gelirdeki artış olduğu biçimindedir. Bu tanımların her ikisi de enflasyonun nedenini göz önüne almaktadır. İlk tanıma göre enflasyon mal piyasasındaki taleple ilişkili iken, ikinci tanımda para arzındaki değişimin sonucu olarak açıklanmaktadır” (Yıldırım, 2001:319).

Daralma aşamasında ise temelde arzın talepten fazla artmasıyla birlikte durağan veya yatay bir trend görülür, sürecin uzun sürmesi resesyona sebep olabilir. Resesyon tanımında literatürde genel kabul görmüş bir kavram olmamasına rağmen yaygın tanımlardan biri ekonomideki aktivitelerde önemli bir yavaşlama ya da daralma görüldüğü durum olarak açıklanmaktadır. Ekonomik aktivitelerde yavaşlama; GSYH büyüme rakamları, sanayi üretimi, işsizlik rakamları, reel gelir gibi makro değişkenlerle ölçülür. Genel kabul gören kavram reel GSYH da en az iki dönem ardışık negatif ekonomik büyüme görülürse ekonominin resesyonda olduğu yönündedir (Vanlı, 2016: 211).

Son aşamada makro göstergelerde yaşanan olumsuzluk, azalan talep nedeniyle enflasyonun tam tersi olan deflasyon yani genel fiyat düzeyinde uzun süreli düşüşler yaşanmaktadır. Özetle bu evrelerin fiyatlara yansımaları yaşanan enflasyonun ve deflasyonun ekonomi üzerinde olumsuz sonuçları olmaktadır. Ekonomide istikrar ile görülen “fiyat istikrarı, ekonominin parasal dengesinin belli bir fiyat düzeyinde sabitleştiği durumu ifade etmektedir. Fiyatların belli bir düzeyin altında veya üstündeki devamlı ve hızlı değişimleri enflasyon ve deflasyonun varlığını gösterirken fiyatların istikrarlı olmadığını göstermektedir (Akdiş, 2001: 280).

Fiyat istikrarı ise enflasyon veya deflasyonun olmadığı bir ekonomide, ekonominin parasal dengesinin belli bir fiyat düzeyinde sabitlendiği durumu ifade etmektedir. Fiyat istikrarının olduğu bir ekonomik yapıda paranın

değeri korunduğundan, yatırım, tüketim ve tasarruf gibi kararların alınmasındaki belirsizlikler ve alınan riskler daha düşük olmaktadır.

Piyasa ekonomilerinde görünen ve etkileri özetlenen iktisadi konjonktürel dalgalanmalar dışında; ayrıca devletin iktisadi hayata doğrudan müdahale etmesi neticesinde ortaya çıkan politik konjonktürel dalgalanmalar da makroekonomik temel göstergelerde pek çok olumsuz etkiye sebep olur. “Politik konjonktür hareketleri teorisinin temellerinin esasen kamu tercihi teorisine dayalı olduğunu söyleyebiliriz. Kamu tercihi alanında araştırma politik iktisatçıları siyasetçilerin “oy maksimizasyonu”, bürokratların “bütçe maksimizasyonu”, çıkar ve baskı gruplarının “rant maksimizasyonu” ve seçmenlerin de “fayda maksimizasyonu” yönündeki tercih ve eğilimlerinin politik konjonktür hareketlerinin doğuşunda ve yaygınlaşmasında etkili olduğu görüşünü savunmaktadırlar. Her ne kadar seçim ekonomisine dönük partizan iktisat politikalarını uygulama kararını alan siyasi iktidarlar olsa da siyasi iradeyi bu yönde teşvik eden ve destekleyen sivil irade (seçmen iradesi) analizin dışında tutulmamalıdır (Aktan ve Güdenoğlu, 2023: 59).

Piyasa ekonomilerinde ortaya çıkan iktisadi ve politik konjonktür hareketlerinin sebep olduğu adil fiyatların oluşmamasının, haksız rekabetin önlenmesi gibi sorunlara karşı konumuz olan bağımsız düzenleyici ve denetleyici kurumlardan Rekabet Kurumu ve diğerlerinin, piyasaları düzenleme ve denetlemeleri, hem piyasaların hem de siyasi iktidarların uygulayacakları popülist ekonomi politikalarının olumsuzluklarını azaltabilecektir.

2.5. Kamu Düzenlemeleri - Pazar Gücü ve Rekabet

Serbest piyasa ekonomisinin esası, iktisadi ajanların faaliyetleri ile ilgili olarak kendi kararlarını verebilmeleridir. İşgücü, veri ücret seviyesinde çalışma saatlerinin miktarı, tüketiciler, veri bütçe kısıtları altında tüketim miktarı, üreticiler de yatırım, üretim ve arz miktarı ile fiyatı konusunda bireysel kararlar verirler. Diğer taraftan, hükümetler piyasa aktörlerinin kararlarını da etkileyebilecek vergi oranları, savunma harcamaları ve para politikaları gibi genel konularda karar alıp, uygulamaktadır. Hükümetlerin bu tür kararları iktisadi ajanların hem refahlarını hem de davranış biçimlerini etkilemektedir (Emek, 2002: 58). Aynı şekilde piyasa koşulları, firmaların veya sektörün pazar gücü, rekabet seviyesi, davranış biçimlerinin etkilenmesinde önemli bir faktördür. Özellikle ihracata yönelik çalışan firmaların da, dış pazarlarda kızışan rekabet ortamında fiyatlama stratejileri konusu önemli olmaya başlamıştır.

Bu bağlamda ülkeler, ilgili ulusal ve uluslararası sektör temsilcisi sivil toplum örgütleri arasında işbirliği gittikçe önemli olmaya başlamıştır. Örneğin Aktaş Çimen ve Kösekaşyaoğlu (2023: 2193) çalışmasına göre: Türkiye ve BRICS'in AB ortak pazarındaki yüksek ihracat benzerlik endeksi, ihraç edilen ürün gruplarında şiddetli rekabete neden olacağından ürünlerinde Türkiye ile BRICS arasındaki ticari işbirliğinin güçlendirilmesi ve ikili ticari anlaşmazlıklarda çatışmayı azaltacak uzlaşmacı bir yaklaşım sergilenmesi daha faydalı olacaktır. Ayrıca, Türkiye ve BRICS arasında uygun bir rekabet ilişkisi, iki ülkenin endüstriyel yapısının ve teknolojik ilerlemesinin gelişmesini de teşvik edebilir. Küresel salgın sırasında özellikle Çin'de yaşanan tedarik zinciri ve tedarik güvenliği sorunları nedeniyle, Türkiye'nin AB pazarına coğrafi yakınlığı Türkiye lehine önemli bir avantaj sağlayabilir. Türkiye'nin AB'ye tam üyeliği beklendiği gibi gelişme de AB ile üyelik müzakerelerinden uzaklaşmamasının Türkiye'nin lehine olacağı düşünülmektedir.

Doğal olarak bu ilişkiler ve firmalar arasındaki yapıcı rekabet genellikle adil fiyat oluşumunu destekler. Fiyatların düşüşü ve/veya piyasalarda adil fiyatın oluşması için Adam Smith tarafından ifade edilen “laissez faire, laissez passer - bırakınız yapınlar bırakınız geçsinler” felsefesi de erdemli insanların olduğu bir durum için söylenmiştir. Etik değerleri anlamadaki eksiklikler nedeniyle ortaya çıkan sorunları çözebilmek için kamusal düzenlemeler ve denetlemeler sonrasında caydırıcı yaptırımlara ihtiyaç vardır. Kısacası hayatın her anında ve piyasalardaki erdemsizlik, haksız rekabet uygulamaları çözülemediği durumlarda uluslararası kurumların hakemliği önemlidir. Yerelde de uluslararası standartlar, sistemler kurulmalı ve işletilmeli. Bu kapsamda konumuzdaki bağımsız düzenleyici ve denetleyici kurumlardan Rekabet Kurumu önemlidir.

3. ADİL FİYATIN OLUŞMASINDA REKABET KURUMUNUN ÖNEMİ

Adil fiyatların oluşumunda yukarıda özetlenen ve öneminden bahsedilen iş ahlakı türlerinin tüm firmalarda içselleşmesini, kurumsallaşmanın gerçekleşmesini beklemek her geçen gün zorlaşmaktadır. Sistemde iş ahlakının erozyona uğradığı, sosyal baskıların olmadığı yapılarda bunların benimsenmesini, birey ve kurumlarda var olmasını beklemek zordur. Dolayısıyla mikro ve makro ölçekte kapsayıcı sistem ve yapıların kurulması ve işletilmesi gerekir. Çünkü böylesi yapıların ve iş ahlakının olmadığı yerde cezalar da caydırıcı değilse piyasalarda adil fiyatın oluşumu gibi beklentilerin gerçekleşmesi imkânsızdır. Özellikle yüksek enflasyonun neden olduğu

belirsizlik, toplumdaki sosyal ve siyasi ilişkilerde çıkarıcı ve ahlaki olmayan davranışların artmasına neden olacaktır. İktisadi birimlerin, enflasyonist ortamda kendi çıkarlarını, toplumun çıkarlarının üstünde tutmaları, enflasyonun ahlaki bir boyutu olduğunu da göstermektedir.

Enflasyonun işletmeler üzerindeki olumsuz etkileri sonucunda, karlarını korumak, varlıklarını devam ettirmek gibi nedenlerle iş ahlakına uymayan davranışlarının artması söz konusudur. Amacı karını artırmak olan işletmelerin, enflasyonist ortamda maliyetlerinde meydana gelen yükselişi fiyatlarını artırarak tüketicilere yansıtmaları bir noktaya kadar kabul edilebilir. Ancak şirketlerin büyük bir kısmının enflasyonu, fiyatları yükseltmek için bir bahane olarak görmesi, dolayısıyla tüketiciye sunması gereken adil fiyatın üzerinde bir fiyattan mal ve hizmetleri sunmaları yaygınlaşmaktadır.

Fiyatların yükseltilmesi dışında şirketler, iş ahlakına aykırı olarak ürünlerin boyutunu küçültmek ve gramajını azaltmak gibi uygulamalara gidebilirler. Ekonomist Pippa Malmgren tarafından shrinkflation (görünmeyen enflasyon) olarak adlandırılan bu uygulama, işletmeler tarafından kar marjlarını artırmak veya artan girdi maliyetleri sırasında kar marjlarını korumak için gizli bir taktik olarak kabul edilmektedir. Özellikle yükselen enflasyon dönemlerinde artan hammadde, işçilik, paketleme ve taşıma maliyetleri ile mücadele etmek için işletmelerin sıkça başvurdukları bir uygulamadır (Wood, 2022:3). Ayrıca, stoklamanın artması, kayıtdışı olarak yabancı işçi çalıştırmak, yanıltıcı reklamlar yapmak, malların kalitesini düşürmek gibi iş ahlakına aykırı davranışlar da artmaktadır.

3.1. Bağımsız Düzenleyici ve Denetleyici Kurumların Önemi

Mal ve hizmetlerin piyasa göstergesi fiyatlarının oluşumu dışında üretim süreçlerinde düzenin sağlanması; ekonomik istikrarın, adaletin, rekabetin, güvenliğin korunması gibi hedefleri gerçekleştirebilmek amacıyla bağımsız düzenleyici ve denetleyici kurumların önemi gittikçe artmaktadır. Çünkü son dönemlerde toplumun genel refah ve güvenliğini tehdit eden durumlar, çok hızlı bulaşıcılık etkisiyle, bireysel çabalarla yönetilemez hale gelmiştir. Bu yüzden piyasaların düzenlenmesi, ekonomik kalkınma, büyüme ve refahın sağlanması açısından hayati önem taşır. Bu süreçte kapsayıcı ve etkili düzenleyici kurumlar, piyasalarda rekabeti saylayarak haksız rekabeti önlemek, tüketicileri korumak, şeffaflığı artırmak ve yatırımcılara güven vermek gibi amaçlarla faaliyet gösterirler.

Şeffaflığın sağlanması yanında “piyasada güvenin pekiştirilmesi, adil bir işlem ortamının sağlanabilmesi ve dolayısıyla haksız rekabetin de önlenmesi için gerekli olan diğer bir husus da, kuralların tam anlamıyla herkese karşı zamanında ve eşit olarak uygulanmasıdır. Aksi hâlde herkes kendi kuralını kendi yazmaya, uygulamaya çalışacak, bu da düzensizliği ve belirsizliği ve riskleri artıracaktır. Böyle bir durumda rekabeti değil, haksız güç yaratılmasını, güçlü olanın daha da güçlenmesini, dolayısıyla da tekelleştirmeyi artıracaktır” (Dura, 2001: 136). Kısaca, piyasaların düzenlenmesi ve denetlenmesinde kapsayıcı kurumların önemi büyüktür. Rekabet Kurumu gibi bu amaçla faaliyet gösteren kurumlar, piyasalardaki rekabeti sağlamak, haksız rekabeti önlemek, tüketicileri korumak ve yatırımcılara güven vermek gibi ilgili taraflara yönelik önemli görevleri yerine getirirler. Bu kurumların etkinliği ve bağımsızlığı, Türkiye'nin ekonomik büyümesi ve gelişmesi için kritik bir rol oynamaktadır.

3.2. Piyasalarda Adil Fiyatın Oluşmasında Rekabet Kurumunun Önemi

Ülkenin ekonomik büyümesi ve gelişmesi için piyasalarda rekabetin sağlanması; üretim maliyetlerinin düşürülmesiyle kaynak kullanımında etkinliğin ve ürün çeşitliliğinin artırılması, tüketicilere daha iyi hizmetler sunulmasını sağlar. Ayrıca firmaların tekel durumlarının ve haksız rekabetin önlenmesi, adil bir piyasa ortamı oluşturulması yatırımcıların güvenliğini artırır. Bu amaçlara hizmet edebilmek için Türkiye Cumhuriyeti Anayasası'nın 167. maddesi şu cümle ile başlamaktadır: Devlet, para, kredi, sermaye, mal ve hizmet piyasalarının sağlıklı ve düzenli işlemlerini sağlayıcı ve geliştirici tedbirleri alır; piyasalarda fiili veya anlaşma sonucu doğacak tekelleşme ve kartelleşmeyi önler.

Bu olumsuzlukları önlemede, piyasaların düzenlenmesinde kullanılan (regülasyonlar) yöntemler şöyle özetlenebilir: “Teknik regülasyon, idari regülasyon ve iktisadi regülasyon şeklinde üçlü bir sınıflandırma yapılabilir. Teknik ve idari regülasyonlarda Rekabet Kurumu'nun herhangi bir görevi yoktur. Genellikle sektörel seviyedeki regülasyon kuruluşları da üçüncü gruba giren iktisadi regülasyon konusunda çalışmaktadırlar. Fakat teknik regülasyon ve idari regülasyona ilişkin olarak da yine sektörel seviyede regülasyon kurumları oluşturulabilir. İktisadi regülasyon olayında, rekabetin korunması ile ilgili regülasyon konusunda Rekabet Kurumu sorumludur ve 4054 sayılı Rekabetin Korunması Hakkındaki Kanun ve bilhassa Kanun'un 4, 6 ve 7'nci

maddeleri çerçevesinde rekabet ihlallerini önlemekle görevlidir. Diğer iktisadi regülasyon çeşitleri ise piyasaya giriş regülasyonu ve piyasadan çıkış regülasyonu, ekonomik parametrelerin regülasyonu şeklinde üç gruba ayrılabilir” (Müftüoğlu, 2001:148).

4054 Sayılı Kanun Madde 4 uyarınca rekabeti kısıtlayacak, engelleyecek veya bozacak anlaşma veya uyumlu eylemlerin hukuka aykırı ve yasak olduğu belirtilmiş ve sonrasında böyle kabul edilecek işlemler örnekleme yöntemiyle altı madde halinde sayılmıştır. Sayılmış olan bu anlaşmalar fiyat ve diğer koşulların tespit edilmesi ve piyasa dışında belirlenmesi, üretimin sınırlandırılması, pazarın paylaşılması, pazara girişlerin engellenmesi, ayrımcılık ve ek yükümlülük yüklemek şeklindedir. Bir teşebbüs tarafından bu hususlara aykırı davranılması halinde kanunun 4. maddesi ihlal edilmiş olacaktır (Aral, 2021: 84).

Bu yetkiler ile kapsayıcı kurumlar arasında önemli bir yere sahip olan Rekabet Kurumu, rekabet ortamını düzenlemek, teşvik etmek ve korumak göreviyle, piyasalarda adil fiyatların oluşmasında önemli bir rol oynamaktadır. 1994 yılında yasası yürürlüğe giren ve 2000 yılında da çıkarılan yeni yasa ile daha da güçlendirilen Rekabet Kurumu'nun bağımsızlığı artırılarak, haksız rekabetin önlenmesi ve rekabetin sağlanması konusunda daha etkili hale gelmiştir.

3.3. Bağımsız Düzenleyici ve Denetleyici Kurumların Başarısının Artırılmasında Temel Faktörler

Kayıt dışı faaliyetler, bireyler ve işletmeler arasında haksız rekabetin doğması, gelir dağılımının bozulması, kayıtlı çalışan mükelleflerin vergiye gönüllü uyumunun ve toplumdaki vergi bilincinin azalması, düşük teknoloji kullanımı, ölçek küçüklüğü, ürün standartlarının tutturulamaması gibi nedenler sanayinin gelişiminin önündeki en önemli engellerden birisidir (Baysal, 2011: 304). Böylesi olumsuzlukların sonucu olarak kısacası piyasalar, “katılımcıların yolsuzluk ya da rekabet karşıtı davranışlar içerisine girmesi halinde çöker. İşlem maliyetlerinin, teknolojik ve diğer parasal olmayan dışsalılıkların içselleştirilmesini engellemesi halinde de çöker. Ayrıca, eksik bilginin etik tehlikeler ve olumsuz seçimlere yol açması halinde de çöker (Rodrick, 2014: 41). Dolayısıyla sistemdeki dönüşümün sağlanabilmesi için temel koşullar Acemoğlu ve Robinson (2016: 407) göre, “mülkiyet haklarını hayata geçiren, eşit rekabet şartları sağlayan ve yeni teknoloji ve becerilere yatırım yapmayı teşvik eden kapsayıcı ekonomik kurumlar olmalıdır”.

Bağımsız düzenleyici ve denetleyici kurumların faaliyetlerinde kapsayıcılığın sağlanabilmesi için de uluslararası düzenlemeler ve standartlar kapsamında organize olmaları; bağımsızlık, hesap verebilirlik, şeffaflık kriterlerine göre faaliyetlerini siyaset üstü bir anlayışla yürütebilmeleri gerekir. Çünkü: Bireylerin, piyasalardaki alıcı ve satıcı rolleri, siyasi ortamda oy veren; vergi ödeyen; bürokrat veya kamu hizmetlerinden yararlanan; politikacı gibi statülere dönüştüğü için kişilik değişimleri de kaçınılmaz olabilir. Bu yüzden sistem, bireysel ahlaki değerlerin devreye girmeyeceğini varsayarak tedbiri elden bırakmadan; etik düzenlemeleri; bağımsız düzenleyici ve denetleyici yapıları kapsayıcı bir şekilde devreye almalıdır. Sakal ve Kitapçı (2009: 33) çalışmalarında bu gerekliliği şöyle ifade etmişlerdir: Tüm kamu kaynaklarını yönetmekle ve bunları adaletli bir şekilde tahsis etmekle görevlendirilen siyasetçilerin de ahlaka uygun davranmaları son derece önemlidir. Siyaset insanları mutlu kılma adına gerçekleştirilen en önemli araçlardan biridir. Siyasetin bir araç olarak görülmeyip bir amaç olarak görülmesi siyasal ahlakın dışına çıkmak demektir. Siyasal ahlak siyasetin temel yapı taşlarından birisidir. Siyasal ahlakın dışına çıkılması siyaseti de ahlaksız bir hale büründürmektedir.

Böylesi sorunların çözülebilmesi için “kamu gücünün sağladığı ayrıcalıkları kullanan tüm idareler gibi Bağımsız İdari Otoriteler de (BİO) eylem ve işlemlerinde kişilerin hakları ve menfaatlerini ihlal etmeden, açık-şeffaf, tüm taraflara eşit mesafeli, yasal, yansız, orantılı, eşit, mahremiyete saygı zemininde verimli ve etkin etkileşim ve eşgüdümüne azami özeni göstermek durumundadırlar. Dolayısıyla söz konusu BİO'ların esasen kamu kesiminin önemli bir parçası olmakla birlikte, diğer kamu kurum ve kuruluşları ile aralarında ahenkli bir işbirliği ve karşılıklı uyum içinde çalışmaları gerektiği vurgulanmak, kendilerine tevdi edilen görev ve yetki alanlarının sınırları, şüpheyi düşürmeyecek şekilde çok açık ve net bir biçimde tanımlanmalıdır” (Sarısu, 2011: 272).

Böylece bağımsız düzenleyici ve denetleyici kurumların, görev tanımlamalarının gereklerini zamanında, kapsayıcı bir şekilde yerine getirmeleri mümkün olabilir. Çünkü piyasa düzensizlikleri; asimetrik bilgi kaynakları; ters seçim; ahlaki tehlike gibi problemlere karşı uzun dönemli ve sürekli başarıların sağlanabilmesi için böylesi kurumsal yapılara ve hafızalarının dinç tutulmasına ihtiyaç vardır. Naqvi'ye (2019: 64) göre de, kamu politikasının ekonomik olan ve olmayan özgürlükler arasında ve ayrıca politik özgürlük ile gelir ve servetin eşit dağıtımı arasında denge kurmayı başarması için onun adil, doğru, tarafsız ve yerleşik çıkarlara hizmet etmiyor olarak görülmesi gereklidir. Yalnız o zaman kapsayıcı bir politik mutabakat inşa edilebilir ve kanunen eşitlikçi bir kamu politikası için kamu desteği kazanılabilir.

5. SONUÇ VE ÖNERİLER

Piyasa ekonomilerinde görülen iktisadi ve politik konjonktür hareketlerinin sebep olduğu adil fiyatların oluşmaması; haksız rekabetin yaşanması gibi sorunlar, bağımsız düzenleyici ve denetleyici kurumların, özelde de Rekabet Kurumu'nun, düzenleme ve denetleme faaliyetleri ile önlenilebilecektir.

Bağımsız düzenleyici ve denetleyici kurumların başarısının artırılabilmesi için çalışma alanlarında kapsayıcılığın sağlanabilmesi gerekir. Bunun için de temel kural, uluslararası düzenlemeler ve standartlar kapsamında organize olunması; birbirine benzeyen firmalar arasında homojenliğin sağlanması ve haksız rekabetin yaşanmaması için denetlenebilmesi gerekmektedir. Bu yaklaşım ve şeffaflık sonucunda, ekonomik faaliyetlerin temel kurumları olan firmaların tüm paydaşlarına iyi bir model olması sağlanabilecektir.

Makro ölçekte böyle bir yapının inşası, firmaların bu felsefeyi içselleştirecek bir bakışa sahip olmalarını teşvik edecek başta bağımsız düzenleyici ve denetleyici kurumlar ve diğer paydaşlar ile mümkün olacaktır. Çünkü üretim sürecinden tüketime kadarki her bir aşamada israfın önlenilebilmesini; doğal çevrenin korunabilmesini ve nihayetinde paylaşımda adaleti sağlayabilecek sürdürülebilir bir ekonomik sistem için gerekli temel kurumsal yapıların kapsayıcı bir şekilde organize edilebilmesi; çalışabilmeleri için de bağımsızlık, şeffaflık ve hesap verebilirlik niteliklerinin tatmin edici seviyede olması gerekir. Böylece Rekabet Kurumu da, görev tanımlamalarının gereklerini zamanında, kapsayıcı bir şekilde yerine getirebilecektir, hatta getirmelidir. Çünkü piyasa düzensizlikleri; asimetrik bilgi kaynakları; ters seçim; ahlaki tehlike gibi problemlere karşı uzun dönemli ve sürekli başarıların sağlanabilmesi için böylesi kurumsal yapılara ve hafızalarının dinç tutulmasına ihtiyaç vardır.

Bu olumsuzlukların önlenilebilmesi kapsamında Rekabet Kurumu'nun görevleri arasında olan kartellerin ve rekabeti kısıtlayıcı anlaşmaların tespiti, teşebbüs birleşmelerinin izlenmesi ve haksız fiyat uygulamalarının engellenmesi yer almaktadır. Bu engellemelerde Kurum, piyasadaki tüm oyunculara eşit bir şekilde davranır ve haksız rekabeti önlemek için çeşitli yasal düzenlemeler, ayrıca tüketicilerin korunması için de çalışmalar yapar. Rekabet Kurumu, düzenlemeler yaparak ve yasal süreçleri uygulayarak piyasanın etkinliğini artırmayı hedefler. Böylece piyasada sağlıklı bir rekabet ortamı oluşur ve tüketiciler en iyi ürün ve hizmetleri en uygun fiyatlarla satın alabilirler. Bunun için de uygulamada tespit ettiği aykırılıklara karşı caydırıcı olacak gerekli cezai işlemleri, yaptırımları uygulayarak piyasalarda etkinliği sağlamaya çalışır. Fakat son dönemlerde bilgi teknolojilerindeki gelişmeler sonucunda piyasa kavramı tanımının değişmesi, hem kurumun hem de durumların tespitini zorlaştırmaktadır. Dolayısıyla proaktif yaklaşım gösterilmesi gerekmektedir.

Sonuç olarak, ekonomik kalkınmanın ve tüketicilerin korunmasının sağlanması açısından düzenleme ve denetleme faaliyetleri, hem piyasa olumsuzluklarını hem de (yetkilerini tam olarak kullanmaları sağlanabilirse) siyasi iktidarların uygulayacakları popülist ekonomi politikalarının olumsuzluklarını azaltabilir.

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İş Dünyasının Beklentileri ile Üniversite Programlarının Karşılaştırılması: Yönetim Bilişim Sistemleri Örneği

Arş. Gör. Senem Hazel Başer¹

Prof. Dr. Hülya Bakırtas²

¹Aksaray Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, Yönetim Bilişim Sistemleri, senemhazelbaser@aksaray.edu.tr

²Aksaray Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, Yönetim Bilişim Sistemleri, hbakirtas@aksaray.edu.tr

Özet: Günümüzün hızla dijitalleşen iş dünyasında, Yönetim Bilişim Sistemleri (YBS) alanı, organizasyonların veri ve bilgi yönetimini desteklemek ve iş süreçlerini optimize etmek anlamında önemli bir rol oynamaktadır. YBS bölümü, işletme alanının yanı sıra bilişim alanına yönelik konuları içeren çok disiplinli bir programdır. Programın çok disiplinli yapıya sahip olması hem üniversitede verilen eğitim hem de sektördeki yeri konusunda alana ilişkin tartışmaların halen devam etmesine neden olmaktadır. Bu çalışma, YBS bölümünün üniversitelerde verilen eğitimi ile sektörde beklenen nitelikler arasındaki ilişkiyi incelemeyi amaçlamaktadır. Bu amaç doğrultusunda, mevcut eğitim programlarının iş dünyasının talepleriyle ne ölçüde uyumlu olduğu incelenmiştir. Bu kapsamda Türkiye’de YBS eğitimi veren üniversitelerin programlarına ilişkin internet ortamında belirttikleri program çıktıları ve kariyer olanakları bilgileriyle; bu alanda LinkedIn ve kariyer.net üzerinden yayınlanan iş ilanlarına ilişkin departman, ilan başlığı, konum, aranan nitelikler gibi bilgiler elde edilerek karşılaştırmalı bir analiz gerçekleştirilmiştir. İlgili analizler için metin madenciliği ve betimsel analiz kullanılmıştır. Sonuç olarak, alana ilişkin sektörün büyük kısmının İstanbul ilinde olduğu, bu alanda personel arayışında olan firmaların çoğunlukla dev, büyük ve orta ölçekli olduğu, ilgili pozisyonların yer aldığı departmanların büyük kısmının bilgi işlem ve satış/pazarlama departmanlarında yer aldığı görülmektedir. Ek olarak, üniversitelerin ve sektörün üzerinde yoğunlaştığı ortak konunun teknik beceriler olduğu, kurumsal kaynak planlama, iş zekası ve müşteri ilişkileri yönetimi gibi kurumsal modüllerin her iki tarafta da önemsendiği görülmektedir.

Anahtar Kelimeler: Yönetim bilişim sistemleri, iş ilanları, üniversite eğitimi, metin madenciliği.

Abstract: In today's rapidly digitizing business environment, the field of Management Information Systems (MIS) plays a significant role in supporting organizations' data and information management and optimizing business processes. The MIS domain encompasses a multidisciplinary program that includes subjects related to both business and information technology. The multidisciplinary nature of the program has led to ongoing debates regarding its positioning in terms of both the education provided at universities and its relevance within the industry. This study aims to examine the relationship between the education offered by MIS departments in universities and the expected qualifications in the industry. In pursuit of this objective, the extent to which existing educational programs align with the demands of the business world has been investigated. Within this scope, a comparative analysis has been conducted by extracting information from the program outputs and career opportunities provided by universities offering MIS education in Turkey, as stated on online platforms. Furthermore, information has been collected from job postings on platforms such as LinkedIn and kariyer.net, including department details, job titles, locations, and required qualifications, to facilitate the analysis. Text mining and descriptive analysis have been employed for the relevant analyses. The results indicate that a significant portion of the industry in this field is located in Istanbul, with most of the companies seeking personnel being large to medium-sized enterprises. The departments associated with the positions in question are predominantly found in information technology and sales/marketing departments. Additionally, a shared emphasis between universities and the industry is observed on technical skills, along with a focus on corporate modules such as enterprise resource planning, business intelligence, and customer relationship management on both sides.

Keywords: Management information systems, job advertisements, university education, text mining.

1. GİRİŞ

YBS, organizasyonların yönetim ve karar alma süreçlerini, teknoloji ve bilişim sistemlerinin etkin kullanımıyla desteklemeyi amaçlayan bir disiplindir. Bu alanda, kurumsal amaç ve hedeflere yönelik olarak veri ve bilgi toplama, işleme, depolama ve dağıtma işlevlerini yerine getiren bilgi sistemlerinin tasarımı, geliştirilmesi, uygulanması ve yönetimi öne çıkan işlemlerdir (Caldas, 2003). YBS eğitimi, genellikle teknik ve yönetsel derslerin bir bileşimini içerir. Öğrencilere, veri tabanı yönetimi, sistem analizi ve tasarımı, programlama, veri analitiği, proje yönetimi ve bilgi güvenliği gibi konular öğretilmektedir. Aynı zamanda, organizasyonlarda bilgi sistemlerinin stratejik kullanımını ve teknolojinin iş hedefleriyle uyumlu hale getirilmesini anlamaları teşvik edilmektedir (Caldas, 2003; Kroenke & Boyle, 2015). YBS'nin önemi, bir organizasyonun çeşitli seviyelerinde zamanında ve doğru bilgi sağlayarak karar alma süreçlerini destekleme anlamında ortaya çıkmaktadır. YBS, organizasyonların kaynakları etkili bir şekilde yönetmelerine, operasyonel verimliliği artırmalarına, karar alma süreçlerini optimize etmelerine ve pazarda rekabet üstünlüğü elde etmelerine yardımcı olmaktadır. Ayrıca, iş

süreçlerini kolaylaştırma, otomasyon sağlama ve farklı departmanlar ile paydaşlar arasındaki iletişimi ve işbirliğini geliştirme amaçlarını desteklemektedir (Caldas, 2003; İlham ve Yuniarti, 2022). YBS'nin uygulama alanları oldukça geniştir ve çeşitli endüstrilere ve sektörler yayılmıştır. Eğitimde öğrenci performansının ölçülmesi ve müfredat yönetiminin gerçekleştirilmesi (Purnamawati, Aryani, Tarjiah & Kurniawan, 2022); ticari kuruluşlarda karar verme süreçlerinin desteklenmesi ve operasyonel verimliliğin artırılması (Sari & Priantinah, 2019); üretim sürecinde envanter yönetiminin, kalite kontrolünün ve tedarik zinciri yönetiminin izlenmesine ve optimize edilmesi (Erasmus, Grefen, Vanderfeesten & Traganos, 2018) gibi konular, YBS'nin destekleyici rol oynayacağı alanlara örnek olarak verilebilir.

Ülkemizde YBS lisans eğitimi; ilk olarak 1995 yılında Boğaziçi Üniversitesinde verilmeye başlanmış olup, bugün 39 devlet ve 36 özel üniversite olmak üzere toplam 75 üniversitede ilgili bölüm bulunmaktadır (YÖK Atlas). Türkiye'deki farklı üniversiteler, yönetim bilişim sistemleri müfredatlarını teknik, analitik, iletişimsel ve yönetsel olarak düzenlemişlerdir (Uğur, Okursoy ve Turan, 2016). Amerika'da YBS lisans eğitimi veren 322 üniversite olduğu görülmektedir. (National Center for Education Statistics, 2023).

Bu araştırma, Türkiye'de YBS bölümü lisans eğitiminin program çıktıları ve kariyer olanaklarını ayrıntılı bir şekilde inceleyerek, YBS bölümü öğrencilerinin yetiştirildiği alanları belirlemeyi, alana ilişkin iş ilanlarını analiz ederek sektörün ihtiyaçlarını tanımlamayı amaçlamaktadır. Ayrıca, öğretilen ve aranan becerilerin bir karşılaştırılması yapılarak, bulgular literatür temelinde değerlendirilmektedir.

2. LİTERATÜR TARAMASI

YBS alanında eğitim almış bireylerin, bir organizasyon içindeki bilgi sistemlerini etkili bir şekilde idare edip kullanabilmek için bir dizi yetenek ve bilgiye sahip olmaları beklenmektedir. YBS uzmanları, kurumsal verilerin verimli bir biçimde depolanmasını, kullanılmasını ve paylaşılmasını sağlamada, kurumsal yönetimin standartlaştırılması ve modernizasyonuna katkı sağlamada önemli bir rol üstlenmektedir (Liu, 2021). YBS uzmanları, bilgi sistemleri kaynaklarının yönetiminden ve organizasyonun bilgi gereksinimlerinin karşılanmasından sorumludur. Bu, onların organizasyonun amaçlarını derinlemesine anlamalarını ve bilgi sistemlerini etkili bir şekilde yönetmek için gerekli teknik ve yönetsel yetilere sahip olmalarını gerektirmektedir. Ayrıca, güncel teknoloji trendlerine ayak uydurmalı ve becerilerini sürekli olarak geliştirmek için eğitim programlarına katılmalıdırlar (Davis & Woodward, 2006; Ligon, Abdullah & Talukder, 2007). Literatürde, YBS alanında verilen eğitim ve bu alanın sektördeki yerine ilişkin gerçekleştirilen bazı çalışmalar bulunmaktadır. Bunlardan biri Beyer (2008)'in çalışmasıdır. Beyer (2008), YBS alanındaki öğrenci dağılımını incelemiş ve işletme ile bilgisayar alanlarına yönelik yönelimi araştırmıştır. İşletme alanında YBS'de uzmanlaşmış öğrenciler ile YBS dışında uzmanlaşmış öğrencileri içeren 159 kişiye anket uygulamıştır. Bulgular, kız öğrencilerin erkek öğrencilere kıyasla YBS derslerine ve eğitmenlere daha olumlu bir tutuma sahip olduğunu göstermektedir. Ayrıca, kadın bilgisayar öğretmenlerinin kız öğrenciler için ilham kaynağı olduğu vurgulanmıştır. Litecky, Aken, Prabhakar & Arnett (2009), YBS alanındaki sektörel beceri taleplerini belirlemek amacıyla Amerika Birleşik Devletleri'nde yayınlanan iş ilanlarını incelemiştir. Çalışma, bilgisayar bilimi, bilgisayar bilgi sistemleri ve YBS gibi alanlarda toplam 218,000 iş ilanını analiz etmiştir. Araştırma, iş ilanlarının üç ana kategoriye ayrılan beceri taleplerini ortaya koymaktadır. Bunlar; işletme, sosyal ve genel teknik yetkinlikler. Elçi (2016), YBS öğrencilerinin önemsendiği beceri ve yetkinlikleri araştırmıştır. İlgili çalışma, öğrencilerin en çok önemsendiği 10 yetkinliği belirlemiştir. Uğur, Okursoy ve Turan (2016), YBS bölümü ders programlarının iletişimsel, yönetsel, analitik ve teknik yetkinlikleri nasıl kapsadığını incelemiştir. Bulgular, müfredat yapılarında teknik ve analitik yetkinliklere ağırlık verildiğini, iletişim yetkinliğinin ise göz ardı edildiğini ortaya koymaktadır. Vural ve Turan (2019), YBS bölümü mezunlarının istihdam edilebilmesi için gereken yetkinlikleri araştırmıştır. Çalışma, sosyal yetkinlik, yönetsel yetkinlik, temel teknik yetkinlik ve teknik yetkinliklerin önemini vurgulamış ve bu yetkinliklerin cinsiyet, deneyim ve mezuniyet düzeyine göre değiştiğini belirtmiştir. Henkoğlu ve Şerefoğlu (2019), YBS alanının diğer bilgi ve bilişim odaklı disiplinlerden nasıl farklı olduğunu incelemiştir. YBS'nin donanım, yazılım, organizasyon, insan ve prosedürleri dengeli bir şekilde içeren geniş bir alan olduğu çalışmada vurgulanmıştır. Aslay, Özen ve Çam (2021), işletmelerin YBS bölümü mezunlarından beklediği beceri ve yetkinlikleri araştırmıştır. İşletmelerin, analitik beceriler, iletişim yeteneği, temel bilgi seviyesi ve İngilizce dil bilgisi gibi yetkinliklere önem verdikleri belirtilmiştir. Aktaş, Aktaş, ve Akbıyık (2022), Türkiye işgücü piyasasında YBS bölümü mezunlarına yönelik iş ilanları üzerinden işveren beklentilerini analiz etmiştir. Bulgular, işverenlerin geliştirme metodolojileri bilgisi, sosyal beceriler, problem çözme yeteneği gibi yetkinlikleri önemsendiğini göstermektedir. Ayrıca, Türkiye ve ABD karşılaştırmasında bazı farklılıklar da ortaya çıkmıştır.

3. YÖNTEM

Çalışmada ülkemizde YBS bölümünün yer aldığı 75 üniversitenin program çıktıları, kariyer olanakları ve alana ilişkin iş ilanları incelenmiştir. İş ilanları, LinkedIn ve kariyer.net üzerinden elde edilmiştir. 349 Türkçe iş ilanı (LinkedIn: 49; kariyer.net: 200) 12-20 Nisan 2023 tarih aralığında toplanmıştır. Çalışma kapsamında gerçekleştirilen işlemler Şekil 1’de verilmiştir.

Şekil 1: Çalışmada Gerçekleştirilen İşlemler



Veri toplama aşamasında “yönetim bilişim sistemleri” anahtar kavramına yönelik listelenen iş ilanlarının uygunluğu nedeniyle LinkedIn ve kariyer.net platformları tercih edilmiştir. İlgili platformların erişilebilirliği doğrultusunda Python programlama dili kullanılarak yazılan veri çekme botu, veri setinin oluşturulması aşamasında kullanılmıştır. Geri kalan veriler manuel olarak elde edilmiştir. Örneğin, LinkedIn üzerinden tüm veriler veri çekme botu ile elde edilirken; kariyer.net platformu üzerinde ilanların niteliklerine ilişkin yer alan veriler, manuel olarak elde edilmiştir. Verilerin ön işleme aşamasında, n-gram analizlerinden elde edilen bulgularda anlam kaymasına yol açan ifadeler tespit edilerek temizlenmiştir. Noktalama işaretleri konusunda veri setinde geçen ve programlama dili gibi kategorilerin altında yer alan isimleri tamamlayan (örneğin, c#) ifadeler korunarak diğer işaretler manuel olarak temizlenmiştir. “Stopword”lerin temizlenmesi noktasında Orange programından destek alınmıştır.

Metin madenciliği, yapay zeka alanında bir teknik olarak kabul edilmekte olup, yapılandırılmamış metin verilerinden anlamlı ve yapılandırılmış bilgilerin elde edilmesi amacını taşıyan bir süreçtir. Bu süreç, doğal dil işleme (NLP) yöntemleri aracılığıyla metinleri analiz ederek, bu metinleri daha kolay analiz edilebilir ve yorumlanabilir bir formata dönüştürmeyi içerir (Yusop, Azmi & Azman, 2022). Metin madenciliğinin temel bileşenlerinden biri n-gram analizidir. N-gramlar, bir metin içinde belirli bir sayıda ögenin (çoğunlukla kelimelerin) ardışık dizileridir. N-gram analizi, metin koleksiyonundaki kelimelerin veya cümlelerin desenlerini,

ilişkilerini ve frekanslarını anlamak için bu ardışık dizilerin çıkarılması ve analiz edilmesi işlemini içerir (Mikolov, Sutskever, Chen, Corrado & Dean, 2013). N-gram analizi aynı zamanda metin sınıflandırma ve kümeleme gibi görevlerde de kullanılır. Belirli n-gramların varlığına dayalı olarak, belgeler arasındaki desenleri ve benzerlikleri belirlemeye yardımcı olur (Manning, Raghavan & Schütze, 2009). Bu kapsamda elde edilen verilerle, elde edilen sonuçların anlamlılığına göre bi-grams ve tri-grams analizleri gerçekleştirilmiştir. N-gram analizleri sonucunda elde edilen bulgular, kelime bulutlarıyla görselleştirilmiştir. Analizler, Orange programında gerçekleştirilmiştir.

Kod şemasına göre analiz aşamasında, araştırma kapsamında toplanan veriler Tablo 1'e göre kümelenmiştir. İlgili tablo, Aktaş, Baz Aktaş ve Akbıyık (2022)'in literatür incelemesi sonucu tasarladıkları bir şemadır. Elde edilen veriler, kod şeması kapsamında iş ilanlarının içerikleri ve üniversitelerin bölüme ilişkin tanımlarına göre incelenmiştir.

Tablo 1: Kod Şeması

Kategori	Kodlar	Anahtar Kelimeler
Organizasyonel Bilgi	Takım Çalışması	<ul style="list-style-type: none"> Takım Çalışması, Ekip Çalışması
	Sosyal	<ul style="list-style-type: none"> İletişim Becerisi İletişim Becerisi, Etkili İletişim, İletişim Koordinasyon, Güçlü İletişim
	Sorumluluk	<ul style="list-style-type: none"> Sorumluluk sahibi
	Yönetimsel	<ul style="list-style-type: none"> Liderlik Takım Liderliği, Yönetim Becerisi, Aksiyon planlamak, Takım Yönetimi, *** Yönetecek
	Proje Yönetimi	<ul style="list-style-type: none"> Agile, Scrum, Jira, Proje Yönetimi
	Organizasyon	<ul style="list-style-type: none"> Fonksiyonel Uzmanlık Süreç Yönetimi, Süreç Geliştirme, Süreç İyileştirmek, xx Süreçlerine Hâkim Süreç Analizi, İş Geliştirmek, Süreç Takibi,
	Sektörel Uzmanlık	<ul style="list-style-type: none"> *** Sektöründe, *** alanında tecrübe *** Tecrübe,
	Problem Çözme	<ul style="list-style-type: none"> Analitik Düşünme Analitik Düşünme, Analiz Yeteneği, Sonuç Odaklı, Çözüm Odaklı
	İnovatif	<ul style="list-style-type: none"> Problem Çözme Yenilikçi, Yaratıcı
	Temel BT	<ul style="list-style-type: none"> MS Office, Microsoft Word, Power Point, Excel, Bilgisayar Bilgisine Sahip
Sistem Bilgisi	Sistem Metodolojileri	<ul style="list-style-type: none"> Yazılım Geliştirme Metodolojisi, Sistem Geliştirme Metodolojisi, Sdlc, Cobit, Sistem Altyapı, Mvp
	Kurumsal Modüller	<ul style="list-style-type: none"> SAP, ERP, SCM, BI, CRM, İş Zekâsı
	Analiz Araç/Teknik	<ul style="list-style-type: none"> Tableau, Power BI, MicroStrategy, SSRS, Business Object, QlikView, Oracle BI, Microsoft SSIS, ETL, OLAP
	Dokümantasyon	<ul style="list-style-type: none"> Raporlama, Rapor Oluşturma, Dokümantasyon, Kayıt Tutmak Rapor Hazırlama
	Veri	<ul style="list-style-type: none"> Veri Analizi, Veri Madenciliği, Veri Ambarı, Veri Modelleme, Veri Setleri, Veri Toplama
	Yazılım	<ul style="list-style-type: none"> Java, Python, Object-Oriented, JQuery, Java_Script, Css, Angular, Php, Node, React, Html, Perl, Ruby, Asp.Net, .Net, C/C++, Swift, C#
Teknik Bilgi	Veri Tabanı	<ul style="list-style-type: none"> Mysql, Sql, T-Sql, Postgre Sql, Mongodb, Pl-Sql

		<ul style="list-style-type: none"> • Oracle Sql, 	<ul style="list-style-type: none"> • Nosql,
Donanım	Donanım	<ul style="list-style-type: none"> • Sunucu, • Network, 	<ul style="list-style-type: none"> • Servis, • Ağ

Kaynak: Aktaş, Boz, Aktaş ve Akbıyık (2022)

Kod şeması bazı kategoriler, alt kategoriler, bunlara bağlı olan kodlar ve kodlara bağlı olan anahtar kelimelerden oluşmaktadır. Örneğin, organizasyonel bilgi kategorisi; sosyal, yönetsel ve organizasyon olmak üzere üç alt kategoriden oluşmaktadır. Bu alt kategorilerden sosyal; takım çalışması, iletişim becerisi ve sorumluluk kodlarından oluşmaktadır. Takım çalışmasına ait anahtar kelimeler ise takım çalışması ve ekip çalışması şeklinde belirtilmiştir.

4. BULGULAR

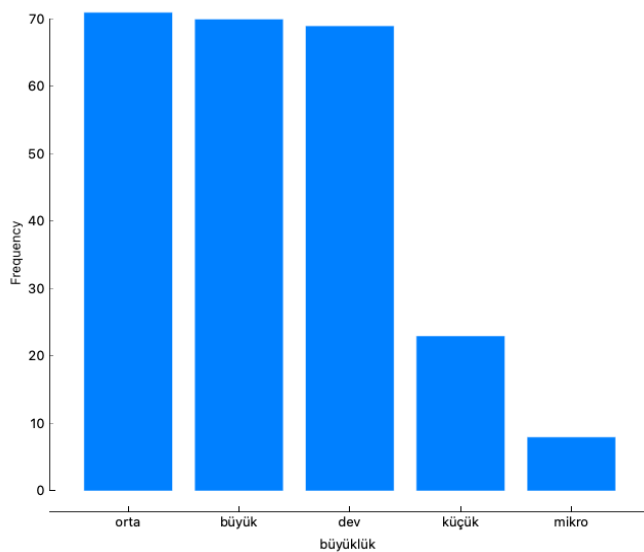
4.1. İş İlanları

İş ilanlarının başlıkları üzerinde gerçekleştirilen 3-gram analizi, yüksek frekansta görülen terimleri ortaya koymuştur ki bu terimler Şekil 2'de gösterilmiştir. En yüksek frekansta olan pozisyon "yazılım geliştirme uzmanı" olarak belirlenmiştir (tf=7). Bu pozisyonu "bilgi teknolojileri uzmanı," "bilgi işlem uzmanı" (tf=6); "bilgi güvenliği uzmanı" ve "bilgi işlem sorumlusu" (tf=4) takip etmektedir. İş ilanı başlıklarına dayanarak, YBS eğitimi alan/alınmış bireylerin teknik alanlarda yer alması beklenmektedir. Bu bulgu, işverenlerin bu alanlarda güçlü teknik yeteneklere sahip bireyleri işe alma eğiliminde olduğunu göstermektedir.

Şekil 2: İlan Başlıkları 3-grams

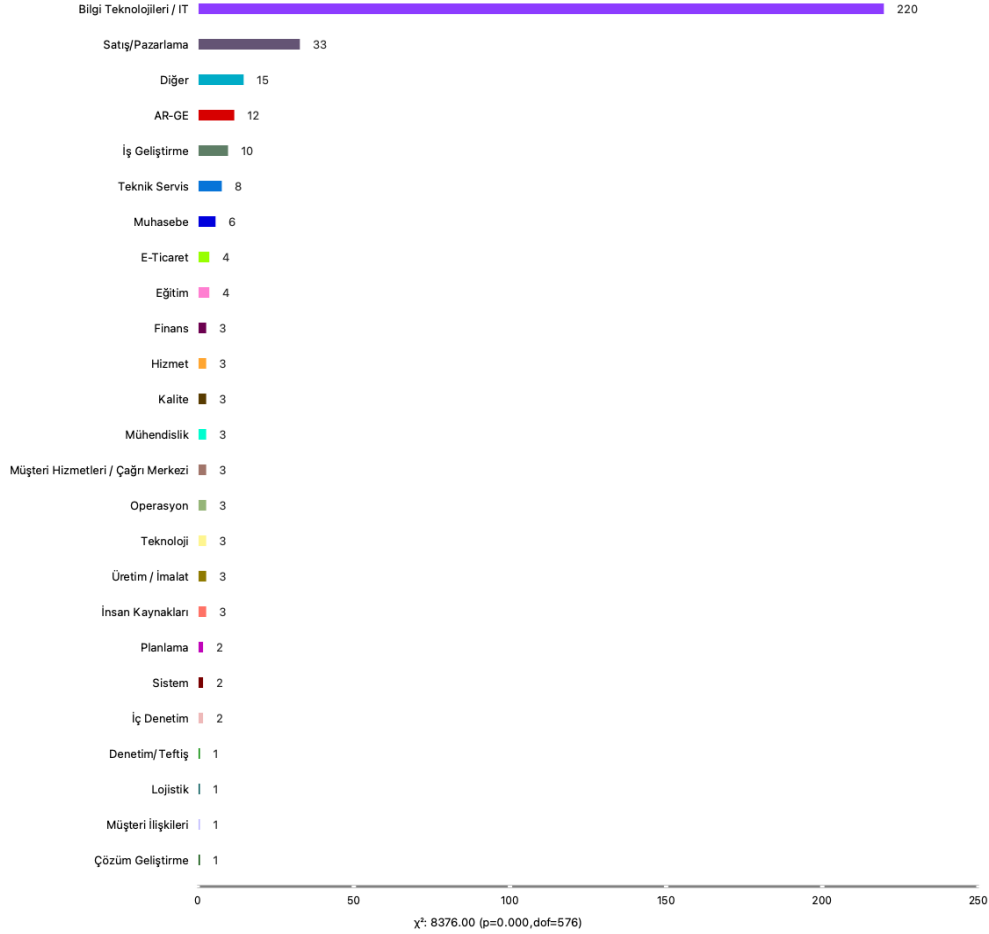


İş ilanlarında aranan genel niteliklerin 3-gram analizi sonucunda ortaya çıkan yüksek frekansta görülen terimler Şekil 3'te gösterilmiştir. "Yönetim bilişim sistemleri" terimi (tf=171) en yüksek frekansa sahiptir. Bunu "askerlik görevini tamamlamış" terimi (tf=160) ve "iyi derecede İngilizce" terimi (tf=97) takip etmektedir. İlanlarda sıkça geçen kelime grupları incelendiğinde, YBS ile ilgili pozisyonların aynı zamanda çeşitli mühendislik bölümleriyle (yazılım, bilgisayar, endüstri gibi) ilişkilendirildiği görülmektedir. Erkek adayların askerlik hizmetini tamamlamaları, şirketler için önemli bir kriterdir.



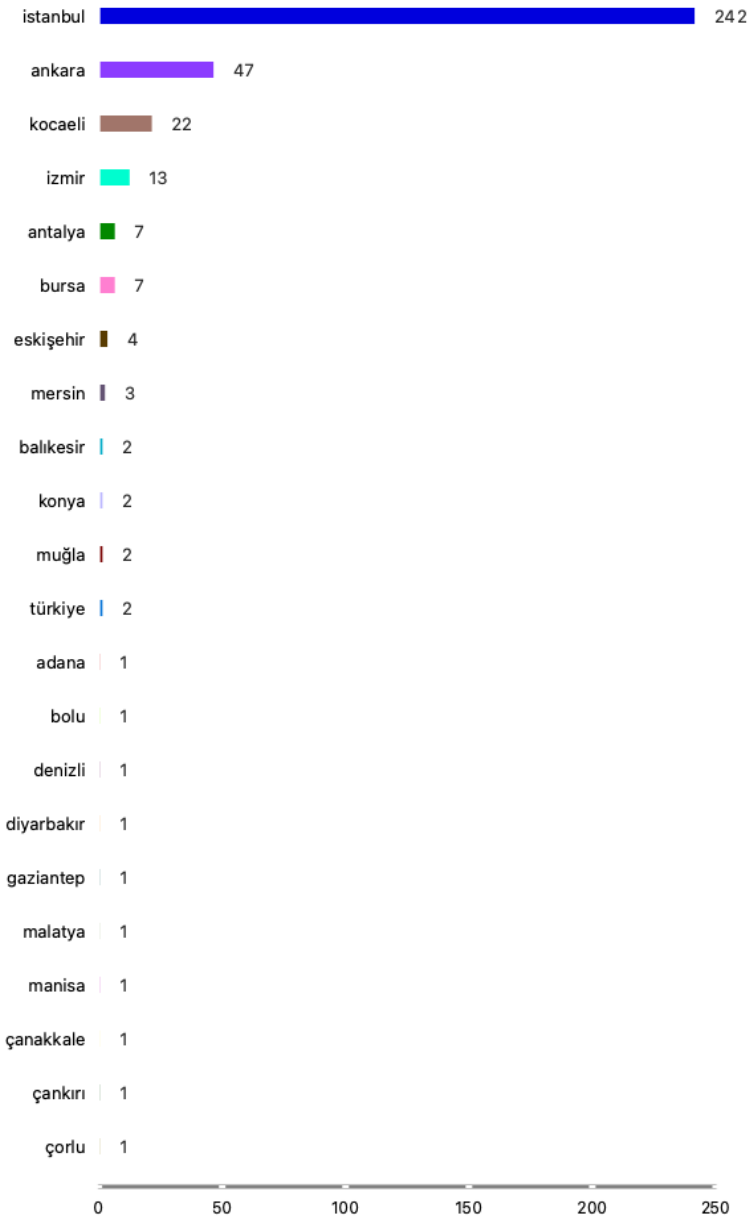
İş ilanlarında belirtilen pozisyonların arandığı hangi departmanlar Şekil 5'te gösterilmiştir. YBS ile ilgili iş ilanlarının 25 farklı departman için bulunduğu görülmektedir. İş ilanları en çok Bilgi Teknolojileri departmanı için yayınlandığı görülmektedir.

Şekil 5: İş İlanlarının Departmana Göre Dağılımı



İş ilanlarının konumlarına göre dağılımı Şekil 6'da verilmiştir. Konum verileri düzenlenirken İstanbul için Asya ve Avrupa yakası ayrımı ya da ilçe detayları kaldırılmış, hepsi İstanbul olarak veri setine kaydedilmiştir. Bir ilanın konumunda birden fazla şehir belirtilmesi durumunda bu şehirler yeni bir satır olarak kaydedilmiş ve böylece hangi ilin ne sıklıkla ilanlarda yer aldığı bilgisine daha rahat ulaşmak amaçlanmıştır.

Şekil 6: İş İlanlarının Konumlarına Göre Dağılımı



Şekil 6'ya göre Türkiye'de 22 farklı şehirde YBS alanına ilişkin iş ilanı yayınlanmıştır. Türkiye geneline hitap eden ilan sayısı 2 olarak görülmektedir. Alana ilişkin ilanlar en çok (242 kez listelenmiş) İstanbul'da faaliyet gösteren firmalar tarafından yayınlanmıştır. İstanbul ilini Ankara takip etmektedir (47).

4.2.Üniversiteler

Üniversitelerin program çıktılarına ilişkin 2-grams analizi sonucunda ortaya çıkan yüksek frekanslı ifadeler Şekil 7'de verilmiştir. "Yönetim bilişim" terimi en yüksek frekansa (tf=84) sahiptir. Onu, "bilişim sistemleri" terimi (tf=70) takip etmektedir.

Şekil 7: Üniversitelerin Program Çıktıları 2-grams



Program çıktılarına ilişkin gerçekleştirilen 3-grams analizi sonucunda elde edilen yüksek frekanslı ifadeler Şekil 8'de gösterilmiştir. "Yönetim bilişim sistemleri" terimi en yüksek frekansa (tf=52) sahiptir. Onu, "yaşam boyu öğrenme" ve "bilişim teknoloji sistemleri" terimleri (tf=13) takip etmektedir.

Şekil 8: Üniversitelerin Program Çıktıları 3-grams



Üniversitelerin program çıktılarıyla gerçekleştirilen analiz sonuçlarına göre, bilişim teknolojileri, yabancı dil ve güncel bilgiler ile ilişkili konuların önemsendiği görülmektedir. Programda teknik ve yönetsel becerilerin geliştirilmesinin çıktı olarak önemsendiği, yaşam boyu öğrenmenin amaçlandığı görülmektedir.

Şekil 9: Üniversitelerin Kariyer Olanakları 2-grams



Şekil 10: Üniversitelerin Kariyer Olanakları 3-grams



Üniversitelerin kariyer olanakları verileriyle gerçekleştirilen analizlere göre sistem analisti, iş zekâsı uzmanı, insan kaynakları uzmanı, proje yöneticisi, veri tabanı uzmanı, sistem ve iş analisti gibi pozisyonların ön plana çıktığı görülmektedir. Ek olarak erp uzmanı, veri bilimcisi gibi pozisyonların da tüm veriler içerisinde yüksek frekanslarla ortaya çıktığı görülmektedir.

4.3. Kod Şemasına Göre Verilerin Dağılımı

Veriler, Tablo 1'e göre değerlendirilmiştir. İlanlar ve üniversite verileri içerisinde bu anahtar kelimelerin ne sıklıkla geçtiği tespit edilerek Tablo 2'de elde edilen frekanslar belirtilmiştir.

Tablo 2: İlanların ve Üniversitelerin Verilerine Göre Dağılımları

Kategori	Kodlar	İlanlar	Üniversiteler
Organizasyonel Bilgi	Sosyal	Takım Çalışması	185
		İletişim Becerisi	183
		Sorumluluk	46
	Yönetimsel	Liderlik	114
		Proje Yönetimi	76
	Organizasyon	Fonksiyonel Uzmanlık	108
		Sektörel Uzmanlık	292
			7
Sistem Bilgisi	Problem Çözme	Analitik Düşünme	208
		Problem Çözücü	108
		İnovatif	17
		Temel BT	117
		Sistem Metodolojileri	82
	Geliştirme Metodolojileri	Kurumsal Modüller	258
		Analiz Araç/Teknik	31
		Dokümantasyon	198
		Veri	48
			19
Teknik Bilgi	Yazılım	Yazılım	237
		Veri Tabanı	162
	Donanım	Donanım	202

Tablo 1'de yer alan kategorilerin, iş ilanlarında geçme sıklığı daha fazla iken üniversitelerin verilerinde geçme sıklığının daha düşük olduğu görülmektedir. İlan verilerine göre en sık geçen anahtar kelimeler incelendiğinde tüm kategorilerde frekansların genel olarak yüksek olduğu görülmektedir. Bununla birlikte sektörel uzmanlık, kurumsal modüller ve yazılım kategorilerine ilişkin vurgunun daha fazla yapıldığı söylenebilir. Üniversite verilerinde kurumsal modüller, iletişim becerisi ve sistem metodolojilerine ilişkin anahtar kelimelerin daha sık geçtiği görülmektedir. İlanlarda ve üniversite verilerinde daha sık geçen ortak kategorinin kurumsal modüller olduğu görülmektedir.

5. TARTIŞMA VE SONUÇ

Sektördeki firmaların, YBS alanında eğitim almış personel arayışında bulunduğu görülmektedir. Bu talep, genellikle orta, büyük ve dev ölçekli işletmelerden gelmektedir. Özellikle bilgi işlem ve satış/pazarlama departmanları, bu niteliklere sahip mezunlara olan talebin yoğunlaştığı ana departmanlar olarak belirlenmiştir. Ayrıca, alana ilişkin personel arayışında olan firmaların çoğunluğunun İstanbul ilinde olduğu görülmektedir.

İş ilanlarının başlıklarının incelenmesi sonucunda, en yaygın başlıklar arasında yazılım geliştirici, bilgi teknolojileri/bilgi işlem uzmanı, satış temsilcisi, satış uzmanı ve satış yöneticisi, iş zekâsı uzmanı, SAP, ABAP ve iş geliştirme başlıklarının yer aldığı görülmektedir. İncelemeye konu olan ilan başlıkları arasında daha az sıklıkla yer alanlar ise; iş analisti, siber güvenlik uzmanı, network uzmanı, sistem analisti, test uzmanı, veri yönetimi, satın alma, insan kaynakları, müşteri temsilcisi ve proje yöneticisidir. İlanlarda yer alan nitelikler incelendiğinde, en çok aranan özellikler arasında MS Office programları, bilgi güvenliği, SAP, Windows işletim sistemi, DLP veri sınıflama, SQL server, sistem tasarımı/geliştirme/test etme, veri tabanı yönetimi, C#, .Net ve yazılım geliştirme becerileri, müşteri memnuniyeti sağlama, iş takibi, organizasyon, risk yönetimi, saha satış tecrübesi yer almaktadır (Özdemir & Özdemir, 2023; Rasul, Abd Rauf & Mansor, 2013). Ayrıca, ilanlarda sıklıkla vurgulanan konular arasında erkek adaylar için askerlik hizmetinin tamamlanmış olması, iyi derecede İngilizce bilgisine sahip olma, aktif araç kullanabilme ve yurtiçi/yurtdışı seyahat engelinin olmaması gibi noktalar bulunmaktadır. Bu durum, sadece teknik yeteneklerin değil, iletişim, analitik düşünme ve problem çözme yeteneklerinin de önemsendiğini ortaya koymaktadır (Ahmed, Fernando Capretz, Bouktif & Campbell, 2012). Benzer şekilde, ilanlarda alanı özelleştiren kavramlar da yer almaktadır; örneğin, ERP için SAP ve ABAP modülünün öne çıktığı gözlemlenmektedir.

Üniversitelerin kariyer olanakları incelendiğinde, bilişim alanına ilişkin yüksek sıklıkla belirtilen olanaklar; sistem analisti, iş zekası uzmanı, iş analisti, proje yöneticisi, veri tabanı uzmanı, sistem tasarlama ve network uzmanı olarak listelenmektedir. Yönetim alanında en sık listelenen olanaklar ise; insan kaynakları uzmanı, satış ve pazarlama uzmanı, iş geliştirici şeklindedir. Kariyer olanaklarına ilişkin verilerde bilişim alanında; uygulama geliştirme, teknik destek, SEO, veri bilimi, ERP, bulut bilişim, web geliştirme ve e-ticaret, nispeten daha az sıklığa sahiptir. Yönetim alanında ise; kaynak planlama, sosyal medya, lojistik, danışmanlık, denetim, bankacılık/finans ve karar alma, daha az sıklıkla listelenmektedir. Üniversite verileri program çıktıları açısından incelendiğinde bilişim alanına ilişkin sık geçen ifadeler; bilgi teknolojileri, veri analizi, yazılım geliştirme ve donanım olarak sıralanabilir. Yönetim alanında ise; insan kaynakları, yönetim ve organizasyon, muhasebe, finans, karar verme, üretim ve pazarlama program çıktılarında yüksek sıklığa sahiptir. Bilişim alanına ilişkin ifadelerden daha az sıklığa sahip olanlar; yazılım seçimi, veri tabanı, sistem tasarımı, bilgi güvenliği ve iş zekası şeklinde belirtilebilir. Yönetim alanında ise; süreç planlama, satın alma, iş geliştirme ve risk analizi nispeten daha az sıklıkla üniversitelerin program çıktılarında ifade edilmektedir. Bunlara ek olarak; yaşam boyu öğrenme, yabancı dil bilgisi, güncel gelişmeleri takip etmek, yazılı ve sözlü iletişim becerisi ve yenilikçi fikirler, üniversiteler tarafından program çıktıları olarak sıklıkla ifade edilmektedir.

Hem üniversitelerin program çıktılarında hem de iş ilanlarında bilişim alanına yönelik beceriler önemslenmektedir (Gurcan & Cagiltay, 2019; Henkoğlu & Şerefoğlu, 2019). Yazılım geliştirme, veri analizi, sistem analizi, ağ yönetimi gibi konular her iki tarafta da vurgulanmaktadır. İş ilanlarında ve üniversitelerin program çıktılarında iletişim becerilerine önem verildiği görülmektedir. İyi derecede İngilizce bilgisi, yazılı ve sözlü iletişim becerisi gibi nitelikler talep edilmektedir. Hem üniversitelerin program çıktılarında hem de iş ilanlarında analitik düşünme, problem çözme becerileri ve mühendislik yaklaşımı vurgulanmaktadır.

İş ilanı verileri ile üniversite verileri arasında bazı benzerlikler ve farklılıklar bulunmaktadır. Hem iş ilanlarında hem de üniversitelerin kariyer olanaklarında özellikle teknik pozisyonlara daha fazla vurgu yapılmaktadır. Farklılık olarak, iş ilanlarında belirli teknoloji ve yazılım bilgileri (örneğin, SAP, ABAP, Java) talep edilirken, üniversitelerin program çıktılarında genel becerilere odaklanıldığı söylenebilir.

Sonuç olarak, iş ilanları ve üniversite programlarından elde edilen verilere dayanarak, yönetim bilişim sistemleri öğrencilerinin/mezunlarının teknik becerilere, bilgi yönetimi yetkinliklerine, projeleri etkin bir şekilde yönetme becerilerine ve iletişim becerilerine sahip olmalarının önemsendiği sonucuna varılabilir. Ayrıca, mühendislik yaklaşımıyla problem çözebilme yeteneği ve İngilizce gibi dil becerilerinin de öğrencilerin iş bulma olanaklarına olumlu etkisi olduğu görülmektedir.

Bu çalışma bazı kısıtlara sahiptir. İlki, çalışmada yalnızca iki iş ilan sitesinden verilerin toplanmasıdır. İkincisi, sadece Türkçe iş ilanlarının dikkate alınmasıdır. Üçüncüsü, üniversitelerin program çıktıları ve kariyer olanakları dikkate alınarak araştırmanın yapılmasıdır. Son olarak verinin belirtilen sürelerde yayınlanan ilanları temel alması ve buna bağlı olarak iş ilanları açısından örneklem sayısının az olmasıdır.

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Dış Borç Sürdürülebilirliğinin Seçilmiş Ülkeler Örneğinde Analizi: Fourier Kpss Durağanlık Testi

Dr.Öğr.Üyesi Serdar ERDOĞAN¹

Doç.Dr. Havanur ERGÜN TATAR²

¹Trakya Üniversitesi, Uzunköprü Uygulamalı Bilimler Yüksekokulu, Muhasebe ve Finans Yönetimi Bölümü, serdarderdogan@trakya.edu.tr, ORCID: 0000-0001-8594-3929

²Bartın Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, İktisat Bölümü, havanurergun@gmail.com, ORCID: 0000-0002-4284-9083

Özet: Az gelişmiş ve gelişmekte olan ülke ekonomilerinin kalkınmasında dış borcun önemli bir yeri bulunmaktadır. Ancak burada dış borçların sürdürülebilirliğinde söz konusu borçların finansmanı ve aynı zamanda vadesinde ödenmesi de büyük önem taşımaktadır. Bu çalışmada 1970 – 2021 arası dönemde yıllık veriler kullanılmış olup üst – orta ve orta – alt gelir gruplu şeklinde olmak üzere otuz sekiz az gelişmiş ve gelişmekte olan ülkeye yönelik uygulanmıştır. Söz konusu çalışmada tüm ülkeler için dış borç stokunun milli gelire oranı yer almış olup, analiz yöntemi olarak Fourier KPSS durağanlık testi kullanılmıştır.

Bu çalışmada elde edilen sonuçlara göre, üst – orta gelir grubu ülkelerinden Brezilya, Kolombiya, Dominik Cumhuriyeti, Fiji, Gabon, Meksika ve Peru için söz konusu değişkenin durağanlığının tespit edilmesi, bu ülkelerde dış borçların sürdürülebilir olduğunu göstermiştir. Ayrıca çalışmada yer alan alt – orta gelir grubu ülkelerinden Endonezya, Pakistan, Kamerun, Kongo Cumhuriyeti, Fildişi Sahili, Honduras, Hindistan, Myanmar, Nijerya, Papua Yeni Gine, Filipinler ve Senegal içinde durağanlığın anlamlı olduğu ve dış borçların sürdürülebilir olduğu bulunmuştur.

Anahtar Kelimeler: Dış Borç, Sürdürülebilirlik, Durağanlık ve Fourier KPSS

The Analysis Of External Debt Sustainability In Selected Countries Sample: Fourier Kpss Stability Test

Abstract: Foreign debt has an important place in the development of underdeveloped and developing countries' economies. However, financing debts and paying them on time are also of great importance in sustainability of external debt. In this study, annual data for the period 1970-2021 are used and applied to 38 underdeveloped and developing countries, including upper-middle and middle-low income groups.

In the study, the ratio of external debt stock to national income is included for all countries, and the Fourier KPSS stationarity test is used as the analysis method. According to the results obtained in the study, the determination of the stagnation of the said variable for the upper-middle income group countries Brazil, Colombia, Dominican Republic, Fiji, Gabon, Mexico and Peru shows that the external debts in these countries are sustainable. In addition, it has been found that stagnation is significant and external debt is sustainable in Indonesia, Pakistan, Cameroon, Republic of Congo, Ivory Coast, Honduras, India, Myanmar, Nigeria, Papua New Guinea, Philippines and Senegal, which are among the lower-middle income group countries included in the study.

Keywords: External Debt, Sustainability, Stationary and Fourier KPSS

1. GİRİŞ

Gelişmekte olan ve az gelişmiş ülkelerin kalkınmalarının finansmanında dış borçlanmanın rolü büyüktür. Bu noktada borçlanma yoluna giderek söz konusu ekonomik kalkınma süreçlerini tamamlama arzusunda olan ülkelerin borçlanmalarından ziyade söz konusu dış kaynakları vadesinde ödeme problemleri de önem teşkil etmektedir. Çünkü bu tarz ülkeler borçlandıkları andan itibaren gerek dünya konjonktüründeki bulundukları konum gereği taşıdıkları ülke riskleri, gerekse dünya üzerinde olası ekonomik şokların oluşturabileceği çeşitli finansal risklerle karşı karşıyadırlar.

Türkiye ekonomisi gibi neredeyse tüm gelişmekte olan ülke ekonomileri; iç tasarruf düzeyinin yetersizliği, kamu harcamalarındaki ciddi artışlar, dış ödemeler bilançosundaki açıklardaki artış, ara malı ihtiyacındaki bağımlılık, bilgi teknoloji transferi ve döviz ihtiyacı gibi nedenlerle dış borçlanma yapması kaçınılmazdır (Ulusoy, 2001: 107). Görüldüğü üzere burada dış borçlanmanın kaçınılmaz olması söz konusu durumun devamlılığının sürmesi için bu borçların sürdürülebilirliğinin daha da önemli olduğu ortaya çıkmaktadır. Bu tarz ülkelerin istenildiği ölçüde ihracat yapamaması, yapmış olduğu ihracat mallarının katma değerinin düşük olması da bu tarz ekonomilerin dış kaynak ihtiyacının sürekliliğini ortaya çıkarmaktadır.

Bir ülke ekonomisi normal şartlar altında dış borçlanma yaptığı zaman, halkın gelir düzeyi artar, döviz kuru düşer, dış açıklar düşer, yatırımlar artar. Bunun yanında söz konusu borcun ödenmesi durumunda ise tersi durumlar ortaya çıkar çünkü dış borçlanmanın yapılması ülkeye döviz girişi sağlarken; borcun ödenmesi ise döviz çıkışı anlamına gelmektedir (Kalenderoğlu, 2007: 235-236). İşte bu noktada borcun alınması kadar söz konusu borcun alındığı kuruma zamanında borcun ödenmesi de büyük önem taşımaktadır. Zamanında ödenmemesi durumunda ortaya ana para yanında faiz ödemeleri de ilave olacaktır ki bu durum açıkları arttırarak sürdürülemez bir hal alıp devleti yeniden borçlanmaya itecektir. Böylece açık-borç-faiz kısır döngüsü ortaya çıkacaktır (Yılmaz, 2018: 325).

Dış borçların sürdürülebilirliği tüm dünya ülkelerinin uluslararası finans piyasalarında güvenilirliğinin önemli göstergelerinden biridir. Dış borçlarını sürdüremez hale gelen ülkeler ilerleyen dönemde borç bulmakta zorlanmakta olup, aynı zamanda risk primleri artacağından daha yüksek maliyetle borçlanmaya razı hale gelecektir. Bu noktada borç sürdürülebilirliği kötü durumda olan ülkelere uluslararası derecelendirme kuruluşlarının vereceği kötü kredi notları bu ülkelerin daha güvenilirlik düzeylerinin düşmesiyle daha da yüksek fon maliyetiyle borçlanmalarına sebep olacaktır.

Dış borçlanmanın bir ülkede ekonomik kriz beklentilerine yol açmasında uluslararası finansal kurumların belirlediği üç tane önemli gösterge kriteri bulunmaktadır; bunlar, dış borç stoku/GSYİH oranının %50, dış borç stoku/ihracat oranının ise %275 ve son olarak da dış borç servisi/ihracat oranının ise %30 sınırlarını aşması durumunda ülkenin borç krizine girme beklentileri artarak borçlarının sürdürülemeyeceği anlamına gelecektir (Biçer, 2020: 28).

Sonuç olarak dış borçların sürdürülebilirliğinin ekonomik krizlerin oluşumunda bir ülke ekonomisi açısından ne denli önem arz ettiği ve birçok makroekonomik büyüklükle arasındaki ilişkisiyle birlikte söz konusu büyüklüğün tek başına da büyük bir anlam taşıdığı bu çalışmada ortaya koyulmaya çalışılacaktır.

Çalışmada gelişmekte olan ve az gelişmiş ülkelerin oluşturduğu 12 üst-orta ve 22 orta-alt gelir grubunu temsilen toplamda 34 farklı ülkeye yönelik dış borç stokunun milli gelirdeki payı değişkeni kullanılmaktadır. Bu çalışmada Fourier KPSS durağanlık testi yöntemiyle söz konusu ülkelerin dış borçlarının sürdürülebilirliği test edilmektedir. Aşağıdaki tabloda da bu alanda literatürde yapılmış çalışmaların bir kısmının görüldüğü çeşitli ampirik çalışmalar bulunmaktadır. Bu çalışmada seçildiği ülke grubu ve yöntemiyle diğer çalışmalardan farklı kılınmaya çalışılmaktadır.

Tablo 1: Literatür Özeti

Yazar/Yazarlar	Ülke ve Dönem	Yöntem	Sonuç
Yurt, 2008	Türkiye, 1980-2005	Rasyo Analizi	Dış borçların sürdürülemez nitelikte olduğu tespit edilmiştir.
Egeli ve Egeli, 2008	Kırgızistan, 1993-2006	Ko-entegrasyon ve ADF ve Perron Birim kök Testleri	Dış borçların sürdürülebilir olduğu bulunmuştur.
Çukurçayır, 2014	Türkiye, 1980-2010	Eşbütünleşme Analizi	Dış borçların sürdürülebilir olduğuna ulaşılmıştır.
Uslu, 2019	Türkiye, 1970-2018	ADF, PP, KPSS, Vogelsang ve Perron, Kapetanios Yapısal Kırılmalı Birim Kök Testleri	Dış borç faiz ödemeleri ihracat oranı değişkeni açısından dış borçlar sürdürülebilir niteliktedir.
Yalçinkaya, 2019	Türkiye, 1970-2018	Doğrusal ve Doğrusal Olmayan Birim Kök Testleri	Dış borçların sürdürülemez olduğu görülmüştür.
Dayioğlu vd., 2020	Türkiye, 2010-2022	Arıma Modeli, Öngörü	Dış borçların sürdürülebilirliği dış ticaret yönünden risk taşımazken, GSMH bakımından nispeten risklidir.
Akçay ve Çelik, 2020	ECOWAS, 1970-2017, 1980-2017, 1986-2017	Kırılmalı Birim Kök testleri, Panel Eşbütünleşme	Söz konusu ülke grubunda dış borçların sürdürülemez nitelikte olduğu elde edilmiştir.
Çakmak, 2020	Türkiye, 1989-2019	Finansal Kırılganlık Endeksi Yöntemi	13 temel değişken ele alınmış ve dış borçların sürdürülemez olduğu tespit edilmiştir.
Yenisu, 2020	Türkiye, 1990-2016	Arıma Modeli	Dış borçların sürdürülebilir olduğu bulunmuştur.

Konat, 2021	Türki Cumhuriyetleri 1996-2019	Doğrusal Olmayan Panel Birim Kök Testi	Söz konusu ülke grubu için dış borçların sürdürülebilir olduğu anlaşılmıştır.
Özbek ve Türkmen, 2021	Türkiye, 1980-2019	ADF, Perron ve KPSS Birim Kök Testleri	Dış borçların sürdürülebilir olmadığı elde edilmiştir.
Ağır ve Özbek, 2021	Eski (Türkiye, Brezilya, Hindistan, Endonezya, Güney Afrika) ve Yeni (Türkiye, Arjantin, Katar, Mısır, Pakistan) Kırılgan 5'li	Panika Panel, Fourier LM Birim Kök Testleri	İhracata bağlı dış borç değişkeninde sürdürülebilirliğin geçerli olmadığı fakat milli gelir değişkeninde ise eski kırılgan 5'li ülkenin dış borçlarının sürdürülebilir olduğu tespit edilmiştir.
Gümüş, 2022	Türkiye, 1991-2020	Rasyo Analizi ve Birim Kök Testi	Dış borçların sürdürülebilir özelliği bulunmaktadır.
Dallı, 2022	Türkiye, 1974-2020	ADF, Kırılgan Zivot Andrews Birim Kök Testleri	Dış borçların sürdürülemez olduğu tespit edilmiştir.

2. YÖNTEM

Dış borcun sürdürülebilirliğini analiz etmek için yapılan bu çalışmada yöntem olarak Fourier KPSS durağanlık testi kullanılmıştır.

2.1. Veri Seti

Çalışmada analiz için seçilen, ülkeler dünya bankası sınıflandırmasına göre iki gruba ayrılmıştır. İlk grupta yer alan ülkeler, üst-orta gelirli ülkeler iken; İkinci grupta yer alan ülkeler, alt-orta gelir grubuna dahil olan ülkelerdir. Çalışmada kullanılan veriler yıllık olup, 1970-2021 dönemini kapsamaktadır (Worldbank, 2023). Çalışmada, dış borç stokunun GSMH içindeki payı incelenmiştir. Analizden önce verinin logaritması alınmıştır.

Çalışmada seçilen üst-orta gelirli ülkeler: Belize, Brezilya, Kolombiya, Kosta Rika, Dominik Cumhuriyeti, Ekvator, Fiji, Gabon, Meksika, Peru, Tayland ve Türkiye'dir. Çalışmada seçilen alt-orta gelirli ülkeler: Endonezya, Mısır, Cezayir, Pakistan, Benin, Kamerun, Kongo Cumhuriyeti, Fildişi Sahili, El Salvador, Honduras, Hindistan, Lesotho, Myanmar, Nepal, Nikaragua, Nijerya, Papua Yeni Gine, Filipinler, Senegal, Sri Lanka, Tunus ve Zimbabve olarak belirlenmiştir.

2.2. Fourier KPSS Durağanlık Analizi

Becker vd., (2006) tarafından, fourier fonksiyonuna dair seçilmiş bir frekans bileşeninden yola çıkarak birim kök testi geliştirmişlerdir. Bu noktada, yapısal kırılmaları analiz etmek için trigonometrik terimleri ele almışlardır. Geliştirdikleri testte, modelin doğrusal olduğunu F testi ile hesaplanabileceğini ortaya koymuşlardır.

Becker vd., (2006: 391) F istatistiğini şu şekilde hesaplamaktadır:

$$F_i(k) = \frac{(KKT_0 - KKT_1(k))/2}{KKT_1(k)/(T-q)}, i = \mu, \tau \quad (1)$$

Fourier KPSS birim kök testinde durağanlık sınamasında, Becker vd. (2006) tarafından tablo haline getirilmiş olan kritik değerler kıyaslanmaktadır. Yani hesaplanan değerler, tablo değerlerinden küçük ise, temel hipotez reddedilememektedir. Temel hipotez, durağanlık durumunu ifade etmektedir (Becker vd., 2006). Trigonometrik terimlerin anlamlılığını ifade eden F testinde, temel hipotezin kabul edilmemesi durumunda geleneksel KPSS birim kök testi kullanılmaktadır (Yılancı, 2017: 7).

3. BULGULAR

Çalışmada dış borç sürdürülebilirliği, fourier KPSS testi ile analiz edilmiştir. Serilerdeki trendin yokluğu F testi ile incelenmiştir. Tablo 2'de seçilmiş üst- orta gelirli ülkelerin durağanlık testi sonuçları gösterilmektedir.

Tablo 2: Seçilmiş Üst-Orta Gelirli Ülkeler için Durağanlık Testi Sonuçları

Ülkeler	Frekans	Min. SSR	Fourier KPSS Test İstatistiği	F test İstatistiği
Belize	1	20.214	0.299	21.510
Brezilya	3	4.549	0.252*	14.490
Kolombiya	3	1.918	0.080*	20.437

Kosta Rika	1	5.509	0.199	36.411
Dominik Cumhuriyeti	2	3.122	0.194*	31.238
Ekvator	1	7.467	0.298	40.526
Fiji	2	5.170	0.318*	52.862
Gabon	1	6.858	0.062*	18.038
Meksika	2	3.914	0.085*	18.741
Peru	1	1.494	0.047*	84.245
Tayland	1	5.714	0.262	26.423
Türkiye	1	5.999	0.351	13.358

Not: F test İstatistiği için Becker vd. (2006: 289) çalışmasından faydalanılmıştır. Benzer şekilde, FKPSS testine dair %5 kritik değer 1, 2 ve 3 frekans değerleri için Becker vd. (2006) çalışmasından faydalanılmıştır. Buna göre; 1.Frekans: 0,17 2.Frekans: 0,41 3.Frekans:0,44.

Tablo 2’de yer alan analiz sonuçlarına göre, seçilmiş üst-orta gelir grubuna dahil ülkelerin tamamında F-test istatistiğinin %5 kritik değerden büyük olduğu görülmektedir. Diğer bir değişle, doğrusal olduğu kabul edilmemektedir. Durağanlık testi sonucuna göre ise, seçilmiş üst-orta gelir grubunda yer alan ülkelere 7’inde, dış borç stoku serisinin durağan olduğu görülmektedir. Yani söz konusu ülkelere dış borç sürdürülebilir. Dış borç stokunun sürdürülebilir olduğu ülkeler: Brezilya, Kolombiya, Dominik Cumhuriyeti, Fiji, Gabon, Meksika ve Peru’dur.

Tablo 3’te alt-orta gelir grubuna ait ülkeler için dış borç stoku serilerine uygulanan Fourier FKPSS durağanlık testi gösterilmektedir.

Tablo 3: Seçilmiş Alt-Orta Gelirli Ülkeler için Durağanlık Testi Sonuçları

Ülkeler	Frekans	Min. SSR	Fourier KPSS Test İstatistiği	F test İstatistiği
Endonezya	1	4.083	0.074*	23.828
Mısır	1	4.344	0.220	103.875
Cezayir	1	18.097	0.245	75.560
Pakistan	1	1.540	0.134*	29.077
Benin	1	5.781	0.318	69.408
Kamerun	1	11.411	0.084*	31.254
Kongo Cumhuriyeti	1	7.166	0.064*	100.616
Fildişi Sahili	1	1.543	0.129*	376.500
El Salvador	2	5.239	0.793	17.190
Honduras	1	3.111	0.143*	50.087
Hindistan	2	2.074	0.391*	21.690
Lesotho	1	15.860	0.338	24.767
Myanmar	1	3.980	0.065*	294.882
Nepal	1	21.608	0.435	53.355
Nikaragua	1	16.160	0.232	31.782
Nijerya	1	16.487	0.114*	52.110
Papua Yeni Gine	2	7.569	0.052*	13.801
Filipinler	1	1.859	0.052*	113.662
Senegal	3	12.740	0.334*	15.465
Sri Lanka	1	4.167	0.396	11.100
Tunus	2	2.781	0.469	10.697
Zimbabve	1	15.334	0.303	46.682

Not: F test İstatistiği için Becker vd. (2006: 289) çalışmasından faydalanılmıştır. Benzer şekilde, FKPSS testine dair %5 kritik değer 1, 2 ve 3 frekans değerleri için Becker vd. (2006) çalışmasından faydalanılmıştır. Buna göre; 1.Frekans: 0,17 2.Frekans: 0,41 3.Frekans:0,44.

Tablo 3’te yer alan analiz sonuçlarına göre, seçilmiş alt-orta gelir grubuna dahil ülkelerin tamamında F-test istatistiğinin %5 kritik değerden büyük olduğu görülmektedir. Durağanlık testi sonucuna göre ise, seçilmiş alt-orta gelir grubunda yer alan ülkelere 12’inde, dış borç stoku serisinin durağan olduğu görülmektedir. Yani söz konusu ülkelere dış borç sürdürülebilir. Dış borç stokunun sürdürülebilir olduğu ülkeler: Endonezya, Pakistan, Kamerun, Kongo Cumhuriyeti, Fildişi Sahili, Honduras, Hindistan, Myanmar, Nijerya, Papua Yeni Gine, Filipinler ve Senegal’dir.

4. SONUÇ

Dış borçların sürdürülebilirliği özellikle az gelişmiş ve gelişmekte olan ülkelerin ekonomik krizler sarmalına girmesinde veya söz konusu krizlerden kurtulmada uygulanacak olan mali politikaların temelini belirlenmesinde etkili bir süreçler bütünüdür. Burada özellikle söz konusu ülkelerin uygulamış olduğu para ve kur politikaları söz konusu borç durumunun büyüklüğü üzerinde direkt olarak belirleyici bir rol oynamıştır. Özellikle kalkınma problemi yaşayan bu tarz ülkelerde tasarruf düzeyinin ve buna bağlı olarak da yatırım hacminin düşük olması sebebiyle kalkınmanın finansman aracı olarak sağlanan dış borçların o ülkelerde verimli yatırım alanlarında kullanılması büyük önem taşımaktadır. Çünkü bu tarz ülkelerin yurtiçi üretimdeki artışa bağlı olarak ihracat hacmindeki genişleme, dış borçların uzun vadede ödenmesinde önemli büyüklükte bir dış kaynak temini elde etmesini sağlamaktadır. Aksi durumda borcun borçla ödenme problemiyle karşı karşıya kalınması söz konusu ülkeyi daha derin bir ekonomik krize hatta borçlarını ödeyemez hale gelerek iflas etme durumuna sürükleyecektir. Büyük buhranlara yol açan ekonomik krizleri yaşayan ülkelerin söz konusu duruma düşmesinde dış borç krizi daima belirleyici ve önemli sebeplerden birisi olmuştur. İşte tüm bu sebeplerle dış borçların sürdürülebilirliği her ülke ekonomisi açısından büyük bir önem teşkil etmiştir.

Burada 22 alt-orta ve 12 üst-orta gelir gruplarını temsilen 34 ülkeye ait Dış Borç/GSYH verisinden hareketle Fourier KPSS durağanlık testi yöntemiyle söz konusu ülkelerin dış borçlarının sürdürülebilir nitelikte olup olmadığı analiz edilmiştir. Söz konusu çalışma alanında literatürde belli çalışmalar yapılmıştır. Bu çalışma seçildiği ülke grupları ve uygulanan yöntem itibarıyla diğer çalışmalardan farklı kılınmaya çalışılmıştır.

Bu çalışmada elde edilen sonuçlar bağlamında bir değerlendirme yapılacak olursa, seçili 12 üst-orta gelir grubuna sahip ülkelerden 7'sinde Dış Borç/GSYH oranı durağandır. Buna bağlı olarak da dış borçlarının sürdürülebilir olduğu tespit edilmiştir. Bunun yanında 22 alt-orta gelir düzeyine sahip olan ülkenin 12'sinde söz konusu değişkenin durağan olduğu ve dış borçlarının sürdürülebilir olduğu bulunmuştur. Burada seçili ülkelerden üst-orta gelir düzeyine sahip olan; Belize, Kosta Rika, Ekvator, Tayland ve Türkiye'nin söz konusu değişkenin durağan olmaması nedeniyle dış borçlarının sürdürülemez olduğu istatistiksel olarak tespit edilmiştir. Ayrıca alt-orta gelir düzeyine sahip olan; Mısır, Cezayir, Benin, El Salvador, Lesotho, Nepal, Nikaragua, Sri Lanka, Tunus ve Zimbabwe ülkelerinin Dış Borç/GSYH değişkeninin durağan olmaması nedeniyle dış borçlarının sürdürülemez özellikte olduğu bulunmuştur.

Bu tarz ülke gruplarında politika uygulayıcılarının para, döviz ve maliye politikası uygulamalarında öncelikli olarak uygulayacakları politikalara uygun altyapı koşullarının sağlanması önem arz etmektedir. Burada özellikle de bu politikaların temelinde ihtiyaç duyulan gerekli reform kararlarının hayata geçirilmesi de söz konusu ülkelerin bu tarz ekonomik problemlerle karşılaşmaları durumunda oluşacak zararı minimuma indirmesinde büyük bir rol oynayacaktır. Söz konusu politikaların uygulanmasında bu durumların daima göz önünde bulundurulması büyük bir önem taşımaktadır.

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Determination of Financial Literacy Level and Socioeconomic Importance in the Process of Adaptation to Financial Innovations in the Turkish Banking Sector: The Case of Bilecik Province¹

Serkan VARSAK¹

Sıla BALCI²

¹Asst.Prof. Dr., Bilecik Seyh Edebali University, Economic and Administrative Sciences, Economy, 11100, Bilecik, Türkiye, serkan.varsak@bilecik.edu.tr, ORCID: 0000-0002-5894-1490

²Student., Bilecik Seyh Edebali University, Graduate School of Education, Economy, Bilecik, Türkiye, silakaplaan239@bilecik.edu.tr, ORCID: 0000-0003-1620-3139

Abstract: In the 21st century, rapidly changing market conditions, the variety of financial products in the banking sector, technological developments, innovations in financial markets and technological changes in the banking sector have an impact on the decisions taken by individuals in financial terms. This situation mostly affects individuals who do not have sufficient information on financial issues and can lead individuals with financial information deficiency to make financial mistakes over time. The level of financial literacy of economic actors is one of the main determinants in making the right investment decisions. The influence of demographic factors in determining financial investment decisions and in the process of adapting to innovations in the banking sector should not be ignored.

In this context, it is aimed to determine the possible interaction of financial attitudes and financial behaviors with demographic factors in determining the level of financial literacy in the process of adaptation to developing and diversifying banking financial instruments. In the study, the results of the survey conducted with 600 people throughout Bilecik province were analyzed by applying T-test and Anova Test on the basis of SPSS program, after determining the demographic characteristics of the survey participants, their level of knowledge about financial instruments was measured and it was tried to determine the level at which individuals benefited from these financial instruments.

When the differences in the knowledge level of the participants about financial instruments according to gender were tested by independent sample T-test, it was seen that there was a significant difference in exchange rate, private pension, mutual fund and mortgage variables ($p < 0.05$). In the variable of bank guaranteed loans, unsecured loans and term deposits, it was found that there was no significant difference according to gender ($p > 0.05$). It was concluded that women had more information than men in the mutual fund variable. . In addition, according to the results of the anova analysis on the level of education of the knowledge level of the participants about the basic financial instruments; It is seen that the exchange rate variable in basic financial instruments is a significant difference between primary school-high school, primary school-associate degree, primary school-undergraduate, primary school-postgraduate. There is a significant difference between associate-bachelor's degree for the private pension variable, associate-bachelor's degree for the bank guaranteed loan, primary-high school for the term deposit variable, primary-high school, primary-associate, primary-undergraduate and primary-graduate for life health etc. insurances. High school-undergraduate, high school-graduate for the bond variable; It was concluded that there was a significant difference between high school-associate degree, high school-license for prepaid card and finally middle school-associate degree, middle school-license for participation banking.

Key Words: Financial, Financial Literacy, Financial Knowledge, Financial Education, Financial Behaviour and Attitude, Financial Awareness.

1. INTRODUCTION

In the recent period, rapid technological innovations have started to be implemented in both national and international financial markets, which have taken their share in the financial system from the rapidly developing technology. In this context, banks, which are the largest part of the financial system, have started to keep up with technological innovations rapidly. Technology innovations have led to the incorporation of new financial instruments into the financial system. The existence of new financial instruments and the adaptation process of savers to these instruments have led to the emergence of new opportunities. This has become a new investment channel for investors who are rapidly adapting to the new tools in the banking system. However, due to various demographic reasons, it cannot be expected that all investors in societies will catch the same adaptation process at the same time. In this process, while opportunities for investors with high levels of financial literacy will increase, there will be no similar opportunities for investors with low levels of

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financial literacy. In this context, financial literacy is of great importance in the process of adaptation to new financial instruments brought about by technology in banks.

Every individual in society benefits from financial products and services to meet their needs. Individuals who wish to benefit from financial products and services must first have accurate and complete knowledge of those products. Managing their assets and budgets is important for individuals of all ages, especially young people. This situation is shaped in line with the decisions made by individuals in finance and affects the welfare and development level of both the society and the country.

Financial decisions are directly proportional to financial literacy. Financial literacy consists of the financial knowledge, skills, attitudes and behaviors that individuals should have in order to understand the basic economic principles and to be able to interpret economic developments with the developing technology and to turn to the right financial instruments.

As stated in the researches, the concept of financial literacy is a concept that is effective in the short or long term decisions of individuals who have basic knowledge and experience in making financial decisions, protecting their capital and encouraging them to save. Being financially literate, social and financial awareness and the rationality it brings with it provide socio-economic benefits to consumers. This also contributes to economic growth. It is an effective concept for consumers to direct their investments to the right and reliable goods and services, to apply efficient exchange and borrowing methods (Yücel, 2017:19).

Hilgert (2003) argues that when a comparison is made between individuals with low and high levels of financial knowledge, individuals who pay their bills on time and pay attention to their expenses are positively affected by the level of financial knowledge of financial behavior. According to Sam et al. (2012), financial behavior is shaped by combining the financial knowledge and psychological variables that an individual has. These psychological variables define the motivation of the individual, the tendency to spend and save, and the financial behavior action that the individual will perform in financial matters in the face of any risk that he may encounter in the market.

Another issue that emphasizes the importance of financial literacy is that people think that they have enough information about financial knowledge, financial attitude, financial behavior and other elements that make up financial literacy. As a result of seeing the financial information levels better than they are, people in this situation make wrong decisions in the transactions they will make and cause risks that will cause distress to their investments (Şengüloğlu, 2019: 6).

2. LITERATURE REVIVAL

Financial literacy is also of great importance in terms of society. The complexity of financial products, which are valid for the individuals who make up each society, affects the structure of the society in a disruptive way. With the increase of these individuals in society, the order in financial markets has deteriorated and individuals who have completed their financial education have caused an increase in social welfare by making the right decisions (Mandell, 2006:1).

As a result of Cude et al. (2006) studies, it was concluded that the opinions of family members had a high impact on the financial knowledge and attitudes of the participating students compared to other factors. In yet another study, Volpe (1998) found that students' knowledge of investment was lower than about saving

According to Dew and Xiao (2011), if the factors affecting financial behavior are classified under four headings, these are; savings, investments, cash flow management and credit management. In this context, before valuing financial literacy, the saving and consumption behaviors of individuals come to the forefront. Individuals who do not have sufficient savings tendencies are less likely to make financial investments. If one has to define the concept of saving in the simplest terms, it can be defined as the remaining part of the income. In other words; attitude is expressed in the form of saving and increasing money. Saving money is the key to success. It is the sacrifice made from today's consumption in order to create better living conditions in the future. It makes assumptions that the traditional economic approach will make more profit by basing consumption and saving decisions on information and logic, and that it will support and save by spending less than its own income (Barmaki, 2019:22).

In the researches conducted on the household, it was seen that the reason for excessive indebtedness was due to lack of financial literacy (Güler, 2015:26). In the study conducted on the Turkish Credit Card Market, it was

found that financial literacy played an important role in determining the extent to which the credit card was affected (Akin, 2012).

Another study found that financial literacy was associated with borrowing behavior, that people with high levels of financial literacy were also more attentive to excessive borrowing, and that consumers' knowledge levels were higher than other consumers. For this reason, financial literacy has demonstrated its importance in preventing borrowing behavior (Güler, 2015:26).

Güler and Tunahan (2017) conducted a study by applying a survey to 453 people in order to investigate the effect of the financial literacy level of individuals residing in Sakarya on their borrowing and saving behaviors by investigating whether there is a connection between them and demographic characteristics. According to the results obtained from the research, it was concluded that more than half of the individuals residing in Sakarya had a low level of financial literacy, and in terms of demographic characteristics, the financial literacy levels of women, married, high school and university graduates and individuals between the ages of 28-37 were high compared to other factors.

Sevim et al. (2012) conducted a study to measure the financial literacy rates of individuals in Eskişehir and to measure the behavior of individuals against excessive debt. As a result of the survey conducted on 550 people, 13% were found to be high financial literacy, 47% were medium and 40% were low level financial literacy. Although excessive borrowing behavior is not seen in individuals with high levels of financial literacy, it has been observed that their credit use and expenditure are made consciously. For this reason, it is seen that financial literacy has a great impact on individuals.

Mandell and Klein (2017) examined the effect of financial literacy on financial behavior in their study on high school students. When students who took finance courses individually and students who did not take finance courses were compared, it was found that students who took finance courses exhibited better financial behaviors.

Along with the mentioned studies, many studies in the literature have been prepared to determine the financial literacy levels of university students and to determine the factors affecting the determination of the financial literacy levels of the students (Chen and Volpe (1998)., Sabri and Macdonald, (2010)., Kılıç et al., (2015)., Bayram, (2010)). In related studies, it was concluded that participants with low levels of financial literacy could not benefit sufficiently from financial innovations and financial instruments.

3.DATA AND METHOD

In order to determine the financial literacy level of Bilecik province and to measure its socio-economic impact, the survey method was used as a data collection tool on a total of 600 randomly selected individuals. The study was based on survey questions conducted by the OECD in 2011 and 2012 aimed at measuring the financial literacy of individuals. The survey consists of three parts. The first of these consisted of 4 closed-ended questions containing demographic information of individuals. The second part consists of 18 closed-ended questions and is prepared to observe the previous experiences of the respondents about financial instruments and finally to measure the financial infrastructure that the participants have about financial instruments and the extent to which they can use this information when using financial instruments with the 3-point Likert method in the third part. The obtained data were analyzed by t-test and Anava method.

3.1.BİLECİK PROVINCE SAMPLE DEMOGRAPHIC CHARACTERISTICS

In the study, In this section, the demographic characteristics of 600 people participating in the study are mentioned. In this section, tables of the findings obtained according to the results of the analyzes made on the data and the comments related to these tables are included.

Table 3.1.1. Frequency and Percentage Distribution of Gender Group of Study Participants

Gender	Frequency	Percentage
Female	373	62.2
Male	227	37.8
Total	600	100

Within the scope of the survey, 62.2% of the individuals surveyed, i.e. 373 people, are women, and 37.8%, i.e. 227 people, are men. When we observed the distribution between male and female frequencies, it turned out that there was a big difference in terms of gender.

Table 3.1.2. Frequency and Percentage Distribution of Age Group of Study Participants

Age	Frequency	Percentage
18-28	113	18.8
29-39	295	49.2
40-50	131	21.8
50+	61	10.1
Total	600	100

Table 3.1.2 While the rate of participants in the 18-28 age group was shown as 18.8%, the rate of participants in the 29-39 age group was stated as 49.2%. It is stated that it is 21.8% among 40-50 years old and finally 10.1% over 50 years old. When the age rates of the participants in Bilecik province are examined, it is seen that those who are "29 – 39" are in the density with 49.2% and that the individuals in the "50 years and over" age group constitute the least part with 10.1% participation.

This situation shows that expenditures are made more in this age range and it is understood that concentrating on the age group specified in the survey will be useful for the survey.

Table 3.1.3. Frequency and Percentage Distribution of Study Participants

Education	Frequency	Percentage
primary school	157	34,7
secondary school	62	13,7
High school	137	30,2
University	83	18,3
Postgraduate	14	3,1
Total	453	100

Table 3.1.3. When the frequency and percentage distribution of the participants regarding the educational status are examined, it is observed that the largest proportion of primary school graduates, ie 157 participants, constitute 34.7%, followed by 30.2% of high school graduates.

Table 3.1.4. Frequency and Percentage Distribution of Occupational Groups of the Participants of the Study

Professional Status	Frequency	Percentage
Public Sector	264	44.0
Private	139	23.2
Self-employment	76	12.7
Student	26	4.3
Unemployed	37	6.2
Retired	55	9.7
Total	600	100

It was revealed that 44.0% of the participants in the study, that is, 264 people were working in the Public Sector, that 23.2%, that is, 139 people were in the Private Sector, that 12.7% of 76 people were in self-employment, 4.3% of 26 people were students, and 9.7% of 55 people were retired and finally 6.2% of 37 people were not working. Considering the table, it is seen in Table 3.1.4 that the highest rate belongs to the Public Sector with 44.0% and the lowest rate belongs to the students with 4.3%.

3.2.BİLECİK PROVINCE SAMPLE FINANCIAL INFRASTRUCTURE LEVEL

The relevant part of the research consists of 18 closed-ended questions and has been prepared by aiming to learn the previous infrastructure and experience of the people who participated in the survey in Bilecik

regarding financial instruments. The names given to the tables contain the topics of the questions prepared for the survey

Table 3.2.1. Frequency and Percentage Distribution of Participants' Methods of Realizing Their Financial Investments

	Frequency	Percentage
By negotiating with different financial institutions	269	44.8
Evaluating the options of a single financial institution	241	40.2
I wouldn't be surprised by what I know	28	4.7
I ask around	37	6.2
I don't know	25	4.2
Total	600	100,0

As can be seen in Table 3.2.1, 44.8% of the respondents in Bilecik province preferred to make their investments by meeting with different financial institutions before realizing their financial investments by providing a majority. This situation revealed that 269 people did not have prejudice about institutions and determined their financial preferences by having information.

Table 3.2.2. Frequency and Percentage Distribution of Information Sources Affecting Financial Investment Sources

	Frequency	Percentage
Advertisements	10	1.7
Hearsay Informations	9	1.5
Information on financial instruments written on the Internet	142	23.7
Information from private financial advisors	269	44.8
Introductions of bank sales representatives	83	13.8
Recommendations on finance pages, such as newspapers	3	.5
Private finance publications	8	1.3
Peer-to-peer advice	27	4.5
Television and radio programs	4	.7
Own experiences	31	5.2
I don't know	14	2.3
Total	600	100,0

Table 3.2.2 includes sources of information affecting sources of financial investment. Within this information, among the first choices of investors was the information received from private financial advisors. It was concluded that this investment source, which is preferred by a large majority with a rate of 48.8%, creates the decision mechanisms of investors with the help and support of experts in the field of finance, and makes the investment more reliable and conscious. Among the second highest preferences, 23.7% of them have information written on the internet about financial instruments. This result shows that the people who will invest in us want to access more information in a faster and easier way.

Table 3.2.3. Frequency and Percentage Distribution of Participants' Previous Methods of Saving Money

	Frequency	Percentage
Hiding in somewhere such as home etc.	52	8,7
In the bank term deposit account	270	45,0
Financial investment instruments (bonds, stocks, etc.)	84	14,0
Through the acquisition of property such as land, house, car	159	26,5
With funds such as private pensions, etc.	10	1,7
I have never saved money	17	2,8
I have not got enough money to save	8	1,3
Total	600	100,0

Table 3.2.3 shows that 45.0% of the participants accumulated their investments in a term deposit account at the bank. They attach importance to the valuation of their savings in these deposit accounts.

Table 3.2.4. Frequency and Percentage Distribution of Home Ownership in Place of Residence

	Frequency	Percentage
No debt	481	80,2
Mortgage loan still continues	22	3,7
I'm a tenant	95	15,8
Employer's owned	2	,3
Total	600	100

The status of the participants in ownership of the houses they reside in is indicated in the table above. More than half of the participants were found to belong to him or his family with a rate of 80.2% and were found to be in the answers of 481 people who did not have any debts.

Table 3.2.5. Frequency and Percentage Distribution Showing the Main Source of Income in the Participants' Households

	Frequency	Percentage
Salary and remuneration	473	78,9
Self-employment or business earnings	105	17,5
State aid	4	,7
Real estate income	6	1,0
Help from family members	8	1,3
Other incomes	4	,7
Total	600	100

Most of the answers given by the participants in the research are 78.9% of the household's main source of income with salary and wages. This situation shows that Bilecik province is more developed in the field of service sector, and among the information obtained during the study was indicated by the participants in face-to-face interviews, most of whom worked as workers. However, it was stated that the income sources of the people who participated at a rate of 17.5% were self-employment or commercial earnings. These people consist of tradesmen and employers. This segment, whose earnings are not fixed, has experienced a decline in their income due to covid-19, some of them have stated that they have to end their work.

Table 3.2.6. Frequency and Percentage Distribution of Persons Responsible for Payments in the Household

	Frequency	Percentage
Female / Mother	18	3,0
Male / Father	361	60,2
Spouses together	180	30,0
All family members together	35	5,8
Other individual(s) of the family	6	1,0
Nobody / We don't make payments	0	0
Total	600	100,0

According to the table above, it is seen that 60.2% of the participants, ie 361 people, are covered by the male/father from the payments in the household. This situation seems to consist of a patriarchal society as a society.

Table 3.2.7. Frequency and Percentage Distribution of the Amount of Credit Cards Held by the Participants

	Frequency	Percentage
None	69	11,5
1	394	65,7
2	114	19,0

3	22	3,7
4 and more	1	,2
Total	600	100

Table 3.2.7. contains information on the amount of credit cards held by respondents. Within this information, it was concluded that a maximum of one credit card was used with a rate of 65.7% and two were used with a rate of 19%. As a result, it was found that most of the participants were cautious against credit card use and borrowing.

Table 3.2.8. Frequency and Percentage Distribution of Participants' Highest Credit Card Debt to Date

	Frequency	Percentage
0-1500 TL	54	9,0
1501-3000 TL	171	28,5
3001-4500 TL	248	41,3
4501-6000 TL	101	16,8
6001 TL and more	26	4,3
Total	600	100,0

It is observed that the highest credit card debt of the participants to date is between 3000-4500 TL with a rate of 41.3%. It has been observed that the awareness of using credit cards is formed in almost most people.

Table 3.2.9. Frequency and Percentage Distribution of the Total Average Amount of Participants' Monthly Expenditures

	Frequency	Percentage
0-500 TL	16	2,7
501-1000 TL	20	3,3
1001-1500 TL	75	12,5
1501-2000 TL	133	22,2
2001 TL and more	356	59,3
Total	600	100

In Table 3.2.9., when asked what was the average amount of the participants' monthly expenditures, 59.3% stated that they spent 2001 TL or more.

Table 3.2.10. Frequency and Percentage Distribution of Reasons Why Participants Previously Used Personal Loans

	Frequency	Percentage
To pay bills, credit cards, etc.	32	5,3
For various needs of the house	312	52
For vacation or travel	15	2,5
For special situations such as marriage, education, etc.	119	19,8
For help to other family members or relatives	5	,8
I did not use	117	19,5
Total	600	100,0

In Table 3.2.10, it is understood that the majority of the participants, i.e. 52%, 312 people use personal loans for various needs of the house. In the second place, there are people who use it for their special situations such as marriage, education, etc. with a rate of 19.8%, while it is seen in the research that the participants do not use personal credit at all with a rate of 19.5%.

Table 3.2.11. Frequency and Percentage Distribution Showing How Many Times Participants Have Previously Used Credit

	Frequency	Percentage
Never	95	15,8

1-2	425	70,8
3-4	66	11,0
5-6	6	1,0
7 and more	8	1,3
Total	600	100,0

It was determined that the most answers to the question of how many times you have used credit before were answered as "1-2" with a rate of 70.8%. This situation reveals that the use of credit is high in Bilecik province and the participants apply for credit because the salaries and fees received are not sufficient.

Table 3.2.12. Frequency and Percentage Distribution of Previously Used Mortgage Products of Participants

	Frequency	Percentage
Fixed interest mortgage loan	32	5,3
Decreasing installment mortgage	23	3,8
Increasing installment mortgage	8	1,3
Variable rate mortgage	5	,8
I've never used a mortgage	532	88,7
Total	600	100,0

When asked which mortgage products have you used before, 88.7% answered "I have never used a mortgage".

Table 3.2.13. Frequency and Percentage Distribution of Whether Participants Earned From Their Previous Savings

	Frequency	Percentage
Yes	419	69,8
No	142	23,7
Never had a saving	39	6,5
Total	600	100,0

Those who earned from the previous savings of the participants consisted of 419 people with a rate of 69.8%. With this answer, it has been observed that more than half of the investors save their money by making the right investments.

Table 3.2.14. Frequency and Percentage Distribution of Whether Participants Have Made Losses from Previous Financial Investments

	Frequency	Percentage
Yes	70	11,7
No	475	79,2
Never had a saving	55	9,2
Total	600	100,0

Table 3.2.14 shows the percentage distribution above showing whether the participants have never lost money on my investments before. In the table, it is seen that the rate of those who say 'no' is 79.2%. This situation shows that investors are cautious in their savings and invest in the right places.

Table 3.2.15. Frequency and Percentage Distribution Showing the Subject on which Participants Previously Received Support from the Financial Advisor

	Frequency	Percentage
For saving and invests	59	9,8
To use credits	299	49,8
For various types of insurance	15	2,5
For debt management	39	6,5
I never consulted	188	31,3
Total	600	100,0

Most of the answers given by the participants in the research show that they receive support from financial advisors to use credit with a rate of 49.8%. Considering the province of Bilecik in general, most of the employees are in the public and private sectors and meet their livelihoods with salaries and wages. Within the scope of the information obtained in the interviews, it was learned that the loan was applied for by stating that their earnings were not enough for the payments.

Table 3.2.16. Frequency and Percentage Distribution of Participants' Regret for Previous Financial Decisions

	Frequency	Percentage
My savings or investments	15	2,5
Credits I've used	98	16,3
The various types of insurance I use	17	2,8
For debt management	13	2,2
I've never regretted it	457	76,2
Total	600	100,0

In Table 3.2.16, the frequency and percentage distribution of the participants' regret for their previous financial decisions are indicated above. Most of the participants answered 'I have no regrets' with a rate of 76.2%. Investors have stated in bilateral meetings that they consider their needs when making their financial decisions.

Table 3.2.17. Frequency and Percentage Distribution of Participants' Methods of Finding Money When Needed Urgent Money

	Frequency	Percentage
Sale of assets (Automobiles, valuables, etc.)	276	46,0
Debt from family members or relatives	290	48,3
Financial debt	3	,5
Additional work, overtime, etc.	9	1,5
I can't find anywhere	22	3,7
Total	600	100,0

When participants need urgent money, it is seen that they borrow from family members and relatives at the top of their methods of finding money with a rate of 48.3%. However, the sale of assets owned by individuals (automobiles, valuables, etc.) ranks second and is among the preferences of 46.0%.

Table 3.2.18. Frequency and Percentage Distribution Showing What Age Range Financial Planning for Retirement Should Be

	Frequency	Percentage
18-28	157	26,2
29-39	345	57,5
40-50	94	15,7
51+	1	,2
Making plan is pointless	3	,5
Total	600	100,0

Most respondents said financial planning for retirement should be between the ages of 29 and 39. Those who gave this answer were 57.5%.

3.3.BİLECİK PROVINCE SAMPLE FINANCIAL LITERACY LEVEL

The 15 questions prepared by the 3-point Likert method in the third part of the questionnaire were prepared in order to measure the knowledge of the participants about financial instruments and how much they can benefit from this information while benefiting from financial instruments.

Table 3.3.1. Participants' Knowledge Levels of Financial Instruments

	Do not know well	I heard but do not know much	I know well
Exchange rate	4,3	15,7	80,0
Private Pension	5,0	36,2	58,8

Mutual Fund	8,5	59,7	31,8
Mortgage	56,8	32,7	10,5
Bank Guaranteed Loan	25,5	33,3	41,2
Unsecured Loan	17,2	40,3	42,5
Credit card	1,7	5,0	93,3
Term Deposit Account	6,8	34,7	58,5
Savings Fund	12,3	52,5	35,2
Microcredit	46,2	38,3	15,5
Life Health etc. Insurances	5,0	24,2	70,8
Stock	8,2	53,5	38,3
Conversion	27,0	56,5	16,5
Prepaid Card	24,8	54,8	20,3
Participation Banking	37,5	44,3	18,2

Based on the responses of 600 respondents, their level of knowledge about financial instruments was measured in order;

The number of people who answered "I know well about the exchange rate" is 480 (80.0%), the number of people who say they have heard but do not know much is 94 (15.7%), and 26 people (4.3%) do not know well. It is seen that 30 participants (5.0%) have no knowledge about private pension, 217 participants (36.2%) have heard of private pension but do not have any knowledge. The remaining 353 (58.8%) are familiar with private pensions.

Most of the answers given by the participants about the mutual fund are that 358 people have heard of 59.7% but do not have enough information. For mortgage products, this is the case with 341 people (56.8%) having no information. In bank-guaranteed loans, it is seen that the rates are close to each other. 153 (25.5%) people who answered 'I have no information', 200 (33.3%) people who said 'I have heard but I have no information' and finally 247 (41.2%) people answered 'I know well'.

In unsecured loans, 42.5% answered that they know well, while 40.3% said that they had heard but had no information. In line with the answers given by 560 (93.3%) participants, it was concluded that they knew the credit card well. This situation also shows that the use of credit cards is widespread.

It is seen that 351 (58.5%) respondents have a good knowledge of term deposits, while 41 people do not have any information about 6.8%. 52.5% of the participants stated that they had heard of the savings fund but did not know about the savings fund. 12.3% of the participants stated that they had no knowledge and 35.2% stated that they knew well. 46% of the participants stated that they did not have information about microcredit.

While the rate of those who answered 'I know well' about life, health, etc. insurances was 70.8%, 5.0% declared that they had no information. 38.5% of the answers given to the participants about the concept of stock, that is, 230 people, stated that they knew this concept well, and 321 people with 53.5% stated that they had heard of the concept of stock but had no information.

On the subject of bonds, 56.5% of the participants answered 'I have heard but I have no information'. While the number of those who know well about the prepaid card and those who declare that they do not have an idea are almost close to each other, 54.8% answered the question that they have heard of the prepaid card but do not know it. While the number of those who say they do not have any information about Participation Banking is 225 (37.5%), the number of those who say I know well is 109 (18.2%), and the most answers are 266 (44.3%) people but I do not have any information.

The level of knowledge that participants have about financial instruments is of great importance in reflecting on their behavior when making decisions about financial issues. Financial behavior can be thought of as the ability of individuals to monitor their personal financial situation, to use their money, to manage their savings and investments, debts and loans, and to evaluate their investments in the short and long term. The level of utilization of individuals from the 15 financial instruments listed above is reported in Table 3.3.2.

Table 3.3.2. Participants' Utilization Levels of Financial Instruments

	I have never used	I have used before	I have been using regularly
Exchange rate	21,7	44,3	34,0
Private Pension	56,0	28,2	15,8
Mutual Fund	73,0	24,5	2,5
Mortgage	92,3	6,7	1,0
Bank Guaranteed Loan	71,8	27,2	1,0
Unsecured Loan	64,0	28,0	8,0
Credit card	5,8	9,8	84,3
Term Deposit Account	41,7	25,3	33,0
Savings Fund	82,7	15,2	2,2
Microcredit	87,8	10,5	1,7
Life Health etc. Insurances	45,0	43,8	11,2
Stock	76,5	21,7	1,8
Conversion	95,8	3,2	1,0
Prepaid Card	93,0	5,8	1,2
Participation Banking	92,0	6,0	2,0

Those who use the exchange rate regularly are 34%, while those who use it before are 44.3%. This situation shows that those who answered "I know well" in the table given to us above invested in the exchange rate. 336 respondents stated that 56.0% had never used private pension, while 169 people had used it before with a rate of 28.2%. Most of the answers given by the participants were that 438 people had never used the mutual fund with a rate of 73.0%. This situation confirms to that my individuals are not aware of the mutual fund and do not have any knowledge.

For mortgage products, it was found that 554 people did not use it at all with a rate of 92.3%. Most of the participants stated during the test that they did not know what mortgage meant in face-to-face meetings. This shows that it uses different sources in purchases.

In the case of bank-guaranteed loans, 71.8% of the participants stated that they had never used them. In unsecured loans, 63.8% of the participants declared that they had never used it. Regular use of credit cards is 84.3%. It is seen that a total of 506 people know the credit card well and regular use is widespread. It is seen in the table that 250 (41.7%) participants do not use term deposits at all, while only 198 (33.0%) people use them regularly.

82.7% of the participants answered 'I have never used the savings fund'. It is an indication that individuals do not have enough information about the savings fund. It was determined that 87.8% of the participants, that is, 527 people, never used microcredit. In line with the answers given, the participants stated that they did not have enough information. While the rate of those who answered 'I use regularly' about life, health, etc. insurances was 11.2%, 45.0% declared that they did not use it at all.

76.5% of the answers given to the participants about the use of the stock, that is, 459 people, stated that they had never used the stock, 19 people with 3.2% stated that they had used it before, and 1.0% had used it regularly. On the subject of bonds, 95.8% of the participants answered 'I have never used them'. The number of people who answered 'I have never used' about the prepaid card was 558, or 93.0%, while the number of those who used it before was 5.8%, indicated in Table 3.24. This is because they don't know what a prepaid card means and they don't need to. The rate of those who answered 'I have never used it' to Participation Banking is 92%.

3.3.1.MEASUREMENT OF FINANCIAL LITERACY LEVEL

In determining the financial literacy levels of the participants, t-test was applied to measure their level of knowledge about financial instruments and to test whether their level of utilization of these instruments differed on demographic characteristics such as gender and educational status. In order to test the differences in terms of measuring the level of knowledge about financial instruments of education, ANOVA analysis was performed.

3.3.1.1 T-TEST ANALYSIS OF PARTICIPANTS

The level of participants' utilization of financial instruments and their effects on the level of financial literacy are examined under subheadings with t-test findings.

3.3.1.2. GENDER T-TEST ANALYSIS

Independent group t-test was applied to test whether the gender of the participants differed in terms of their level of utilization of financial instruments and determination of financial literacy rates.

Table 3.3.3. Gender Difference in Knowledge Level of Basic Financial Instruments (Independent Sample T-Test)

Variables	N	Average	Standard deviation
Exchange rate			
Woman	373	2,82	,465
Male	227	2,65	,587
Private Pension			
Woman	373	2,62	,571
Male	227	2,40	,596
Mutual Fund			
Woman	373	2,29	,605
Male	227	2,15	,557
Mortgage			
Woman	373	1,60	,695
Male	227	1,44	,637
Bank Guaranteed Loan			
Woman	373	2,22	,791
Male	227	2,05	,811
Unsecured Loan			
Woman	373	2,30	,724
Male	227	2,17	,736
Term Deposits			
Woman	337	2,56	,613
Male	227	2,45	,632

Table 3.3.3. continued

Variables	t-value	df-value	Significance Value
Exchange rate			
Woman	3,833	396.364	0.000
Male			
Private Pension			
Woman	4,619	461.679	0.000
Male			
Mutual Fund			
Woman	2,918	507.921	0.004
Male			
Mortgage			
Woman	2,912	509.338	0.004
Male			
Bank Guaranteed Loan			
Woman	2,575	468.153	0.010
Male			
Unsecured Loan			
Woman			
Male	2,131	471.238	0.033

Term Deposits			
Woman	2,059	466.562	0.040
Male			

The gender differences in the level of knowledge of the participants regarding financial instruments are shown in Table 3.3.3. by independent sample T-test. Table 3.3.3. When examined, it is seen that there is a significant difference in exchange rate, private pension, mutual fund, mortgage variables in terms of the gender of the participants ($p < 0.05$). It was found that there was no significant difference in the variable of bank guaranteed loans, unsecured loans and term deposits according to gender ($p > 0.05$). It was found that women had more information than men in the mutual fund variable.

Table 3.3.4. Gender Differences in Utilization Levels of Basic Financial Instruments (Independent Sample T-Test)

Variables	N	Average	Standard deviation
Private Pension			
Woman	373	1,73	,788
Male	227	1,37	,614
Mutual Fund			
Woman	373	1,36	,540
Male	227	1,18	,429
Mortgage			
Woman	373	1,11	,351
Male	227	1,05	,243
Bank Guaranteed Loan			
Woman	373	1,34	,492
Male	227	1,21	,438
Unsecured Loan			
Woman	373	1,57	,671
Male	227	1,22	,513
Credit card			
Woman	373	2,82	,505
Male	227	2,73	,576
Micro Credit			
Woman	373	1,09	,325
Male	227	1,22	,468
The bond			
Woman	373	1,07	,312
Male	227	1,02	,147
Prepaid Card			
Woman	373	1,05	,288
Male	227	1,13	,348

Variables	t-value	df-value	Significance Value
Private Pension			
Woman	6.247	,562.569	0.000
Male			
Mutual Fund			
Woman	4.611	557.130	0.000
Male			
Mortgage			
Woman	2.239	587.861	0.000
Male			
Bank Guaranteed Loan			
Woman	3.523	520.464	0.000
Male			

Unsecured Loan Woman Male	7.120	567.481	0.000
Credit card Woman Male	2.018	429.743	0.044
Micro Credit Woman Male	-3.930	359.089	0.000
The bond Woman Male	2.527	568.590	0.012
Prepaid Card Woman Male	-2.698	411.180	0.007

The gender differences in participants' utilization of basic financial instruments are shown in Table 3.26 by independent sample T-test. In terms of the gender of the participants, it is seen that there is a significant difference in the variables of private pension, mutual fund, mortgage, bank guaranteed loan, unsecured loan and micro credit ($p < 0.05$). It was found that there was no significant difference in credit card, bond and prepaid card variables according to gender ($p > 0.05$). In Table 3.3.4., apart from the prepaid card variable, it is observed that women benefit from financial breaks more than men in private pension, mutual fund, mortgage, bank guaranteed loan, unsecured loan, credit card, micro credit and bond variables.

3.3.1.3. TRAINING ANOVA ANALYSIS OF PARTICIPANTS' KNOWLEDGE LEVEL ON BASIC FINANCIAL INSTRUMENTS

Table 3.3.5. Anova Analysis of the Level of Knowledge of Participants on Basic Financial Instruments Regarding Education

Variables	Primary School Avg./Standard deviation (1)	Secondary School Avg./Standard deviation (2)	Highschool School Avg./Standard deviation (3)	Associate Degree Avg/ Standard Deviation (4)
Exchange rate	1,83	2,44	2,79	2,78
Private Pension	2,00	2,44	2,57	2,69
Mutual Fund	1,83	2,31	2,17	2,37
Mortgage	1,50	1,69	1,53	1,60
Bank Guaranteed Loan	1,83	2,25	2,20	2,31
Unsecured Loan	1,67	2,42	2,28	2,32
Credit card	2,83	2,81	2,92	2,91
Term Deposits	1,67	2,44	2,61	2,48
Savings Fund	1,67	2,31	2,15	2,30
Micro credit	1,50	1,61	1,62	1,73
Life, Health, etc.	1,67	2,47	2,67	2,71
Stock	1,67	2,25	2,28	2,22

The bond	1,67	2,00	1,74	1,88
Prepaid Card	1,33	1,83	1,77	2,21
Participation Banking	1,33	1,44	1,61	2,15

Table 3.3.5. continued

Variables	License Avg./Standard deviation (5)	Graduate Avg./ Standard deviation (6)	F-value	p-value
Exchange rate	2,77	2,96	7,657	.000
Private Pension	2,44	2,52	3,943	.002
Mutual Fund	2,20	2,43	3,119	.009
Mortgage	1,45	1,65	1,278	.272
Bank Guaranteed Loan	1,98	2,17	2,949	.012
Unsecured Loan	2,15	2,30	2.202	.053
Credit card	2,94	2,96	1,116	.351
Term Deposits	2,47	2,43	3,860	.002
Savings Fund	2,29	2,30	2.495	.030
Microcredit	1,80	1,87	1,656	.143
Life, Health, etc.	2,67	2,74	4,845	.000
Stock	2,40	2,43	2,825	.016
The bond	2,05	2,30	7,134	.000
Prepaid Card	2,07	2,17	10,602	.000
Participation Banking	1,93	1,96	13,614	.000

In Table 3.3.5, an anova analysis of the level of education of the participants' level of knowledge about the main financial instruments is indicated above. In line with the data obtained, the exchange rate variable in basic financial instruments is determined by the primary school - high school; primary school -associate degree; primary school - bachelor's degree; It is seen that there is a significant difference between primary school and postgraduate. There is a significant difference between associate-bachelor's degree for the private pension variable, associate-bachelor's degree for the bank guaranteed loan, primary-high school for the term deposit variable, primary-high school, primary-associate, primary-undergraduate and primary-graduate for life health etc. insurances. High school-undergraduate, high school-graduate for the bond variable; There is a significant difference between high school-associate degree, high school-license for prepaid card and finally middle school-associate degree, middle school-license for participation banking.

CONCLUSION

Determining the level of financial literacy and measuring the impact on individuals reveals the importance of the study that this research has not been conducted before in Bilecik. The impact of the concept of financial literacy on both individuals and society has recently become important. It is a concept that enables individuals in Bilecik to have sufficient knowledge of financial information, financial attitude, financial behavior and other elements that make up financial literacy and to make the right decisions within this information. As a result, they make wrong decisions in their transactions and ensure that they can make the right decisions without causing risks that will cause distress to their investments.

Today, individuals want to reach the maximum level of financial benefit with the limited resources they have. However, in order to benefit and make the right decisions, it is necessary to have information about financial products and services. People who cannot access this information can make wrong choices. This situation adversely affects both the individual and the social welfare of the society.

As a result of the studies in the literature (Chen and Volpe (1998)., Sabri and Macdonald, (2010)., Kılıç et al., (2015)., Bayram, (2010)., financial literacy studies were carried out by the state and independent organizations by dividing them into various groups such as university and high school students, public and private sector employees. Individuals need to be financially literate so that they do not have difficulties and make mistakes when making decisions in financial matters. The fact that an individual is a good financial literate comes to the fore with the financial education he receives. In our country, there are institutions and organizations carried out for individuals to operate in financial education. These institutions act independently of each other in financial education. Studies conducted to make individuals more aware of financial issues have been shown to be beneficial for both individuals and the welfare of society.

As a result of these evaluations, as a result of the study conducted in Bilecik province, in line with the data obtained, the exchange rate variable in basic financial instruments is determined by the primary school and high school; primary school -associate degree; primary school - bachelor's degree; It is seen that there is a significant difference between primary school and postgraduate. There is a significant difference between associate-bachelor's degree for the private pension variable, associate-bachelor's degree for the bank guaranteed loan, primary-high school for the term deposit variable, primary-high school, primary-high school, primary-bachelor's degree and primary-graduate for life health etc. insurances for the bond variable High school-undergraduate, high school-postgraduate; There is a significant difference between high school-associate degree, high school-license for prepaid card and finally middle school-associate degree, middle school-license for participation banking.

In addition, in the study, the participation levels of the participants in the statements related to the determination of the information, thoughts and financial literacy level of the participants about financial issues were determined for the Bilecik province and according to the findings obtained, the highest participation rate (73.8%) was determined as 'I can keep my monthly payments and expenses under control'. The lowest participation rate was (0.7%) that 'the type of securities invested should be increased to reduce the risk of an investment' (0.3%), 'that the lack of financial information harms the country's economy' (0.3%), 'Basic level finance education should be given compulsorily in high school' (0.3%), 'The importance of financial literacy should be spread to the public through promotions such as public notices etc.' (0.3%), 'government institutions should work to raise public awareness about financial literacy' (0.7%) and 'the society of non-governmental organizations work to raise awareness about financial literacy' (0.5%). This is an indication that the participants have a financial literacy consciousness. As it can be understood from the data, almost all of the participants residing in Bilecik province foresee that the provision and dissemination of financial literacy training and the support of the state and non-governmental organizations will contribute to financial development. However, the lack of training on financial literacy in Bilecik supports these answers.

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Barack Obama Döneminde İran Nükleer Programına Yönelik Değişen ABD Tutumu*

Doktora Öğrencisi Uğur ZENGİNER¹

Prof. Dr. Sibel KAVUNCU²

¹ Trakya Üniversitesi / Sosyal Bilimler Enstitüsü, Uluslararası İlişkiler Anabilim Dalı, ugurzenginer@trakya.edu.tr, ORCID: 0000-0002-0448-2655.

² Trakya Üniversitesi / İktisadi ve İdari Bilimler Fakültesi, Uluslararası İlişkiler Bölümü, skavuncu@trakya.edu.tr, ORCID: 0000-0002-9465-3648.

Özet: Barack Obama'nın ABD'de 2000'lerin ikinci on yılının başları itibarıyla başkan olarak iktidara gelmesi, beraberinde ABD dış politika yönelimlerinde belirgin bir değişikliği de getirmiştir. Dış politikaya ilişkin söylemlerinde “değişim” vurgusuyla dikkat çeken Obama'nın bu yaklaşımı, İran'a yönelik ABD politikalarına da yansımıştır. Özellikle selefi George W. Bush döneminde İran'ın nükleer programı nedeniyle oldukça gerginleşen ABD-İran ilişkileri, Obama'nın başkanlığıyla birlikte yeni bir boyut kazanmıştır. Obama'nın dış politikada değişim anlayışı, ABD'nin İran'ın nükleer politikasına yönelik tutumuna da belirgin bir şekilde yansımıştır. Bu bağlamda, iki ülkenin ilişkilerinde hemen olmasa da süreçle birlikte özellikle de Obama'nın başkanlığının ikinci döneminde ciddi bir yumuşama görülmeye başlamıştır.

Obama'nın dış politikada değişim söylemi ve dış politika sorunlarının çözümünde diplomasi uygulamalarına ağırlık verilmesi yaklaşımı çerçevesinde, Obama yönetimiyle birlikte İran'ın nükleer programına yönelik olarak ABD'nin tutumu da değişmiştir. İki ülke arasındaki ilişkileri gerginliğe sürükleyen bu sorunu diplomasi yoluyla çözmeye çalışmaları sonuçlarını, Batı ile ılımlı ilişkiler izlenmesine önem veren Hasan Ruhani'nin 2013'de İran'da cumhurbaşkanı seçilmesi ile vermeye başlamıştır. Obama ve Ruhani yönetimlerinin birbirleriyle diyaloga açık yaklaşımları, ABD ve İran ilişkilerinde yumuşama yönünde yeni bir sayfa olarak değerlendirilebilecek olan “Kapsamlı Ortak Eylem Planı (KOEP)”nın imzalanmasına giden yolu açmıştır.

Bu bağlamda çalışmada öncelikle, Soğuk Savaş döneminin son on yılının başlarından itibaren ABD-İran ilişkilerindeki sorun alanlarının belli başlılarından birini oluşturmuş olan; İran'ın Nükleer programına yönelik olarak, ABD'nin Obama dönemiyle birlikte değişen tutumu, süreç analizi çerçevesinde değerlendirilecektir. Bu doğrultuda ise, Obama'nın dış politikada “değişim” söylemi bağlamında ABD'nin İran'ın Nükleer programına yönelik değişen tutumunun, ABD-İran ilişkilerinde bir yumuşama havası oluşturmadaki rolü ele alınacaktır.

Anahtar Kelimeler: ABD, İran, Dış politika, Değişim, İran'ın Nükleer Programı

1. GİRİŞ

Barack Obama'nın başkanlığıyla birlikte nispeten bir yumuşamadan bahsedilen ABD-İran ilişkilerinin tarihsel seyri bağlamında bir değerlendirmeye gidildiğinde, iki ülke ilişkilerinin başlangıcının II. Dünya Savaşı sonrasına, Soğuk Savaş döneminin başlangıç yıllarına uzandığı görülmektedir. II. Dünya Savaşı sonrasında Ortadoğu coğrafyasına yönelik artan ABD ilgisi (Hahn, March 2006: 38) beraberinde ABD-İran ilişkilerinde de bir yakınlaşmayı getirmiştir. Soğuk Savaş yıllarında ABD'nin Sovyetler Birliği (SSCB)'nin etki alanını daraltarak SSCB'ye yönelik bir çevreleme politikası izleme amacıyla (Arıboğan vd., 2005: 204) Ortadoğu, ABD için büyük bir önem taşıdığından (Hahn, May 2006: 5), İran'la ilişkiler de bu çerçevede bir anlayışla şekillenmiştir denilebilir. ABD'nin Soğuk Savaş yıllarında Ortadoğu'ya olan ilgisinin kaynağına ilişkin olarak Bruce R. Kuniholm bunu: “... *Batı'nın bölgedeki çıkarlarına yönelik potansiyel Sovyet tehdidi...*” (Kuniholm, Winter 1987: 9) olarak değerlendirmektedir. Öyle ki, ABD için İran'ın bu doğrultuda taşıdığı önemi, İran Şahı Muhammed Rıza Pehlevi'nin dönemin ABD Başkanı Harry Truman'ın daveti üzerine geldiği ABD ziyareti sonrasında 30 Aralık 1949'da Truman ve Pehlevi'nin, iki ülke arasındaki ilişkilere ilişkin yaptıkları ortak açıklamadaki:

“... Dünyanın herhangi bir yerinde uluslararası barış ve güvenliğe yönelik ciddi bir tehdit, ABD'yi doğrudan ilgilendirmektedir. 1 Aralık 1943'te Başkan Roosevelt, Başbakan Churchill ve Mareşal Stalin Tahran'da Üç Güç Bildirgesi'ni imzaladığında ABD, İran'ın bağımsızlığının ve bütünlüğünün korunmasına yönelik arzusunu açıkça ortaya koydu. Amerika Birleşik Devletleri'nin bu konudaki büyük ilgisi dış politika beyanlarında defalarca teyit edilmiştir ve Amerika Birleşik Devletleri Hükümeti bu politikayı sürdürme niyetindedir...” (Harry S. Truman Library, <https://www.trumanlibrary.gov>)

* Bu çalışma, Prof. Dr. Sibel Kavuncu danışmanlığında, Uğur Zenginer tarafından yazılmakta olan, “2000’li Yıllarda ABD Dış Politikasında İran” adlı doktora tezinden yararlanılarak hazırlanmıştır. (Trakya Üniversitesi, Sosyal Bilimler Enstitüsü, Uluslararası İlişkiler Anabilim Dalı Doktora Programı).

sözlerinde görmek mümkündür.

Ancak belirtilmelidir ki, ABD için İran'ın taşıdığı önem kadar o yıllarda İran için de ABD büyük önem taşımıştır. Hatta Kemal İnat'a göre, İran için ABD, ABD için İran'ın olduğundan daha da büyük önem taşımıştır (İnat, Aralık 2014: 5). Kemal İnat bu durumu:

“ABD'nin Ortadoğu'da aktif olmaya başlamasından beri İran'la kurduğu ilişkilerin bölge üzerindeki etkisi her zaman önemli olmuştur. Şah döneminde Washington yönetiminin İran'la ilişkisi müttefiklik ilişkisi üzerinden yürüyordu ve her iki ülke bölgesel çıkarlarına ulaşmak için birbirlerine destek oluyorlardı. Ancak bu ilişkinin dengeli bir karşılıklı bağımlılık ilişkisi olduğunu söylemek mümkün değildir. Tahran'ın Washington'a olan bağımlılığının daha yüksek olduğu hatta Şah İran'ının ABD'nin bölgedeki jandarması olarak tanımlandığı bir ilişki söz konusuydu.” (İnat, Aralık 2014: 5)

Diye belirtmektedir.

Öyle ki, Pehlevi yönetimi, ABD ile yakın ilişkiler geliştirme konusunda, “Sovyet tehdidi” konusunu ABD'yle ilişkilerde sürekli gündemde tutan bir yaklaşım içinde olmuştur (Alvandi, April 2012: 345, 349).

Gerek ABD gerekse de İran'ın birbirleriyle ilişkilerindeki yakınlaşmanın ana nedenini, SSCB'den kaynaklı olası tehdit algılamalarının oluşturduğu bu karşılıklı iyi ilişkiler ortamı uzun soluklu olmamış, 1979'da İran'da yaşanan rejim değişikliği, ABD-İran ilişkileri açısından adeta bir kırılma noktası oluşturmıştır. 1979 İran İslam Devrimi sonrası Ayetullah Humeyni yönetimi dönemi ile birlikte, Pehlevi yönetimi dönemindeki ABD ve Batı odaklı dış politika anlayışı yerine, dış politikada ABD karşıtı bir tutum benimsenmiştir (Karnap ve Çağla, 2022: 642).

Her ne kadar, 1979'daki rejim değişikliği sonrası İran'ın ABD'ye karşı tutumu sertleşse de, o yıllarda, Ortadoğu'ya olası bir SSCB nüfuzunun ABD'nin temel endişesini oluşturması, ABD'nin başlarda İran'a yönelik tutumunda belirgin bir değişikliği getirmemiş, Basra Körfezi bölgesinin önemi ve İran'ın SSCB'ye olan yakınlığı doğrultusunda, bölgede istikrarlı bir İran'ın varlığı, ABD için önem taşımıştır (Rubin, 1980: 310). Bu dönemde İran, ABD için, SSCB'nin nüfuzunun genişlemesine karşı bir bakıma bir siper olarak görülmüştür. Öyle ki, Amerikalı diplomatların, bir grup “öğrenci” tarafından Tahran'daki Amerikan büyükelçiliğinde 4 Kasım 1979'dan 444 gün süresince rehin alınması (TRT Haber, 03.11.2021) öncesinde bu anlayış, ABD'nin Pehlevi sonrası İran'la iyi ilişkiler sürdürmeye yönelik politikalarında merkezi bir rol oynamıştır (Rubin, 1980: 310) denilebilir.

Ancak, 4 Kasım 1979'da yaşanan “rehine krizi”, ABD yönetiminin de İran'a yönelik ılımlı denilebilecek tutumunda ciddi bir değişimi getirmiş, bir yıldan fazla bir süreyi kapsayan ve “en uzun diplomatik rehine krizi” olarak değerlendirilen krizi, ABD yönetimi, uluslararası hukukun açık bir ihlali olarak değerlendirerek, İran ile tüm diplomatik ilişkileri kesmiş ve İran'a yönelik yaptırımları hayata geçirmiştir (TRT Haber, 03.11.2021).

Barry Rubin'in: *“Rehine meselesi, 1980'de ABD dış politikasının en tartışmalı sorunuydu ve iki ülke arasındaki ilişkilerde tarihi bir düşüşe işaret ediyordu.”* (Rubin, 1980: 307) sözleriyle tanımladığı “rehine krizi” sonrasında her iki ülkenin karşılıklı dış politika davranış ve tutumlarında diyalog ve uzlaşıdan oldukça uzak bir durum oluşmuştur.

Peter L. Hahn'ın belirttiği gibi, “rehine krizi” her iki ülkenin yakınlaşma umutlarını zedelemiş, Pehlevi dönemi İran'ı ABD'nin güvenilir bir güvenlik ortağıyken, *“Humeyni'nin İran'ı diplomatik alanlarda ABD'nin tutarlı bir stratejik rakibi haline”* gelmiştir (Hahn, 22 October 2017).

İki ülke yönetimlerinin birbirlerine yönelik uzlaşıdan uzak tutumları ABD-İran ilişkilerinin işbirliği alanlarından birini oluşturan “nükleer alan” a da yansımış, tarafların birbirlerine yönelik sert tutumları neticesinde, ABD-İran arasında nükleer kapsamda gerçekleştirilmiş olan tüm işbirliği anlaşmaları da sonlandırılmıştır.

ABD-İran ilişkilerinde “rehineler krizi”nin bir dönüm noktasını oluşturduğu “dostane olmayan” ilişkiler süreci, uzun yıllar boyunca, kimi zaman gerginliğin iki ülke arasında ivme yaptığı gelişmelerle 2009'da Barack Obama'nın ABD başkanı oluşuna kadar sürmüştür. Taraflar arasındaki bu gergin ortamı daha da geren, bir bakıma süreç boyunca iki ülkenin temel anlaşmazlık hususlarından biri olarak aradaki gerginliği tırmandıran ise, ABD'nin İran'ın nükleer programına yönelik yaklaşımı olmuştur.

2- ABD-İRAN İLİŞKİLERİNDE 2009 ÖNCESİ NÜKLEER SÜREÇ

1979'da İran'daki rejim değişikliği sonrasında 20 Ocak 2009'da ABD'de Obama'nın başkanlığına kadar gelen süreç boyunca ABD-İran ilişkilerinde kilit anlaşmazlık konularından biri olmuş olan İran nükleer programı ve de bu programa yönelik ABD'nin tutumunun İran'la olan ilişkileri nasıl etkilediğine tarihsel süreç perspektifinden

bakıldığında, İran nükleer programının temellerinin 1957 yılında atıldığı görülmektedir. 1957 yılında İran Şahı Pehlevi'nin, nükleer program için ABD ile anlaşma imzalaması (TRT Haber, 03.04.2015) sürecin başlangıcını oluşturmuştur. 1967'de İran'ın ilk nükleer araştırma reaktörü faaliyete geçse de, 1979 İran Devrimi'nin ardından yeni yönetim nükleer santral inşası anlaşmasını feshetmiş, bunun üzerine ABD de İran'la bir yıl önce yapılmış olan zenginleştirilmiş uranyum sağlama anlaşmasını iptal etmiştir. Humeyni yönetiminin, nükleer programı askıya almasıyla birçok nükleer uzman ülkeyi terk etmiş, ABD'nin Tahran Büyükelçiliği'ndeki rehine krizi ise bir bakıma nükleer ilişkilerdeki son nokta olmuş, rehine krizi sonrasında iki ülke arasındaki nükleer işbirliği de son bulmuştur (TRT Haber, 03.04.2015).

“... ABD ilk olarak 1950’li yılların ortalarında İran ile nükleer alanda işbirliği imzalamıştır. İran Şah’ı, Mısır lideri Nasır’ı ve Sovyetler Birliği’ni bahane ederek sürekli olarak Amerika’dan daha yüksek miktarda silah ve daha yakın işbirliği taleplerinde bulunmuştur.” (Kıbaroğlu, Güz 2013: 2)

Diyan Mustafa Kıbaroğlu'nun da belirttiği gibi, Pehlevi yönetimi 1950'lerin başlarında ABD ile yakın ilişkiler geliştirme, bu doğrultuda ise nükleer işbirliği arayışlarına girmiştir (Kıbaroğlu, Güz 2013: 2). İran'ın bu arayışları 5 Mart 1957'de, “Atom Enerjisinin Sivil Kullanımına İlişkin İşbirliği Anlaşması” (Agreement for Co-operation Concerning Civil Uses of Atomic Energy)'nin ABD ve İran arasında Washington'da imzalanışıyla neticelenmiştir (UN, 05.03.1957). Bu doğrultuda, “Atom Enerjisinin Sivil Kullanımına İlişkin İşbirliği Anlaşması”nın taraflar arasında imzalanışından ve ABD'nin, Pehlevi yönetimindeki İran'a Tahran araştırma reaktörü için desteğinden, Ocak 1979'da Humeyni rejiminin, ABD'nin Körfez kıyısındaki Buşehr'de iki nükleer enerji santrali inşa etme sözleşmesini iptal etmesi ve İran nükleer programını sonlandırması (The Guardian, 24 November 2013) akabinde ABD'nin, İran'la diplomatik ilişkilerini kesmesiyle (US Virtual Embassy, <https://ir.usembassy.gov>), ABD ile nükleer alandaki işbirliği son bulmuştur. Ancak ABD-İran nükleer işbirliği son bulmuş olsa da, İran bir müddet sonra, (1980-1988) İran-Irak Savaşı'yla birlikte, “Buşehr nükleer santralinin onarımı ve tamamlanması konusunda Almanlarla yeni bir nükleer programa” başlamaya yönelmiştir (Anadolu Agency, 13.07.2015). Kıbaroğlu'nun ifadesiyle: “... İran-Irak savaşında enerji sorunun patlak vermesi üzerine Humeyni üzerinde büyük etkisi olan Rafsancani nükleer enerjinin önemini vurgulayıp reaktörlerin tekrar inşasının önünü açmıştır.” (Kıbaroğlu, Güz 2013:3). 4 Haziran 1989'da Humeyni'nin ölümünün ardından Ali Hamaney İran'ın yeni dini lideri olmuş, 1995 yılına gelindiğinde, İran Buşehr'deki araştırma reaktörü projesinin tamamlanması için Rusya ile bir anlaşmaya gitmiştir. Ne var ki, reaktör yaşanan aksaklıklar ve gecikmelerden sonra ancak 2010 yılında tamamlanabilmiştir (Anadolu Agency, 13.07.2015).

İran'ın nükleer programı, 1980'li yılların ortalarından itibaren ABD ile ilişkilerde öne çıkan sorun alanlarından biri olmuş, ABD İran'ı nükleer silah geliştirmeye çalışmakla suçlarken, İran ise bu suçlamalar karşısında ısrarlı bir şekilde nükleer çalışmalarının askeri amaçlar taşımadığını, sivil amaçlar taşıdığını belirtmiştir (Şahin vd., 2023: 34). ABD'nin de aralarında olduğu çeşitli ülkeler tarafından nükleer silah teknolojisi geliştirmekle ve nükleer silahlara sahip olmakla suçlanan İran, suçlamalara tepki gösterirken, sıklıkla nükleer programının barışçıl amaçlar taşıdığını ve nükleer enerji için kullanıldığını vurgulamıştır (Şahin vd., 2023: 33).

1990'lı yıllarda da ABD-İran arasındaki gergin durum devam etmiş, ABD, George H.W.Bush ve Bill Clinton'ın başkanlıkları dönemlerinde İran'a yönelik yaptırımları arttırmıştır. 1992'de Kongre, gelişmiş silahlar geliştirmek için kullanılabilecek malzemeleri onaylayan, “İran-Irak Silahların Yayılmasını Önleme Yasası” (Iran-Iraq Arms Nonproliferation Act)'ni kabul etmiş, İran'a yönelik yaptırımlar 1995 yılında tam bir petrol ve ticaret ambargosu ile genişletilirken, “1996 İran ve Libya Yaptırım Yasası”(Iran and Libya Sanctions Act) ile de İran'ın petrol ve gaz sektörlerine yılda 20 milyon dolardan fazla yatırım yapan Amerikalı olmayan şirketlere karşı ambargo uygulanması öngörülmüştür (Council on Foreign Relations, <https://www.cfr.org>).

ABD Dışişleri Bakanı Madeleine Albright'ın, 1979'dan sonra gerçekleşen en üst düzey ABD-İran teması olan, 1998 BM Genel Kurulu sırasındaki “Altı Artı İki Görüşmeleri” (Six-Plus-Two Talks)'nde İran dışişleri bakan yardımcısıyla bir araya gelmesi sonrasında, iki ülke ilişkilerinde görece bir yumuşama havası hissedilse ve bu yumuşama ortamı sonrasında ABD tarafından İran'a yönelik bazı yaptırımlar kaldırılrsa (Council on Foreign Relations, <https://www.cfr.org>) da, yaşanan yumuşama, İran nükleer programına dair ABD ve İran arasında süregelen restleşmelerin gölgesinde kalmıştır. Kısa süreli bu yumuşama havası yerini, 2000'li yıllarda daha da yoğunluk kazanan gerginlik ortamına bırakmıştır (Şahin vd., 2023: 34). Özellikle de, ABD'ye yönelik 11 Eylül 2001 saldırıları sonrasında, dönemin ABD Başkanı George W. Bush'un 29 Ocak 2002 tarihinde “Birliğin Durumu Konuşması”(State of the Union Address)'nda; İran'ı, Irak ve Kuzey Kore ile birlikte “şer eksen” bir ülke olarak nitelendirmesi ve bu ülkelerin kitle imha silahları geliştirerek dünya barışını tehdit etmeyi amaçladıklarını söylemesi (The Washington Post, 29 January 2002), ABD-İran gerginliğini tırmandırıcı bir rol oynamıştır.

2006'ya gelindiğinde, dönemin İran Cumhurbaşkanı Mahmud Ahmedinejad, dönemin ABD Başkanı George W. Bush'a 8 Mayıs 2006'da on sekiz sayfalık bir mektup göndermiştir ki bu mektup, bir İranlı liderin bir ABD başkanına 1979 sonrasında yazdığı ilk mektup olmuştur (Council on Foreign Relations, <https://www.cfr.org>). İran Cumhurbaşkanı Mahmud Ahmedinejad bu mektupla Başkan George Bush'a iki ülke arasındaki gerginliği gidermeyi amaçlayan yeni öneriler sunmuş (VOA, 08 Mayıs 2006), ancak Amerika Dışişleri Bakanı Condoleezza Rice, İran Cumhurbaşkanı Mahmud Ahmedinejad'ın Başkan Bush'a gönderdiği mektubun yeterli olmadığını söyleyerek, 18 sayfalık mektupta sunulan önerilerin İran'ın nükleer programıyla ilgili anlaşmazlığa çözüm getirmedikçe vurgulamıştır (VOA, 09 Mayıs 2006). İran'ın nükleer sorununu çözmeyi amaçlayan diplomatik çabaların henüz ilk aşamada olduğunu söyleyen ABD Başkanı Bush ise, Florida'da bir toplantıda yaptığı konuşmasında, *"İran'ın meydan okumaya devam etmesinin ciddi sonuçlar doğuracağını anlaması gerektiğini, nükleer çalışmalarını durdurmadığı takdirde uluslararası alanda tecrit edileceğini"* belirtmiştir (VOA, "İran'la ilgili Diplomatik...", 09 Mayıs 2006). Ahmedinejad'ın mektubuna ilişkin olarak da Bush, İran Cumhurbaşkanı Mahmud Ahmedinejad'ın mektubunda esas sorun olan nükleer uyuşmazlıktan söz edilmediğini söylemiştir (VOA, 10 Mayıs 2006).

2006 yılında da ABD daha öncesinde olduğu gibi İran'ı nükleer silah geliştirme çabası içinde olmakla suçlamış, İran ise bunu sürekli bir şekilde reddetmiştir (VOA, 11 Mayıs 2006).

3 Aralık 2007'de ise ABD, "İran'ın nükleer programına ilişkin Ulusal İstihbarat Tahmini raporu" (National Intelligence Estimate report on Iran's nuclear program)'nun gizli olmayan bir özetini kamuoyuna açıklamıştır. Raporda, istihbarat topluluğunun İran'ın nükleer silah programını 2003 sonbaharında durdurduğuna "yüksek bir güvenle" karar verdiğini ve programın 2007 ortasından itibaren yeniden başlamadığını orta düzeyde bir güvenle değerlendirdiği belirtilirken, aynı zamanda rapor, İran'ın nükleer silah programını, "tasarım ve silahlandırma çalışması"nın yanı sıra gizli uranyum dönüşümü ve zenginleştirilmesi olarak tanımlamıştır. Raporda ayrıca İran'ın teknik olarak 2010 ile 2015 yılları arasında nükleer silaha yetecek kadar yüksek derecede zenginleştirilmiş uranyum üretebileceğine inanıldığı da belirtilmiştir (Arms Control Association, January 2023).

2006'da ABD tarafından, Tahran'ın nükleer zenginleştirme programını durdurması halinde çok taraflı diyalogla söz konusu meseleyi görüşmeye hazır olduğu duyurulurken, 2008'de ise, Başkan Bush, ilk defa bir yetkiliyi, İran ile gerçekleştirilen nükleer müzakereler için Cenevre'deki görüşmelere göndermiştir (Okudici ve Ahıskalı, 06.01.2020). Bush yönetiminin Temmuz 2008'de Tahran'daki P5+1 (Birleşmiş Milletler Güvenlik Konseyi'nin 5 daimi üyesi ve Almanya) toplantısına Dışişleri Müsteşarı William Burns'ü göndermeyi seçmesi üzerine İran'la yapılan görüşmelere ilk kez bir ABD temsilcisi katılmış (The White House, 16 July 2008) olmuştur. Ancak, resmi bir yetkilinin Cenevre'deki nükleer görüşmelere gönderilmiş olması, iki ülke arasındaki gerginliği azaltacak yönde bir adım olarak düşünülse de, iki ülkenin karşılıklı ilişkileri süreç içerisinde ele alındığında, 2008 yılında da ABD-İran ilişkilerinde İran nükleer programı kaynaklı gergin havanın varlığını koruduğu, gerek ABD gerekse de İran yönetimlerinin sorunun çözümü konusunda karşılıklı diyaloga yakın bir tutum içinde olmadıkları, taraflar arasında karşılıklı uzlaşının sağlanamadığı, İran'la Batı ülkeleri arasında yürütülen müzakerelerin tıkanıdığı (The Guardian, 24 November 2013) gözlenmiştir. Hatta Bush, 2008 Eylül ayında BM Genel Kurulu'nda yaptığı veda konuşmasında, İran'ın nükleer programının tehdit oluşturduğuna dair söylemini yinelemiştir (Siddique, 25 September 2008).

3- ABD-İRAN İLİŞKİLERİNDE 2009 SONRASI NÜKLEER SÜREÇ

4 Kasım 2008'de yapılan 2008 ABD başkanlık seçimlerini kazanarak George W. Bush sonrası ABD'nin 44. devlet başkanı olan Barack Obama, seçim kampanyası boyunca selefi George W. Bush yönetiminin politikalarını eleştirerek, "değişim" söylemini ön plana çıkarmıştır (The Guardian, 10 February 2007). Ayrıca Obama seçim kampanyasında dış politikaya dair söylemlerinde İran konusunda da: *"İran'ın nükleer silah geliştirmesini engellemek Amerika Birleşik Devletleri'nin hayatı bir ulusal güvenliğidir."* (The Guardian, 16 July 2008) demiştir.

Gökhan Teletar, Obama'nın başkanlığında ABD dış politikasının biçimlenişinde İran'a yönelik tutumu:

"Barack Obama, ABD'nin Ortadoğu politikasında değişim vaadiyle başa gelmiş, İran'a yönelik politikasını da bu bağlamda değerlendirmiştir. Selefi gibi Obama da İran'a yönelik politikasında nükleer program sorunu üzerinde yoğunlaşmıştır. Göreve geldikten sonra ilk etapta İran ile ilişkileri düzeltmek için çaba sarfeden ve diplomasiye öncelik veren Obama yönetimi, bu çabalarına Tahran rejiminden umduğu karşılığı alamaması üzerine BM Güvenlik Konseyi'nin yaptırım kararı almasını sağlayarak, tek taraflı olarak yaptırım uygulayarak ve diğer aktörlerin

yaptırım uygulaması için çaba sarfederek İran üzerinde baskı oluşturmaya ve Tahran yönetimini uzlaşma masasına oturtmaya çalışmıştır.”(Telatar, 2012: 61-62)

Sözleriyle değerlendirmektedir.

Obama'nın başkanlığıyla birlikte ABD'nin İran'a yönelik politikasında söylem düzeyinde önemli değişimler yaşanmış (Telatar, 2012:62) olduğunu belirten Telatar bu bağlamda ayrıca, ABD'nin İran'a yönelik politikasında diplomasiyi önceleyen bir yaklaşımı benimsediğine (Telatar, 2012: 62) de işaret etmektedir. Ki, Telatar'ın belirttiğine göre, Obama, başkanlığının daha ilk yılında İran'la ABD arasındaki birincil sorun alanlarından biri olarak değerlendirilebilecek olan İran'ın nükleer çalışmaları sorununun çözümü konusunda yoğun bir çaba göstermiştir (Telatar, 2012:62).

Selefi Bush'un başkanlığında olduğu gibi Obama da dış politikasında İran ile ilgili sorunlar içerisinde nükleer programa yönelik sorunu öncelikli problem olarak görmüş ve bu doğrultuda problemin çözümü için diplomatik girişimlere hız vermiştir.

Ancak her ne kadar, ABD'de 2008'de yapılan ve Barack Obama'nın göreve geldiği başkanlık seçimlerinin ardından, uluslararası alanda, ABD-İran ilişkilerinin gerginliğinin taraflar arasında müzakere yoluyla çözüme ulaşması beklenti ve umutları artmış olsa da, Obama'nın iki ülkenin ilişkilerindeki sorunların odak noktasını oluşturduğu söylenebilecek olan İran'ın nükleer çalışmaları konusunda başkanlığının ilk yıllarıyla birlikte taraflar arasında uzlaşmayı sağlamaya yönelik diplomatik girişimleri de beklenen sonuçları vermemiştir.

Obama'nın Fransa Cumhurbaşkanı Nicolas Sarkozy ve İngiltere Başbakanı Gordon Brown ile Eylül 2009'da G-20 Konferansı'nda yaptığı ortak açıklama, bir bakıma Obama'nın İran'a yönelik ılımlı tutumunun değişmekte olduğuna dair de bir gösterge olmuştur. Genel hatlarıyla ABD, İngiltere ve Fransa'nın İran'a, nükleer faaliyetleri konusunda uyarısı niteliğindeki ortak açıklama (The White House, 25 September 2009), Obama'nın, nükleer faaliyetleri konusunda İran'ı nükleer programını uluslararası kontrollere açmaya yöneltme çabasının da göstergesi olmuştur.

ABD-İran arasında 1979 sonrasında gerginliğin hakim olduğu ilişkilere dair:

“Barack Obama'nın ikinci dönemine ve Hasan Ruhani'nin İran cumhurbaşkanı seçilmesine kadar da bu durum değişmedi. Daha sonra bu liderlerin ABD-İran ilişkilerinin temel sorunu olan nükleer anlaşmazlığın çözümü için diplomasiye yönelik ortak adımlar atmaya karar vermesiyle ikili ilişkilerde önemli bir dönüşüm yaşandı.”(Kaya, Eylül 2023: 276)

Diyen Emirhan Kaya'nın da belirttiği şekilde, İran'ın nükleer programının temel kaynaklarından biri olduğu, ABD-İran ilişkilerindeki gerginlik ortamı, Obama'nın ikinci başkanlık dönemine kadar ılımlı bir yönelim göstermemiştir. Obama'nın İran'a karşı tutumundaki değişim, ikinci döneminde nükleer müzakereler ilerledikçe belirginleşmiştir (Kaya,Eylül 2023: 281).

2013 yılında İran'da yapılan cumhurbaşkanlığı seçimlerini, reformist kimliği ile tanınan ve ABD ve Batı ile ilgili söylemlerinde uzlaşmacı bir yaklaşım benimseyen Hasan Ruhani'nin kazanması (Anadolu Ajansı, 15.06.2013), Obama'nın “değişim” söylemi doğrultusunda İran'a yönelik politikasında diplomasi çerçevesinde çözüm arayışını tekrar gündeme getirmesine olanak sağlamıştır. Başkanlığının ikinci döneminde de İran'la ilişkilerdeki temel sorunlardan biri olan nükleer sorununa yönelik çözüm arayışlarını sürdüren Obama'nın soruna çözüm arayışları, Ruhani yönetiminde de karşılık bulmuş, “2013 Haziran'ında İran'ın yeni cumhurbaşkanı seçildiğinde, nükleer krizi 3 ila 6 ay arasında çözeceğine” söz vermiş olan (NTV, 20.05.2017) Ruhani'nin de ABD ile nükleer müzakerelere hazır olduğunu bildirmesiyle, 27 Eylül 2013 tarihinde, 1979 İran İslam Devrimi'nin ardından uzun yıllar sonra ilk kez iki ülkenin liderlerinin direkt olarak iletişim kurduğu bir telefon görüşmesi gerçekleşmiştir (BBC News Türkçe, 28 Eylül 2013; VOA, 28 Eylül 2013). İki ülke ilişkileri açısından dönüm noktası olarak değerlendirilebilecek olan bu telefon görüşmesinden sonra ABD-İran arasındaki bu ılımlı havanın etkisi doğrultusunda İran'la müzakereler neticesinde, Cenevre'de İran ile Birleşmiş Milletler (BM) Güvenlik Konseyi'nin 5 daimi üyesi (ABD, Rusya, Çin, İngiltere, Fransa) ve Almanya'dan oluşan P5+1 arasında 24 Kasım 2013'te geçici bir nükleer anlaşma imzalanmıştır (BBC News Türkçe, 25 Kasım 2013).

Geçici anlaşma sonrasında İran'ın yükümlülüklerini yerine getirdiğine dair Uluslararası Atom Enerjisi Ajansı (IAEA) raporları neticesinde, nihai anlaşma olan “Kapsamlı Ortak Eylem Planı (KOEP) (Joint Comprehensive Plan of Action)” 14 Temmuz 2015 tarihinde imzalanmıştır (Anadolu Ajansı, 09.05.2018). ABD-İran ilişkilerinde yeni bir sayfa açan bu anlaşma ile Obama yönetimi, 33 yıl sonra İran ile resmi bir anlaşma imzalayan ilk yönetim olmuştur. Obama'nın diplomasiye dayalı çözüm arayışının zaferi olarak değerlendirilebilecek olan KOEP, ABD-İran ilişkilerinde yeni bir sayfa açtığı gibi diplomasi yoluyla İran'ın zenginleştirilmiş uranyum üretme kapasitesi

sınırlandırılmış ve UAEA'ya İran nükleer faaliyetlerini denetleme yetkisi verilmiştir. Anlaşma ile UAEA, santrifüjlerin üretimi, depolanması ve montajıyla ilgili tesislere erişim yetkisine sahip olmuş, İran, zenginleştirilmiş uranyum üretme kapasitesinde sınırlandırma, 20 bin olan santrifüj sayısını 10 yıl boyunca 5060 ile sınırlı tutma sözü vermiştir. Anlaşmayla İran'a yönelik yaptırımlar da kalkarken, İran, ülke dışındaki 100 milyar dolarlık dondurulmuş varlıklarına erişim hakkı kazanmıştır. Ayrıca anlaşma ile İran dünya pazarlarına petrol satma imkanına da sahip olmuştur (Anadolu Ajansı, 09.05.2018).

14 Temmuz 2015 tarihinde Viyana'da P5+1 ülkeleri ve İran arasında "Kapsamlı Ortak Eylem Planı"nın imzalanışını, ABD-İran ilişkileri açısından olumlu yönde bir yeni başlangıç olarak değerlendirebilirken, KOEP, ABD-İran gerginliğinde nispeten bir yumuşama oluşturmaya bağlamında da ilerleyen süreçte iki ülkenin ilişkilerine diyalogun hakim olabileceğine yönelik beklentileri de beraberinde getirmiştir denebilir.

4.SONUÇ

Obama'nın başkanlığı sürecinde ABD-İran ilişkilerinin bir yumuşama içine girdiği değerlendirilmesinde bulunulması, P5+1 olarak adlandırılan BM Güvenlik Konseyi'nin 5 daimi üyesi ve Almanya'nın, İran'ın nükleer programı kapsamında İran'la gerçekleştirdikleri müzakereler sürecinin 2015 yılında İran'la Kapsamlı Ortak Eylem Planı (KOEP)'nin imzalanışı doğrultusundadır denilebilir.

İran'la P5+1 arasında KOEP'in imzalanışı, ABD-İran ilişkilerinde gergin bir havanın hakim olduğu uzun yıllar sonrasında gerçekleşmiştir. 1979'dan 2015'e gelene kadar tüm bu yıllar boyunca ABD-İran ilişkilerine İran'ın nükleer programı çerçevesinde taraflar arasında bir anlaşmazlık ve diyalogsuzluk ortamı hakim olmuştur.

ABD-İran arasında gözlenen bu diyalogdan uzak tutum, 2009'da Barack Obama'nın ABD başkanı oluşuyla birlikte, yerini taraflar arasında nispeten karşılıklı ılımlılığa bırakan bir değişim içine girmiştir. Ancak ABD-İran ilişkilerine yumuşamanın hakim olduğundan bahsedilebilmesi, 2013 yılında Hasan Ruhani'nin İran Cumhurbaşkanı seçilmesi sonrası olmuştur. Obama'nın diyaloga açık yaklaşımı Ruhani yönetiminde karşılık bulmuş, Ruhani yönetiminin de, taraflar arasında bir diyalog ortamı oluşturulmasına olumlu yaklaşması ile ilişkiler, karşılıklı anlaşmazlıkların çözümü odaklı bir yönelime girmiştir. Bu doğrultuda, Obama yönetiminin ABD-İran ilişkilerindeki en temel sorunlardan biri olarak, iki ülke arasında gerginliğe yol açan İran'ın nükleer programı kapsamında da, konunun iki ülke arasında oluşturduğu gerginliğin çözüme kavuşturulması yönündeki çabaları hız kazanmıştır. Obama'nın sorunun çözümüne yönelik arayış ve çabaları sonucunu, iki ülke arasında oluşan diyalog ortamı neticesinde 2015 yılında KOEP'in imzalanışı ile vermiş, KOEP, ABD-İran ilişkilerindeki yumuşamanın en net göstergesi olmuştur.

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Yatırım-Tasarruf İlişkisi Bağlamında Türkiye’de Feldstein-Horioka Hipotezinin Analizi

Prof. Dr.Utku ALTUNÖZ¹

Özet: Feldstein –Horioka hipotezine göre yatırımlar ile tasarruflar ilişkisi uluslararası sermaye hareketliliğinin derecesine bağlıdır. Tam sermaye hareketliliği durumunda yatırımlar ile tasarruflar arasındaki ilişki güçlüyken sermaye hareketliliğinin kısıtlanması ile bu ilişki de gücünü yitirmektedir. Çalışmada Türkiye için Feldstein-Horioka hipotezinin geçerliliği 1990-2022 dönemi için ARDL sınır testi yaklaşımı ile araştırılmıştır. Ulaşılan sonuçlar Türkiye’de F-H hipotezinin varlığını desteklemektedir.

Analysis Of Feldstein-Horioka Hypothesis In Turkey Within The Context Of Investment-Saving Relationship

Abstract: According to the Feldstein-Horioka hypothesis, the relationship between investments and savings depends on the degree of international capital mobility. While the relationship between investments and savings is strong in the case of full capital mobility, this relationship loses its strength with the restriction of capital mobility. In the study, the validity of the Feldstein-Horioka hypothesis for Turkey was investigated with the ARDL bounds test approach for the period 1990-2022. The obtained results support the existence of the F-H hypothesis in Turkey.

GİRİŞ

Gelirin harcanmayan kısmı olarak tanımlanan tasarruflar yatırımların finansmanına aktarılmaktadır. Dışa açık olmayan bir ekonomide yurtiçi tasarruflar, kamu ve özel kesim tasarruflarının toplamından meydana gelmektedir. Ekonominin dışa açık olduğu durumda ise sermaye hareketlerinden dolayı yurtiçi yatırımlar yurtiçi tasarrufların üzerinde veya altında kalabilmektedir (Yalçınkaya ve Hüseyini, 2016: 344). Yurtiçi tasarruf yetersizliği söz konusu iken yatırımların finansmanı uluslararası piyasalardan karşılanması mümkün olabilmektedir (Ata vd.2022:124). Bu durum da uluslararası sermaye akımlarında artışa yol açabilmektedir (Bresiz, 1995: 56). Yatırım-tasarruf farklı şekillerde inceleme alanı bulmuş olup Feldstein-Horioka’nın çalışmaları bu çalışmaların içinde önemli bir yere sahiptir. Yatırım ve tasarruf ilişkisi Feldstein (1983) ve Feldstein ve Bachetta (1991) tarafından test edilmiş ve ulaşılan bulgular literatürde Feldstein-Horioka hipotezi (Bilmecesi) olarak adlandırılmıştır. Çalışmada Türkiye’de yatırım-tasarruf ilişkisi Feldstein-Horioka hipotezi bağlamında analiz edilecektir.

Feldstein-Horioka Hipotezinin Teorik Arka Planı

Feldstein ve Horioka(1980)’a göre sermayenin nispeten hareketsiz olup tasarruflar ve yatırımlar arasındaki ilişkinin varlığı, uluslararası sermaye hareketliliğinin derecesine bağlıdır. Yaptıkları çalışmada 16 OECD ülkesi için 1960-1974 dönemleri üzerinden tasarruf-yatırım ilişkisini yatay kesit regresyonu kullanılarak incelenmişlerdir.

$$(I/Y)_i = a + b\left(\frac{S}{Y}\right)_i \quad (1)$$

Eşitlik (1)’de Y GSYH’yi, I , yatırımları ve S tasarrufları ifade etmektedir. Feldstein-Horioka, tam hareketlilik varsayımı altında, yurt içi yatırım ile yurt içi tasarruf arasında bir ilişki olmaması gerektiğini iddia etmektedir. Söz konusu çalışmada incelenen dönem hem bütün olarak hem alt dönemlere ayrılıp analiz edilerek β katsayısına ait değerlere ulaşılmıştır. Elde edilen katsayılar sırasıyla 1960-1974 dönemi $\beta=0,89$; 1960-1964 dönemi için $\beta=0,90$ 1965-1969 için $\beta=0,87$ ve 1970-1974 için $\beta=0,87$ şeklinde hesaplanmıştır. (β) değerinin 1’e yaklaşması güçlü bir yurt içi yatırım- tasarruf ilişkisini ifade etmektedir. Elde edilen sonuç

Öne sürdüğü tam sermaye hareketliliğindeki durum ile çelişmekte ve çoğu tasarrufun, tasarrufun yapılmış olduğu ülke içinde kalmaya eğilimli olduğunu göstermektedir (Feldstein ve Horioka, 1980: 321). Bununla birlikte finansal küreselleşmenin bir sonucu olarak sermaye hareketlerinin önündeki kısıtlama ya da engellerin nispeten kalktığı günümüz dünyasında yatırımlar yurtiçi tasarruflar yerine yurt dışı tasarruflar yoluyla finanse edilebileceğinden tasarruf ve yatırımlar arasındaki ilişkinin zayıflayacağı söylenebilir (Bai ve Zhang, 2010)

Literatür

Penati ve Dooley (1984), F-H hipotezini 19 ülke test etikleri çalışmalarında F-H hipotezi ile uyumlu olarak, yatırım-tasarruf arasında güçlü bir ilişkinin varlığına ulaşmışlardır. Holmes ve Otero (2014) Panel CCEMG

yöntemiyle OECD'ye üye 25 ülkeyi F-H hipotezi bağlamında analiz ettikleri çalışmalarında yatırım- tasarruf ilişkisinin yalnızca sermaye hareketlilik derecesine değil aynı zamanda cari hesap seviyesine de bağlı olduğu sonucuna ulaşmışlardır. Drakos vd. (2017) Panel analizle AB üyesi 14 ülkede yatırım -tasarruf ilişkisini inceledikleri çalışmalarında iki değişken arasındaki ilişkinin uzun dönem borçların ödenmesi ile ilgili olduğu sonucuna ulaşmışlardır. Kızıltan vd. (2019) Panel yöntemiyle 1980-2014 yılları için düşük ve yüksek gelire sahip OECD ülkelerindeki Tasarruf-yatırım ilişkisini F-H hipotezi bağlamında inceledikleri çalışmalarında F-H hipotezinin temel varsayımlarının desteklendiği sonucuna ulaşmışlardır. Künc vd. (2019) Türkiye'de 1980-2016 yılları için F-H hipotezinin geçerliliğini Johansen eş bütünleşme testi ile analiz ettikleri çalışmalarında hipotezin geçerli olduğu sonucuna ulaşmışlardır. Keskin (2020) Türkiye 'de F-H hipotezinin geçerliliğini analiz ettiği çalışmada ARDL yöntemini tercih etmiş ve 1990-2015 dönemi için Hipotezinin geçerli olmadığı sonucuna ulaşmıştır. Akkuş (2021) Feldstein-Horioka hipotezinin 1980-2020 döneminde Türkiye için geçerli olup olmadığı araştırdığı çalışmada Fourier eş bütünleşmesi ve Shin eş bütünleşme testi tercih edilmiştir. Araştırmada bağımsız değişken olarak ele alınan tasarruf katsayısının sıfıra yakın olduğu ve sermaye hareketliliğinin yüksek olduğu belirlenirken yurt içi tasarrufların yatırımları karşılamada yetersiz olduğu ortaya çıkmıştır. Sonuç olarak Feldstein-Horioka hipotezinin Türkiye için geçerli olmadığı tespit edilmiştir.

Koçdemir ve Gölpek (2021) Arjantin, Brezilya, Uruguay, Şili, Bolivya, Ekvador, Peru, Kolombiya ve Venezuela içi H-P hipotezinin geçerliliğini 1990-2018 periyodunda panel analizle inceledikleri çalışmalarında hipotezin geçerli olduğu sonucuna ulaşmışlardır.

Ekonometrik Analiz

Geleneksel eş bütünleşme testlerinde değişkenin aynı düzeyde durağan olması beklenir. Ancak Pesaran vd (1996) tarafından geliştirilen ARDL Sınır Testi yaklaşımı değişkenlerin farklı seviyelerde analizine imkân sağlamaktadır. "Oto regresif dağıtılmış gecikme (ARDL) modeli, tekli eş bütünleşme ile ilgilenir ve orijinal olarak Pesaran ve Shin (1999) tarafından geliştirilmiş ve Pesaran ve diğerleri (2001) tarafından daha genişletilmiştir. ARDL yaklaşımının avantajı, tüm değişkenleri gerektirmemesidir. Johansen çerçevesi olarak $I(1)$ olsun ve kümemizde $I(0)$ ve $I(1)$ değişkenleri varsa hala uygulanabilir. ARDL sınır testi iki bölümden oluşur. Birinci bölümde, değişkenler arasındaki ilişkiler aşağıdaki denklem (1) kullanılarak uzun dönem için test edilecektir.

$$\Delta R_t = a_0 + \sum_{i=1}^p b_i \Delta R_{t-i} + \sum_{i=0}^p c_i \Delta \pi_{t-i} + \lambda_1 R_{t-1} + \lambda_2 \pi_{t-1} + \varepsilon_t \quad (1)$$

Denklem (1) kullanılarak uzun dönemli ilişkinin elde edilmesinden sonra, değişkenler arasındaki kısa dönemli ilişkinin elde edilmesi gerekmektedir. Bunun için aşağıdaki eşitlik (2) kullanılacaktır.

$$\Delta R_t = a_0 + \sum_{i=1}^p b_i \Delta R_{t-i} + \sum_{i=0}^p c_i \Delta \pi_{t-i} + \lambda_1 R_{t-1} + \lambda_2 \pi_{t-1} + \mu \text{ect}_{t-1} + \varepsilon_t \quad (2)$$

Eşitlik (2)'de ECT hata terimini ifade etmekte olup negatif, aynı zamanda 0 ile 1 arasında bir değer alması beklenir.

ARDL sınır testini kullanmanın bir avantajı, ARDL'nin incelenmekte olan tüm değişkenlerin aynı dereceden entegre olması gerekmemesi ve altta yatan değişkenler birinci dereceden, sıfırdan veya kesirli olarak entegre edildiğinde uygulanabilmesidir Ekonometrik analizlerde analiz ekonu olan değişkenlerin birim kök taşımaları sahte regresyon sorununa neden olmaktadır. Bu nedenle analizlere geçilmeden önce birim kök testleri ile bu durum incelenmelidir. Çalışmanın analiz kısmında 1990-2022 yılları için S/GSYH oranı ve I/GSYH oranı TÜİK'ten elde edilmiştir. Analizde ilk olarak Dickey ve Fuller (1981) tarafından önerilen Augmented Dickey-Fuller (ADF) testi kullanılacaktır.

$$\Delta Y_t = \rho Y_{t-1} + \sum_{i=1}^k \beta_i \Delta Y_{t-i} + \varepsilon_t \quad (3)$$

$$\Delta Y_t = \alpha + \rho Y_{t-1} + \sum_{i=1}^k \beta_i \Delta Y_{t-i} + \varepsilon_t \quad (4)$$

$$\Delta Y_t = \alpha + \delta t + \rho Y_{t-1} + \sum_{i=1}^k \beta_i \Delta Y_{t-i} + \varepsilon_t \quad (5)$$

(3), (4) ve (5) numaralı denklemlerdeki ΔY_t değişkenin ilk farkını, k gecikme uzunluğunu, t zaman trendini, ΔY_{t-i} br dönem gecikmeli fark terimini, ε_t ise hata terimini ifade etmektedir. Boş hipotez serinin seviyede durağan olmadığını iddia etmektedir. Tablo 4' de ADF birim kök testleri izlenebilmektedir.

Tablo 1: ADF Birim Kök Test Sonuçları

	Seviyede		Birinci Farkta	
	Sabit	Sabit ve Trendli	Sabit	Sabit ve Trendli
I/GSYH	-0.86	-4.43	-6.10**	-2.18**

S/GSYH	-1.14*	-1.36*	-	-
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Not: *,** sırasıyla %1 ve %5 anlamlılık düzeyini ifade etmektedir

1 deki sonuçlara göre gerek sabit gerekse sabit ve trendli I/GSYH değişkeni birim kök içerirken birinci farkı alındığında durağan hale gelmişlerdir. S/GSYH değişkeni ise seviyede durağandır. Diğer birim kök testi olarak yapısal kırılmalara izin veren Lee ve Strazicich testi tercih edilmiştir.

Bu testte yapısal değişimler işsel olarak belirlenmekte ve birin üzerinde yapısal değişime imkân vermekte olup 2 modelle analiz edilmektedir(Lee ve Strazicich ,2003). A modeli yapısal kırılma, C modeli sabit ve trenddeki kırılma olmak üzere analize dâhil edilmektedir.

$$Y_t = \vartheta'Z_t + \varepsilon_t \text{ ve } \varepsilon_t = \beta\varepsilon_{t-1} + e_t \quad (6)$$

Eşitlik (6)'da Z_t içsel değişken vektörü ve ε_t hata terimini temsil etmektedir. Bir kırılmaya izin veren A modeli için;

$D_t, t \geq T_B + 1$ Olduğunda 1, farklı durumlar için 0 değerini alan dummy değişkenini temsil etmek üzere (5) no'lu denklem için;

$Z_t = (1, t, D_{1t})$ Şeklini almaktadır. T_B Kırılma zamanını temsil etmektedir.

Tablo 2: Lee ve Strazicich Birim Kök Testi Sonuçları

Değişkenler	Model C	Model CC	Model A	Model AA
I/GSYH	-2.14 (2001)	-4.30(2001-2020)	-2.71(2001)	-4.90(2001-2020)
S/GSYH	-3.41(2002)	-4.22 (2002-2020)	-1.39(2002)	-5.42(2002-2020)

Lee ve Strazicich sonuçlarına göre yapısal kırılmalar dikkate alındığı durumda bile zaman serilerinin seviyede birim kök taşıdığına işaret etmektedir. Kırılma tarihleri de Türkiye ekonomisi için anlamlı tarihler olup 2001 krizi ile Covid 19 pandemisinin etkisinin olduğu yıllardır. Çalışmanın ampirik kısmında Pesaran ve Pesaran (1997), Pesaran ve Smith (1998) ve Pesaran ve Shin (1999) tarafından bulunan ARDL sınır testi tercih edilmiştir. Sınır testi yönteminin temel avantajı farklı seviyelerde durağan olan değişkenler için analiz imkânı sağlamasıdır ARDL tekniği, altta yatan verilerin sırasının spesifik olarak tanımlanmasını gerektirmeme avantajına sahiptir. Üçüncüsü, bu teknik küçük veya sonlu örneklem büyüklüğü için uygundur (Pesaran ve diğerleri, 2001).

Tablo 2: Gecikme Uzunluğunun Tespiti

Gecikme Uzunluğu	LR	AIC	SC	HQ
0	68.009	74.312	81.312	69.890
1	97.210	72.000	87.412	71.100
2	12.223	72.717	81.001	65.001
3	109.106*	70.081*	79.312*	59.011*
4	12.221	77.098	80.017	60.341
5	21.011	76.212	88.000	61.300

Uygun gecikme olarak 3 seçilmiştir. F analizinde ulaşılan F istatistik değeri üst kritik değeri ise boş hipotez reddedilirken (eş bütünleşme ilişkisi var) altında ise kabul edilir (eş bütünleşme ilişkisi yok) . İki değer arasındaysa herhangi bir yorum yapılamaz. Ters durumda boş hipotez kabul edilir. Alt sınır ile üst sınır arasında bir değere ulaşırsa yorum yapılamaz. F değeri analizine ait sonuçlar Tablo 8'de izlenebilmektedir.

Tablo 4: F İstatistik Analiz Sonuçları

k	F_{nir}	t_{nir}	F İstatistiği Üst Kritik Değeri			
			1%	5%	10%	Karar
1	7.324**	-3.22***	8.10	6.21	5.08	Uzun Dönem İlişkisi Var

Not: **, %5 ve ***,%10 seviyesinde istatistiksel olarak anlamlılığı göstermektedir.

Elde edilen F istatistik değeri üst kritik değerden büyük olup istatistiksel olarak anlamlıdır. Analizde ARDL (1,0) modeli uygun model olarak seçilmiştir.

Tablo 5:ARDL (1,0) Sonucu

Değişken	Katsayı	t-Değeri
I/GSYH(-1)	0.341*	2.412
S/GSYH	0.312*	3,718

c	6.324*	1.111
Teşhis Testleri		
R^2	0.71	
Oto korelasyon	1.017(.399)	
Heteroscedasticity	0.201(.474)	

Not:* %1, seviyesinde anlamlılığı ifade etmektedir. Paarantez içindeki değerler P değerlerini göstermektedir. Model için Akaike Bilgi Kriterleri kullanılmıştır. Bağımlı değişken (I / Y).

Modelin tahmini için en küçük kareler yöntemi kullanılmıştır. Teşhis testleri sonucuna göre deterministik ve stokastik problem (otokorelasyon ve heteroskedastisite problemi) yoktur. ARDL tahminini takiben, eş bütünleşmenin varlığı f istatistiği ile incelenmiştir. Değişkenler arasında eş bütünleşme ilişkisi olup olmadığını ifade eden sıfır hipotezi aşağıdaki gibi oluşturulmuştur:

$$H_0 : \lambda_1 = \lambda_2 = 0$$

$$H_1 : \lambda_1 \neq 0, \lambda_2 \neq 0$$

Uzun dönem katsayıları tablo 6'da sunulmaktadır.

Tablo 6: ARDL (1,0) Uzun Dönem Sonuçları

Değişkenler	Katsayı	t-values
S / Y	0.38120*	3,2119
c	12.0412*	5.212

Not: I/ GSYH bağımlı değişkendir.

Tablo 6'dan izlenen ARDL (1, 0) sonucuna göre, uzun dönemli ilişkilerde tasarruf ve yatırım arasında pozitif bir ilişki vardır. Elde edilen sonuca göre tasarruflardaki 1 birimlik artış yatırımları 0.38 oranında arttırmaktadır. Bu sonuca paralel olarak Feldstein –Horioka Teorisi'nin incelenen tarihler için Türkiye'de geçerli olduğunu söyleyebiliriz. Başka bir deyişle, uzun vadede uluslararası sermaye hareketinin artması durumunda tasarruf ve yatırım arasındaki ilişkiler zayıflayacaktır.

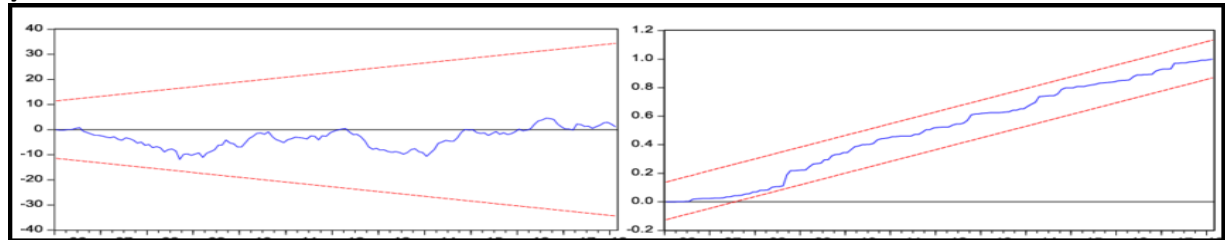
Hata Düzeltme Modelinin (ECM) 0 ile 1 arasında eksi bir değer alması beklenir ve bize kısa dönem dengesizliklerinin uzun dönem dengesine ne kadar sürede ulaşacağı konusunda bilgi verir.

Tablo 7: Kısa Dönem Sonuçlar (Hata Düzeltme Modeli)

Değişkenler	Katsayı	t-Values
S/GSYH	0.441	1.300
ERM	-0.300	-2.101
c	4.222	1.189

Tablo 7'deki hata düzeltme modeli sonuçlarına göre katsayılar anlamlıdır. Hata düzeltme katsayısı beklentilerle uyumlu olup (-0.30) katsayısı kısa dönemdeki uyumsuzlukların yaklaşık 3 dönemde ortadan kalkacağını ifade etmektedir. Kısa dönem katsayısı 0.44'ün uzun dönemde ilişkinin zayıflaması tam sermaye hareketliliği durumunda olan Türkiye'de hipotezin geçerli olduğunu göstermektedir. Uzun döneme ait katsayıların istikrarının anlaşılması için uygulanan yöntemlerden biri olan ve Brown vd. (1975) tarafından geliştirilen CUSUM ve CUSUMQ analizleri şekil 1'de sunulmuştur.

Şekil 1: QUSUM ve CUSUMQ Analizleri



Mavi çizginin kırmızı çizgilerin arasında kalması modelin istikrarlı olduğunu teyit etmektedir.

SONUÇ

Tasarruf ve yatırım arasında bir ilişkinin varlığı, ekonomi politikalarının belirlenmesi açısından önemlidir. Girdi ve çıktının serbestleşmesi ile tasarruf-yatırım ilişkisinin önemi artmıştır. Bu çalışmada 1900-2022 dönemini kapsayan ARDL sınır testi kullanılarak Feldstein-Horioka hipotezi Türkiye için incelenmiştir. Ekonometrik analiz sonucuna göre tasarruf ile yatırım arasında pozitif yönlü bir ilişki olduğu sonucuna varılmıştır. Bu sonuç beklentilere uygundur. Çünkü Feldstein-Horioka'ya göre artan sermaye hareketleri her iki değişken arasındaki ilişkileri zayıflatmaktadır. Değişkenler arasındaki kısa dönemli ilişkiler ERM modeli ile test edilmiştir. ERM katsayısının -0,30 olması ise şok etkisinin ilk yıl içerisinde %30 gibi bir hızla dengeye gelmesidir. Bu çalışma analiz yılları için Türkiye'de desteklendiğini ortaya koymaktadır.

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Türk Bankacılık Sektöründe Mevduat Hesaplarının Tanımı, Kapsamı, Önemi ve Muhasebeleştirilmesi Üzerine Bir Araştırma Örneği

Öğr. Gör. Korkmaz Keskendir¹

¹İstanbul Aydın Üniversitesi, ABMYO, Finans-Bankacılık ve Sigortacılık Bölümü, korkmazkeskendir@aydin.edu.tr
<https://orcid.org/0000 0002 1561 0800>

Özet: Günümüz uluslararası sistemde ve ülkemizde faizlerin yüksek seyretmesi ve sıkılaşma politikaları bankaları kaynak bulma ve kaynakları verimli bir şekilde yönetme konusunda zora sokmuştur. Çünkü bankalar, bireysel ve tüzel kişilerden topladıkları mevduatları belirli vade ve faiz oranlarıyla müşterilerine kredi verirler. Bu noktada bankalar, mevduat faiz oranının üzerinde bir oranla kredi vermek zorundalar, kredi faiz oranlarının yükselme eğilimi mudiler tarafından krediye bakışı olumsuz etkilemektedir. Özellikle mudiler tarafından açılan vadesiz mevduat hesaplarına bankaların büyük önem vermeleri gerekmektedir. Çünkü bankalar, vadesiz mevduat hesaplarına düzenli şekilde faiz ödemesi yapmazlar. Öte yandan ülkemizde yapılan çeşitli bilimsel araştırmalar sonucunda bankacılık sistemine dâhil olmayan ve büyük miktarda Türk Parası ve Yabancı Paraların olduğu bilinmektedir. Bankacılık sistemine dâhil olmayan bu paraların çeşitli çalışmalar yapılarak sisteme dâhil edilmesi büyük önem arz etmektedir. Bunlar yapılırken, mudilere vergi indirimleri, kredi çekme kolaylığı veya ilk kez açılan hesaplara yüksek faiz verme politikaları geliştirilebilir. Ayrıca, ülkemizde tasarruf alışkanlıklarının geliştirilmesi amacıyla ilköğretimden başlanarak üniversite öğrencilerine kadar bu konunun müfredatlara dâhil edilmesi ve işlenmesi önerilmektedir. Ülkemizde bankacılık sisteminin gelişmesi için finansal okuryazar oranının artırılması günümüz finansal koşullarında zorunluluk arz etmektedir.

Anahtar Kelimeler: Bankacılık, mevduat, muhasebe.

A research study on the definition, scope, importance, and accounting of deposit accounts in the Turkish banking sector

Abstract: Currently, high-interest rates and tightening policies in Turkey and the global economy have created difficulties for banks to efficiently source and manage resources. One reason for this challenge is that banks have to lend deposits collected from individuals and legal entities to customers with specific interest rates and maturities. At present, banks are required to lend at rates higher than the deposit interest rate, and the rising trend in loan interest rates negatively affects the way depositors view loans. Banks ought to give particular attention to demand deposit accounts opened by depositors since they do not receive regular interest payments from banks. On the other hand, multiple scientific studies conducted in Turkey indicate the existence of substantial amounts of Turkish and Foreign Currency not yet incorporated into the banking system. It is imperative to include these funds by conducting comprehensive investigations. In doing so, policies, such as tax reductions for depositors, easy credit withdrawal, or high-interest rates for newly opened accounts, can be implemented. Furthermore, in order to enhance savings habits in our nation, it is suggested to integrate this topic into the educational program from elementary to university level. Given the current financial environment, raising the financial literacy rate is essential for the advancement of the banking system in Turkey.

Keywords: Banking, deposits, accounting.

1.BANKA KAVRAMI

Banka, mevduat kabul eden ve toplanan bu mevduatı çok çeşitli şekillerde kredi işlemlerine dönüştüren kuruluşlar olarak tanımlanabilir. Günümüzde bankaların faaliyet konuları oldukça fazla olduğu için bu nitelikleri kapsayacak bir tanım yapmak oldukça zordur. Ancak bankaların genel olarak; mevduat hesapları, kredi işlemleri, aracılık faaliyetleri, kiralık kasa işlemleri, borsa faaliyetleri, kredi kartı işlemleri, otomatik ödeme hizmetleri ve birçok alanda işlem gerçekleştirirler (Güney, 2007: 1). Bankalar, fon talep eden kesime fonları kanallı eden, yatırım fırsatları yaratarak finansal sistemin ve ekonominin etkinliğinin sağlamada önemli roller üstlenen kurumlardır (Yıldırım,2019: 97).

Bankacılık faaliyet alanları günümüzde gelişme göstermektedir. Gelişen teknoloji sayesinde bankalarda hem fiziki yapılarını hem de personel istihdamını bu gelişim sürecine uygun olarak hazırlamak durumundadırlar. Bankaların faaliyet alanları genişledikçe almış oldukları ücret ve komisyonlarda artış yaşanacak ve bankaların faiz dışı gelirlerinde büyüme gözlenecektir. Bu durum, bankaları olumsuz durumlara karşı daha dirençli hale getirecektir.

2.BANKALARDA OTOMOSYON

Elektronik bilgi işlem ve teknik imkânların gelişme göstermesi banka işlemlerini büyük oranda etkilemiştir. Bu durum şube işlemlerinin muhasebeleştirilmesinde yararlanıldığı gibi, merkezi bilgi işlem ünitesindeki bilgilere şubelerin erişim sağlayarak daha kolay işlem yapmalarını sağlamaktadır. Örneğin, farklı bir şubedeki vadesiz tasarruf mevduat hesabından para çeken bir mudinin bilgilerine 3-4 saniye içinde ulaşılmaktadır. Ayrıca aynı anda hem ana bellekteki hem de şubedeki müşteri hesabından, yapılan ödeme düşürülmektedir. Sağlanan bu kolaylık sayesinde bankaların giderek daha büyük bir sayıda şubenin ana bilgi işlem merkezine bağlanması sağlanacaktır (Sevilengül, 12).

Bankaların bu sistemi kullanmaları kendileri açısından büyük bir kolaylık sağlamakla birlikte bazı riskleri de barındırmaktadır. Çünkü bankalar çok yoğun bir şekilde işlem yapan iktisadi kuruluşlardır. Ana sistemlerinde meydana gelen bir aksaklık büyük kayıplara veya operasyonel hatalara yol açabilir. Örneğin, mudinin şubeden nakit para çekerken sistemin gitmesi veya mudi yoğunluğu nedeniyle sistemin işlem yapamaz hale gelmesi gibi durumlar ile karşılaşılabilir.

3.MEVDUAT KAVRAMI

Bankalara istenildiği zaman ya da belirlenen bir vade sonunda geri alınmak koşuluyla yatırılan Türk Lirası veya Yabancı paralara mevduat denir. Mevduatın kabulüyle banka ile müşteri arasında bir sözleşme oluşur. Bu sözleşme Borçlar Kanunu açısından bakıldığında usulsüz tevdi veya karz sözleşmesi karakterlerini taşır (Güney, 2007: 33).

Türk parası mevduat, “Tasarruf Mevduatı”, “Resmi Kuruluşlar Mevduatı”, “Ticari Kuruluşlar Mevduatı”, “Bankalar Mevduatı”, “Diğer Kuruluşlar Mevduatı” hesaplarında, yabancı para mevduat ise “Bankalar Mevduatı -Y.P.” ve “Döviz Tevdiat” hesaplarında izlenir. İlgili düzenlemelerle belirlenen mevduat vadeleri, vadesiz ve vadeli olmak üzere bölünmüş olup, mevduatta meydana gelecek değişikliklere paralel olarak vade ayırımında düzenleme yapılır.

Müşteri tarafından mevduat bakiyesinden fazla yapılan çekilişler bir kredi işlemi olarak kabul edilir ve ilgili kredi hesaplarının “Kredili Mevduat Hesabı” yardımcı hesaplarında izlenir. Bankaların yurtdışı şubelerinde, bunların bulundukları ülkelerde ya da diğer ülkelerde yerleşik kişiler tarafından açılan mevduat hesapları ilgili yurtdışı mevduat hesaplarına, Türkiye’de yerleşik kişiler tarafından açılan mevduat hesapları ilgili yurt içi mevduat hesaplarına kaydedilir (1.8.2019 tarihli ve 30849 sayılı Resmi Gazete’de yayımlanan Tekdüzen Hesap Planı Hakkında Yönetmelik uyarınca bankalarca uygulanacak olan tekdüzen hesap planı ve izahnamesi).

4.MEVDUAT HESAPLARININ ÖNEMİ

Mevduat hesapları hem bankalar hem de müşteriler açısından büyük bir öneme sahiptirler. Mevduat bankalar için önemli bir fon kaynağıdır. Bu nedenle bankalar, müşterilerin mevduatlarını kendi bankalarına getirmeleri için büyük çaba harcarlar. Bir banka için hayati öneme sahip olan mevduat, bankanın prestiji açısından olduğu kadar büyüklüğünün göstergesi sayılması bakımından da önemsenmektedir. Diğer taraftan müşteriler açısından da bankanın önemi büyüktür. Çünkü müşteriler güven duydukları yerlere tasarruflarını götürmektedirler. Bu nedenle paralarını güvenli bir şekilde geri alabileceğinden emin olmak isterler. Bankalarda tasarruflar belirli oranda devlet garantisi altındadır. Bankaları düzenleme ve denetleme yetkisi BDDK’ya verilmiştir. Kurallara uymayan bankalara gerekli yaptırımlar uygulanır (Güney, 2007: 34).

Mevduat hesaplarını artırmak isteyen bankaların aşağıdaki yaklaşımları benimsemeleri önerilmektedir;

- ❖ Mudiler hesap açarken mevduat türleri konusunda bilgilerin tam olarak verilmesine dikkat etmek,
- ❖ Mevduat hesabı açılırken banka ve şube olarak taban bir miktar belirlememek,
- ❖ Mevduat hesaplarının açılmasını kolaylaştırmak,
- ❖ Farklı şubeden para çekmek isteyen müşterilerden ücret ve komisyon bedeli alma yoluna gitmemek,
- ❖ Sosyal sorumluluk projelerini üstlenmek, eğitim, sağlık, spor vb.,
- ❖ Bütün mudilerine adil ve eşit bir yaklaşım benimsemek ve onların banka nezdinde çok değerli olduklarını hissettirmek,
- ❖ Mudilerden provizyon ücreti almamak,
- ❖ Şube farkı gözetmeksizin bütün mudilerin her şubede işlemlerini hızlı etkin bir şekilde yapılması sağlamak,

- ❖ Performans açısından personellerin izinlerini her yıl düzenli bir şekilde kullanılmak,
- ❖ Yeni başlayan personellerin hizmet içi eğitimlerini tam ve eksiksiz aldirmek ve personellerde bilgi eksiğinin olmamasına dikkat etmek,
- ❖ Hedef eksikli değil müşteri eksikli çalışmak, her zaman müşterinin istediği ürün ve hizmetleri geliştirmek,
- ❖ Mevduat hesaplarını özendirerek yaklaşımlar geliştirmek, bu sayede yastık altında bulunan Türk Parası ve Yabancı Paraları bankacılık sistemine kazandırmak,
- ❖ Uzmanlığa dayalı bir yükselme politikası benimsemek, yükselme sistemini kendi içinde yapmak, transfer yoluyla personel alımı yoluna gitmemek.
- ❖ İlk kez hesap açtırmak isteyen mudiye uzun vadeli hesap açma yoluna gitmek ve uzun vadeli tasarrufun önemini anlatmak.

5. MEVDUAT TÜRLERİ

Genel olarak mevduat hesaplarını aşağıdaki şekilde sınıflandırmak mümkündür (Sipahi, 2010: 115);

- ❖ Tasarruf Mevduatı: Mevduat bankaları tarafından açtırılan, gerçek kişilere ait olan, çek keşide edilmesi ve ticari işlemler dışında kalan mevduat türüdür. Mudi tarafından banka izni aranmaksızın para çekme veya para yatırma işlemlerinin yapıldığı ve herhangi bir vade koşulu taşımayan hesaplardır.
- ❖ Resmi Kuruluşlar Mevduatı: Genel bütçe kapsamındaki kamu idarelerine, düzenleyici ve denetleyici kurumlara, mahkemelere, savcılıklara, özel bütçeli idarelere, icra ve iflas dairelerine ve tereke hâkimliklerine ait hesaplardır.
- ❖ Ticari kuruluşlar Mevduatı: Gerçek ve tüzel kişilerin ticari işletmelerine ait olan hesaplar bu sınıfta izlenir.
- ❖ Bankalar Mevduatı: TCMB ve bankalar ile özel kanunlara göre mevduat kabulüne yetkili bulunan diğer kuruluşlara ait mevduattır.
- ❖ Diğer Kuruluşlar Mevduatı: Dernek, vakıf, sendika, yardımlaşma sandıkları, apartman yönetimleri, savcılıklar, icra ve iflas daireleri ve tereke hâkimlikleri nezdinde paralara ilişkin açılan hesaplardır.

Banka Şubeleri Tarafından hesap açılması: İlk kez bankaya gelen mudiye banka personeli tarafından bankacılık hizmet sözleşmesi imzalatılır. Mudinin kimlik bilgileri alındıktan sonra bu bilgiler doğru bir şekilde sisteme işlenir. Müşterinin imzası taranır varsa müşterinin diğer evrakları alınarak sisteme yüklenir. Tüzel kişilerin bankada hesap açtırması durumunda ise, firma yetkililerinden ticaret sicil gazetesi, imza sirküleri, vergi levhası ve şirket ana sözleşme alınarak gerekli kontroller yapıldıktan sonra sistem girişleri yapılarak ticari hesap açılır.

Bankalar nezdinde alınan evrakların farklı personeller tarafından kontrol edilmesi ve güvenlik kontrollerinin yapılması herhangi bir aksaklık çıkmaması açısından önem arz etmektedir. Şüpheli durumlarda mudiden ikinci bir kimlik istenmelidir. Veya hesabın açılması ertelenmelidir. Güvenlik kontrollerinin yapılmadan ve sisteme gerekli bilgilerin doğru bir şekilde girilmeden hesap açılma yoluna gidilmemelidir. Yapılan hatalı ve eksik bilgi girişleri ileri tarihlerde riskli operasyonel hatalara neden olabilmektedir.

Mevduat İşlemleriyle İle İlgili Uygulamada Dikkat Edilecek Önemli Hususlar (Şemsi, 2015: 270);

- ❖ İlk kez açılan hesaplarda müşteriye hesap cüzdanı verilmelidir. Verilen hesap cüzdanı banka yetkili personelleri tarafından imzalanmalıdır. Hesap hareketleri her zaman bu cüzdanlara işlenmeli ve mudi tarafından hesap kapatılması durumunda ise banka tarafından hesap cüzdanları alınmalıdır,
- ❖ Hesap cüzdanlarını çeşitli nedenlerden dolayı kaybeden mudilerden dilekçe alınmalı yeni cüzdan verilmelidir. Verilen hesap cüzdanı sisteme girilmelidir,
- ❖ Hesapta yeterli bakiye olmadan açığa işlem yapılmamalıdır. Bu durum özellikle hesaptan hesaba para transferlerinde meydana gelebilmektedir,
- ❖ Mevduat hesabının bulunduğu şube dışında farklı bir şubeden para yatırılması durumunda hesap cüzdanına yapılan işlemin yazdırılması gerekir,
- ❖ Banka şubelerinde meydana gelebilecek riskli işlemleri önlemek amacıyla 1 yıl ve daha fazla süreyi kapsayan hareketsiz hesaplardan tek imza ile ödeme yapılmamalıdır.

Mevduat Faizinin hesaplanması;

Faiz tutarı= Miktar x Gün Sayısı x Faiz Oranı/100 x Bir yılda bulunan gün sayısı

Bankaların müşterilerine ödeyecekleri mevduat faizleri üzerinden gelir vergisi kesintisi yapılmaktadır. Bu oran genel olarak %15 olarak uygulanır.

Mevduat hesabından mudi, medeni kanunun rehinlere ve Borçlar Kanunu’nun alacağın devir ve temlikine ilişkin hükümleri ile diğer kanunların verdiği yetkiler ve koyduğu yükümlülükler saklı kalmak şartıyla mevduat sahiplerinin mevduatlarını geri alma hakları hiçbir suretle sınırlandırılmaz.

6.MEVDUAT HESAPLARININ MUHASEBE SÜRECİ

5411 Sayılı Bankacılık Kanunu ve 2006 yıl 26333 sayılı Resmi Gazete’de yayımlanan ve BDDK tarafından hazırlanan Tek Düzen Hesap Planı Tebliğine göre mevduat türleri şu şekilde sınıflandırılmıştır (Dursun, 2016: 28-29);

- 300 Tasarruf Mevduatı (YİYGK)
- 301 Döviz Tevdiat Hesabı (YP-Vadesiz)
- 302 Tasarruf Mevduatı (YDYGK-Vadesiz)
- 304 Resmi, Ticari ve Diğer Kurumlar Mevduatı (YİY- Vadesiz)
- 306 Ticari ve Diğer Kurumlar Mevduatı (YDY- Vadesiz)
- 308 Bankalar arası mevduat (Vadesiz)
- 309 Bankalar Mevduatı (Yabancı Para-Vadesiz)
- 310 Tasarruf Mevduatı (YİYGK-Vadeli)
- 311 Döviz Tevdiat Hesabı (Yabancı Para – Vadeli)
- 312 Tasarruf Mevduatı (YDYGK-Vadeli)
- 314 Resmi, Ticari ve Diğer Kurumlar Mevduatı (YİY-Vadeli)
- 316 Ticari ve Diğer Kurumlar Mevduatı (YDY-Vadeli)
- 318 Bankalar arası Mevduat (Vadeli)
- 319 Bankalar Mevduatı (Yabancı Para- Vadeli)

Sıralanan bu mevduat hesapları, pasif karakterli olduğundan dolayı yevmiye defterine ilk kayıt alacaklı olarak yapılmakta ve bütün mevduat hesapları alacak bakiyesi vermektedir.

Vadesiz Mevduat İşlemlerinin Muhasebeleştirilmesi

Mevduat Bankaları tarafından açılan ticari işlemlere konu olmayan tasarruf mevduatı türüdür.

Örnek: XYZ Bankası yurt içi yerleşik müşterisi olan Ahmet Vural, banka nezdinde toplamda 80.000 TL vadesiz mevduat hesabı açmıştır. Bankanın bu işlem sonucunda yapması gereken yevmiye kaydı aşağıdaki şekilde olacaktır (Sipahi, 2011:119).

		Borç	Alacak
1	010 KASA HESABI	80.000	
	300 TASARRUF MEVDUATI HESABI		80.000

Mudi tarafından hesabına para yatırıldığı zaman yukarıdaki yevmiye kaydı yapılır. Mudi şubeden nakit para çektiğinde ise 010 kasa hesabı alacaklı 300 tasarruf mevduatı hesabı ise borçlu çalışacaktır.

Döviz Tevdiat Hesaplarının Muhasebesi

Türk Parasını Kıymetini Koruma Hakkındaki karar ve buna ilişkin tebliğler uyarınca bankalar tarafından gerek Türkiye’de yerleşik, gerekse yurt dışında yerleşik gerçek ve tüzel kişiler adına konvertibl dövizler üzerinden açılan döviz tevdiat hesabı, pasif nitelikli olup, sabit fiyat üzerinden hareket görür. Her dönem sonunda hesap bakiyesi evalüasyon işlemine tabi tutulur. Yani Türk parasına dönüştürülür (Altuğ, 2000: 126).

Örnek: ABC Bankası Bakırköy şubesi müşterilerinden Ahmet Yeğen, elinde bulunan toplamda 500.000 USD ile vadesiz döviz hesabı açtırmak istemektedir. Bu talebi şube tarafından kabul edilmiş ve fiziki dövizlerin güvenlik kontrollerinin yapıldıktan sonra şube nezdinde hesap açılmıştır. Bankanın bu işlem için yapması gereken yevmiye kaydı aşağıdaki şekilde olacaktır.

		Borç	Alacak
1	011 EFEKTİF DEPOSU-YP 011.01 (USD) 301 DÖVİZ TEVDİAT HESABI-VADESİZ	500.000	500.000

Yukarıdaki yevmiye kaydında fiziki para girişi olduğu için 011 Efektif Deposu hesabı borçlu çalışmıştır. Çünkü aktif nitelikli hesaplarda artış olduğunda hesap borçlu çalışır.

Vadeli Mevduat İşlemlerinin Muhasebesi

Banka ve müşteri arasında yapılan anlaşma gereği belli bir vade sonunda anapara ve faizin çekilebildiği mevduat türüdür. TCMB tebliği gereği mevduatlar için asgari bir sınır bulunmamakla birlikte mevduat hesapları, bir ay, üç ay, altı ay, bir yıl, sürelerle açılabilir (Dursun, 2016: 32). Ayrıca birikimli olarak 5 yıllık süreyle de açılabilir. Mevduat hesaplarında gelir vergisi kesintisi yapılır. Yani brüt olan faizden gelir vergisi kesilerek net faiz müşterinin hesabına aktarılır. Müşteri, net faizi ister hesabına aktarılır isterse nakit olarak bankadan çekebilir.

Örnek: AB Bankası müşterilerinden Aziz Bey, vadesiz mevduat hesabından 600.000 TL bedelle banka nezdinde vadeli tasarruf mevduatı hesabı açtırmıştır. Banka müşterinin hesap kontrollerini yaptıktan sonra Aziz Bey'e 32 günlük mevduat hesabı açmıştır. Faiz oranı %30 olarak belirlenmiştir (Sipahi, 2011: 122-123).

		Borç	Alacak
1	300 TASARRUF MEVDUATI HESABI-TP 310 TASARRUF MEVDUATI HESABI-VADELİ	600.000	600.000

Yukarıdaki yevmiye kaydında mudinin vadesiz mevduat hesabından vadeli mevduat hesabına toplamda 600.000 TL para transfer edilmiştir. Mudinin vadesiz mevduat hesabında azalma meydana gelirken vadeli mevduat hesabında aynı miktarda artış olmuştur.

		Borç	Alacak
2	610 MEVDUATA VERİLEN FAİZLER 310 TASARRUF MEVDUATI HESABI-VADELİ	15.780,82	15.780,82

Yukarıdaki yevmiye kaydında brüt olarak faiz hesaplanmıştır.

		Borç	Alacak
3	310 TASARRUF MEVDUATI HESABI-VADELİ 380 ÖDENECEK VERGİ, RES. HARÇ VE PRİ.	789	789

Yukarıdaki yevmiye kaydında gelir vergisi tevkifatı kaydı yapılmıştır.

		Borç	Alacak
4	310 TASARRUF MEVDUATI HESABI-VADELİ	614.991,78	
	300 TASARRUF MEVDUATI HESABI		614.991,78

Yukarıdaki yevmiye kaydında anapara ve net faizin müşterinin vadesiz tasarruf mevduatı hesabına aktarılması kaydını içermektedir. Sonuç olarak müşterinin hesabında net faiz kadar bir artış meydana gelmiştir.

SONUÇ

Günümüzde bankacılık sektörü hızla gelişim göstermektedir. Bu gelişim sonucunda bankalar, rakiplerine karşı üstün hale gelebilmek için yeni ürün ve hizmet üretmek ve bu ürün ve hizmetleri müşterilerin yararına kullanmaktadırlar. Uygulamada bakıldığı zaman kaynak maliyeti açısından mevduat hesaplarının bankalar için çok önemli bir enstrüman olduğu görülmektedir. Çünkü özellikle vadesiz mevduat hesabına düzenli olarak bir faiz ödemesi yapılmamaktadır. Bu durum, vadesiz mevduat hesaplarını daha da önemli hale getirmiştir. Mudilerin mevduat hesapların yeteri kadar olması kredi taleplerinin de olumlu sonuçlanmasını sağlamaktadır. Veya nakit karşılığı kredi kolaylığı sağlamaktadır. Bunun sonucunda, mevduatın kredi sistemin gelişmesine de olumlu katkı sağladığını söyleyebiliriz. Ülkemizde bankacılık sistemine dâhil olmayan ve yastık altında tutulan Türk Parası ve Yabancı Paraların olduğu bilinmektedir. Bunlara ilaveten yastık altında tutulan altınların bankacılık sistemine kazandırılması bankalar ve ülkemizin gelişmesi açısından hayati bir öneme sahiptir. Bu konuda bankaların çalışma yapması önerilmektedir. Bankacılık sistemimizin gelişmesi ve daha da büyümesi için ülkemizde finansal okuryazar oranının artırılması, tasarruf bilincinin daha çok geliştirilmesi, bankacılık ve finans sistemine olumsuz yaklaşım benimseyen mudilerin sisteme kazandırılması günümüz koşullarında gerekli görülmektedir. Sonuç olarak, aracılık görevi üstlenen bankalar, fon ihtiyacı olmayan bireysel ve tüzel kişilerden topladıkları bu fonları ihtiyaç sahibi kişi ve kurumlara kredi olarak vermek ve bu sayede reel sektörün gelişip büyümesine katkı sağlamaktadır.

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Underlying Food Values influencing food-related behaviors of consumers in Turkey

Cihat GUNDEN¹

Ela ATIŞ²

H. Ece SALALI³

¹Professor, Ege University, Faculty of Agriculture, Department of Agricultural Economics, Bornova, Izmir, Turkey, cihat.gunden@ege.edu.tr, 0000-0003-0353-5054

²Professor, Ege University, Faculty of Agriculture, Department of Agricultural Economics, Bornova, Izmir, Turkey, ela.atis@ege.edu.tr, 0000-0001-8011-8102

³Corresponding author, Assistant Professor, Ege University, Faculty of Agriculture, Department of Agricultural Economics, Bornova, Izmir, Turkey, ecesalali@gmail.com, 0000-0001-8537-1705

Abstract: While the world is struggling with the obesity epidemic, the novel coronavirus pandemic has started to spread, and has become more in need of health conscious consumers and healthy eating habits along with new approaches in designing policy interventions. In this new situation, it is urgent to examine the food attributes to identify the underlying food values, which lead consumers to eat healthy. This study aims to explore consumers' food values and their influences on health consciousness and food-related behavior in Turkey. Also, the study shed light on identifying the underlying dimensions that capture the meaning of food values used to segment consumers. Ultimately, policy interventions are designed benefited from behavioral insights to encourage healthy diet. Data were obtained from a random sample of 385 consumers through face-to-face interviews in Turkey. Factor analysis was performed to determine the underlying dimensions that summarize and capture the meaning of food values. Then, consumers were classified into segments considering their perception of food values. The food values were fairness, environmental impact, origin and nutrition (ethical and environmental), defined as social food values in Turkey. Classifying consumers into two segments regarding their perception of social food values showed that 57.4% of the consumers had a positive perception, while 42.6% had a negative perception, named as ethical consumers and apathetic consumers respectively. The results showed that ethical consumers had higher health conscious, and healthier food consumption behaviors than apathetic consumers. The study recommends policy interventions aimed at altering the decision-making environment of consumers to promote healthy eating behavior.

Keywords: Food values, Consumer perception, Food consumption behavior, Policy intervention

1. INTRODUCTION

Numerous initiatives develop policy interventions in all regions of the world, regardless of whether it is a wealthy nation or not, in order to struggle with the growing epidemic of obesity, and increasing obesity related diseases such as diabetes and heart disease (Just and Gabrielyan, 2016). Overall, overweight and obese adults were 39% and 13% of the world's population, respectively, in 2016 (WHO, 2020a). In Turkey, the prevalence of obesity among adults nearly tripled between 1980 (10.4%) and 2016 (32.1%) (WHO, 2020b). Increasing obesity rates indicate that improving current policy instruments or enacting various measures are not effective enough to mitigate the prevalence of obesity (Dipietro et al., 2016). In addition to the epidemic of obesity, the novel coronavirus disease (COVID 19) has been spreading rapidly worldwide. In particular, recent reports emphasize that no food or dietary supplement prevents COVID-19, but healthy foods and balanced diet positively affects the immune system and thus strengthens body resistance to the virus (FAO, 2020c; WHO, 2020d). Therefore, the expectation of the society with health consciousness and healthy eating will increase; meaning that scholars, policy-makers and public health professionals in world countries will make more efforts to design food policies to achieve sustainable and healthy food consumption goals.

Ensuring sustainability in consumption as well as in food production is inevitable in order to achieve the goal of being a sustainable society (Robinson and Smith, 2003; Ghvanidze et al., 2016; Gunden and Thomas, 2018). In order to clarify the conceptual link between health consciousness and food consumption, it is useful to first examine the multidimensional structure of sustainability. The underlying dimensions of sustainability, which is an abstract construct, are conceptualized as temporal dimension, regarding environmental concerns (trade-offs between present and future), and social dimension, dealing with ethical concerns (trade-offs between consumers and others) (Grunert et al., 2014). Sustainable consumption refers to the decision-making by taking into account the social responsibility of the consumer (Vermeir and Verbeke, 2006). However, a sustainable (or reflexive) consumer is by definition not an ethical consumer. Actually, sustainable consumer is surrounded by general cultural norms, and associated with the environment. On the other hand, ethical consumer incorporates social and ethical issues, and feels responsibility for both the environment and society (Vermeir

and Verbeke, 2006; Ghvanidze et al., 2016). Health and sustainable development have important contributions to each other. Therefore, health is included in sustainability as the fourth dimension, and sustainable development now consists of: Environmental, economic, social and health sustainability. To better understand the relationship between health and sustainability, researchers have suggested the duality thought (Peterson and Land, 2010; Kjærgård et al., 2013; Jelsøe et al., 2018). The duality of health and sustainability means the mutual linkages between health promotion and sustainable development that are considered to produce, reproduce and constraint each other.

The given conceptual explanations emphasize why healthy eating habits are closely related to environmental and ethical food consumption. Although consumers have different meanings for sustainability, most consumers relate sustainability to some aspects of environmental protection and to a lesser extent to ethical issues (Grunert et al., 2014; Ghvanidze et al., 2016). In this recent view, conceptually narrowing sustainability to environmental sustainability and reducing the priority of the social dimension negatively affect the relationship between health and sustainability (Jelsøe et al., 2018). This argument reveals the need to examine aspects of food products that address environmental, ethical and social issues.

When it comes to policy implementations, even though intensive educational and information campaigns targeting final consumers have been conducted, policy makers are looking for alternative approaches anyway to change consumers' food choices (Vecchio and Cavallo, 2019). So, why not we primarily focus directly on health consciousness to promote healthy food consumption? The reason might be that conscious thought has a small effect on much of individual's behavior (Hallsworth et al., 2016). On the other hand, along with the failure to integrate health promotion and sustainable development, policy implementations aimed at solving public health problems or environmental sustainability problems may result in new health or environmental problems (Jelsøe et al., 2018). To prevent another misunderstanding, research suggests that food and health policy implementations that make an effort to convince consumers to increase healthy food choices and change their eating habits should not focus on "what is right" (Kroese et al., 2016). Indeed, consumers' food purchase and eating behaviors are influenced by the environment they make decision. In this case, the right approach is to adjust the environment where the food consumption decisions are made, rather than efforts to increase health consciousness and deliver "Make the right choice" as a content of message to ensure that consumers eat healthy food. This argument highlights behavioral design as an approach to change consumer behavior as desired.

As seen so far, the major problem is to identify the most appropriate approach to better understand why still unhealthy food choices and eating behaviors happen. To solve this problem, it would be necessary to make changes to the current perspective. To reach a rigorous approach: Firstly, consumers don't place importance solely on taste, appearance and convenience attributes of food products to make decisions on what to purchase and eat. Instead, environmental issues, animal welfare, origin, production methods and sharing benefits of trade have been an increasing impact on consumers' food purchase and eating behaviors, result in changing consumers' priorities and preferences towards healthy eating habits (Lusk and Briggeman, 2009; Dagevos and van Ophem, 2013; Grunert et al., 2014; Bazzani et al., 2018; Lim, 2017; Rejman et al., 2019). Secondly, psychographic variables, describing consumers based on their psychological and behavioral characteristics, may be more predictive than demographic variables in order to explain consumer behavior (Hoyer and MacInnis, 2008). Indeed, since demographic variables are not considered as very substantial in profiling socially responsible consumer (Vermeir and Verbeke, 2006), psychosocial variables are claimed to be more influential in predicting consumer intention to purchase sustainable food products than the demographics (Robinson and Smith, 2002). Thus, instead of a group of consumers defined by demographics, researchers stated that informational messages could be delivered effectively to consumers by considering their attitudes about sustainable foods. From this point of view, the problem encountered is to define and measure attitudinal variables, and how they affect consumer behavior when making food-specific decisions. At this point, researchers investigate consumers' attitudes by means of applying different methodologies in order to provide evidence to policy makers to design policy interventions to positively change these attitudes towards health and healthy nutrition (Gunden and Thomas, 2012; Thomas and Gunden, 2012). However, attitude-behavioral intention gap stated that a particular attitude alone does not guarantee that a consumer will behave in a certain way, meaning that consumers with positive attitude toward sustainable consumption may not intend to buy sustainable food products (Vermeir and Verbeke, 2006). Additionally, even if consumers report to prefer the environmental and ethical aspects of food products, other food attributes (like price, quality, brand familiarity) may still be important in consumers' food purchasing decisions (Vermeir and

Verbeke, 2006; Ghvanidze et al., 2016). To sum, all this indicates that we need profoundly understand the underlying values that can take precedence over attitudes and food attributes.

Individuals' behavior is formed through values that have a position in the center of self-conception (Schwartz, 1992). Values are defined as enduring belief that a specific end-state of existence is personally or socially preferred over an opposite one (Rokeach, 1973). They may be thought of as the criteria individuals employ to evaluate situations or objects (Brunso et al., 2004a). That is, values determine individuals' reaction to their surroundings, which consider what is good or bad, and right or wrong (Hoyer and Macinnis, 2010). We could say that realizing our values is our ultimate goal, since we generally strive to achieve those things that are consistent with our sense of values (Gunden and Thomas, 2017). In a general sense, values are beliefs about desirable end states that are not situation specific; they guide the evaluation or selection of behavior or events and are ordered by importance (Schwartz, 1992).

On the other hand, food values are defined as stable basic preferences for broad categories of food attributes, such as nutritional value, taste, and price. The relative importance that consumers associate with these food values can help explain food purchasing and consumption decisions (Lusk and Briggeman, 2009).

In Turkey, it is also highlighted the necessity of sustainable food consumption. The existing research studies have set side on organically produced food consumption or one dimension of sustainable consumption, such as environmentally friendly consumption (Gunden et al., 2020). Therefore, lack of knowledge with regard to the impact food values on consumers' health consciousness, food purchase and eating behaviors have reduced the ability of policy makers and health care professionals to design customized interventions that will result in concrete behavioral changes that lead to the adoption of healthy eating habits.

The objective of the study is to explore consumers' food values, and the role of these values in influencing food-related behavior in Turkey. The study aims to identify the underlying dimensions that capture the meaning of food values, and to classify consumers into segments based on their food values. The ultimate goal is to propose food policy interventions, designed by means of behavioral insights, in order to prevent unhealthy nutritional behavior.

In the present study, we seek answer to the following question: Does food values influence consumers' food consumption habits? The answer to this question concerns health policymakers as well as food policymakers, because both groups need to better explain consumer behavior. In such a way that, knowledge generated by this study on how food values determine food consumption behavior will enable researchers, extension services, health professionals and health care providers to tailor nutritional/education programs to target those consumers who need to change shopping, eating and cooking behaviors that are consistent with food values. In attempt to developing new strategies designed to produce behavioral changes in gaining a healthy nutritional habits among individuals in the community, policy makers will be likely to benefit from a better understanding of food values that form consumer behaviors.

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2. LITERATURE REVIEW

Values have been examined in the studies that attempt to find a relationship between global or personal values and consumers' purchase behavior for a certain group of food products. Aertsens et al. (2009) tried to understand the relationship between consumption of organic food and global values, suggested by Schwartz' (1992) value theory: Security, hedonism, universalism, benevolence, stimulation, self-direction and conformity. The authors acknowledged the positive effects of these values on organic food consumption. Also, consumers with traditional values were more inclined to buy sustainable products than consumers with power seekers (Vermeir and Verbeke, 2008). In addition, researchers found out the remarkable influence of moral attitude and subjective norms on consumers' willingness to buy organic food (Arvola et al., 2008). Similarly, Tanner and Kast (2003) showed that positive attitudes of consumers toward environmental protection were one of the major facilitators of green food purchases.

As for personal values, Homer and Kahle (1988) explored two different groups based on List of Values (LOV) developed by Kahle, 1983: Internal and external values. The authors revealed that people who gave more importance to internal values (self-fulfillment, fun and enjoyment in life, sense of accomplishment, and self-respect) and less importance to external values (sense of belonging, being well-respected, and security) tended to purchase natural foods. Additionally, researchers investigated correlations among personal values, attitudes and behaviors. They found that excitement had significant positive correlation with pro-snacking attitude, whereas warm relationship with others had negative (Goldsmith et al., 1995). Moreover, self-respect as internal values, and security as external values were correlated negatively with convenient food consumption. In contrast, achievement was correlated positively with convenience food product usage, convenience orientation towards food shopping, meal consumption and meal preparation (Botonaki and Mattas, 2010). In another pioneering study, Brunsø et al. (2004) constructed a model that showed value-lifestyle-behavior relationship. They proposed a hierarchical structure using LOV as personal values, food-related lifestyle instrument developed by Brunsø and Grunert (1995) as a measure of lifestyle specific area of food consumption, and food-related behavior (Brunso et al. 2004) as an indication of consumers' shopping, cooking and eating behaviors. The research studies illuminate that food related life style is a mediator between values and behavior (Brunso et al., 2004; Brunsø & Grunert, 1995; Grunert et al., 1997; Scholderer et al., 2002).

The strength of personal values may be low level on explaining consumers' food-related behavior due to other influencing factors. Controversially, food values can be powerful depending on consumers' prioritization tendencies (Paasovaara, 2011). The relationship between consumers' food values and behaviors has been rarely investigated in the literature. In the previous studies, consumers were given a certain number of food values related to food consumption patterns (Lusk and Briggeman, 2009; Bazzani et al., 2018). These studies attempted to resemble the values proposed by Schwartz (1992). Lusk and Briggeman (2009) purposed a List of Food Values including 11 food values based on human values and preferences to determine how these values affected consumers' preferences for organic food by employing best-worst scaling and econometric methods in the USA. The authors found that safety, nutrition, taste and price were the most important, whereas environment, fairness, tradition and origin were the least important food values. They pointed out the significant influence of food values on consumers' preferences. Bazzani et al. (2018) classified the List of Food Values into three groups of attributes: Credence (Naturalness, safety, environmental impact, origin, fairness, nutrition and tradition), experience (taste, convenience and appearance) and search (price). Unlike the study conducted by Lusk and Briggeman (2009), the authors have modified the list by means of including novelty and animal welfare, and excluding tradition. Another extended definition of food value is the food consumption value (FCV) introduced by Dagevos and van Ophem (2013). The FCV comprises two relevant values: Product value, which refers to physical product attributes, and process values, which is related to practices and characteristics of production process. List of food values proposed Lusk and Briggeman (2009) and the FCV are directly related as follows: Product value is associated with six food values (i.e. taste, price, safety, convenience, nutrition and appearance), while process value corresponds to remaining five food values (i.e. naturalness, tradition, origin, fairness and environmental impact) (Dagevos and van Ophem, 2013). As an example of value-attitude-behavior chain, Hauser et al. (2013) investigated the impact of food-related values on consumers' food purchase behavior along with the mediating role of consumer attitudes toward eight food product categories. They found a partial mediation of values through attitudes, meaning that food values have a strong impact on attitudes, and attitudes influence food purchase behavior. Recently, Thomas and Gunden (2017) and Gunden and Thomas (2017) considered food-specific values developed by Lusk and Briggeman (2009) instead of Brunsø et al. (2004) model that utilized personal values defined as LOV above, and explored the influence of food values and food-related lifestyle on food-related behavior among food desert residents in the US. They found that self-centered consumers tended to eat fast food out.

Researchers might produce a different list of food values that capture the major values describing food consumption (Lusk and Briggeman, 2009). Therefore, the present study provides a different approach: We initially considered the food values used in the previous studies and then performed a multivariate analysis technique for identifying the underlying values that influence consumers' health consciousness and food-related behavior. Thus, the approach designated whether the values could measure consumers' food values or not in the study area, instead of measuring solely the importance of pre-determined food values assumed as the values that influence consumers' choices.

Consumers have recently increased their interest in ethical, environmental and health issues. Since there is a relationship between healthy eating, environmental and ethical consumption, this interest of consumers has changed their preferences (Ghvanidze et al., 2016; Ghvanidze et al., 2019). Although there have been studies

analyzing food values in relation to solely consumers' food purchasing behavior (Lusk and Briggeman, 2009; Hauser et al., 2013; Bazzani et al., 2018) or food-related behaviors (Thomas and Gunden, 2017; Gunden and Thomas 2017), none of the studies have examined together the influence of these values on consumers' food shopping, cooking and eating behaviors.

3. MATERIAL and METHODS

A structured questionnaire was developed to collect data from a random sample of consumers in Izmir, which is the third biggest city and located in Aegean region of Turkey. The sample size was designed following the proportional sampling procedure outlined by Newbold (1995), with a 95% confidence interval and 5% margin of error. The sample was drawn proportionate to population size by 11 provinces. Data were obtained from 385 consumers through face-to-face interviews. Pre-trained interviewers carried out data collection in June 2017. Consumers were approached during their food shopping in the most visited hypermarkets in each province. They were invited to volunteer to participate in a survey. Then, face-to-face interviews were conducted with only the consumers stated that they were 18 years or older, and mainly responsible for food shopping and cooking in the household.

3.1. Food values

In this study, List of Food Values developed by Lusk and Briggeman, (2009) was utilized to determine consumers' food value system. The scale used to measure each value ranged from (1) not at all important to (9) very important. Table 1 shows 11 food values examined in the study area and their corresponding food attributes (Bazzani et al., 2018) and food consumption values (Dagevos and van Ophem, 2013) as mentioned before.

Table 1: Table 1: Food values

Food values	Description*	Corresponding attribute**	Food consumption value***
Naturalness	Extent to which food is produced without modern technologies	Credence	Process
Taste	Extent to which consumption of the food is appealing to the sense	Experience	Product
Price	The price that is paid for the food	Search	Product
Safety	Extent to which consumption of food will not cause illness	Credence	Product
Convenience	Ease with which food is cooked and/or consumed	Experience	Product
Nutrition	Amount and type of fat, protein, vitamins, etc.	Credence	Product
Tradition	Preserving traditional consumption patterns	Credence	Process
Origin	Where the agricultural commodities were grown	Credence	Process
Fairness	The extent to which all parties involved in the production of the food equally benefit	Credence	Process
Appearance	Extent to which food looks appealing	Experience	Product
Environmental Impact	Effect of food production on the environment	Credence	Process

Source: * Lusk and Briggeman (2009); ** Bazzani et al. (2018); ***Dagevos and van Ophem (2013)

3.2. Food-related behavior

Brunso et al. (2004a) prepared a food-related behavior list in order to measure the self-reported frequency of shopping, cooking and eating behaviors. Food-related behavior instrument consists of 37 behavioral frequency statements measured on a 7-point scale: (1) every day or almost every day, (7) never.

3.3. Analytic approach

Factor analysis was conducted to determine the underlying dimensions that summarize and capture the meaning of food values in order to make these values comparable and understandable in terms of their influences on food-related behaviors (Gunden and Thomas, 2017). Factor analysis enabled us to reduce the number of values by combining two or more values into a single food value dimension. Eventually, the analysis provided food values by their common underlying dimensions. In the present study, principal component analysis utilizing varimax rotation was performed to determine the minimum number of dimension that will account for maximum variance in the data (Tabachnick and Fidell, 2007; Mazzocchi, 2008; Hair et al., 2010).

Factor analysis process described by Thomas and Gunden (2017); Gunden and Thomas (2017) for food values was followed by the steps given below:

In the first step, factor analysis was applied using 11 food values and 385 responses. In the preliminary result, all food values were checked to ensure that they met the requirements for employing factor analysis. The second step was devoted to validating the results obtained from the factor analysis. To test the generalizability of the results, the sample was firstly split into two halves by generating a random variable (0, 1). Then, factor analysis was conducted on each half of the sample. The results from the two sub-samples were compared with the results obtained from the complete data set. All communalities for two sub-samples met the criteria of being more than 0.50, and the dimensions generated by the sub-samples were similar to the original sample. This validation process demonstrated that the results of the factor analysis were used to identify consumers' food values represented by this data set. To verify that the food values for a dimension are measuring similar concept, we computed Cronbach's alpha by performing reliability analysis to evaluate the internal consistency among the values. Tabachnick and Fidell (2007) provide a rule of thumb that sample size should be at least 300 responses for the factor analysis. Generally speaking, the minimum requirement for sample size is 1:5 ratio (five cases per variable). This study met the criteria for sample size with 385 responses and the values retained, corresponding to adequate responses per food value.

Following the first round of factor analysis, a second round of factor analysis was performed to create a new composite variable from responses to the food values. Factor analysis enables the identification of a group of values that is a better measure of food values. By using responses to the food values, a new composite variable was created from the results of factor analysis. The estimated factor scores of the new variable were used to capture consumers' perception of food values, and obtain consumer segments by their perceptions. A new binary variable was created by assigning zero to consumers with negative factor scores and one to the consumers with positive factor scores in order to classify consumers into segments (Thomas et al., 2011).

Point Score Analysis was conducted to rank food values by the importance consumers put on. Food values were ranked considering the share of summed scores reported by consumers in total scores (9x385) for each value.

In the study, Kolmogorov-Smirnov normality test was used to check whether the variables used in the analyses showed normal distribution. For non-parametric variables, Mann-Whitney U test was performed to compare different groups of consumers. Friedman test, which is the non-parametric alternative to the one-way repeated measures analysis of variance (Pallant, 2010), was conducted to detect differences among food values.

4. RESULTS and DISCUSSION

Table 2 shows basic descriptive statistics on food values obtained from consumers in the study area, and corresponding attributes for each food value. An overall reliability test of food value scale yielded a Cronbach's alpha of 0.69; meaning that all the items included in the analysis were measured with a reasonable degree of reliability. The Friedman test, which is significant ($\chi^2 = 667.205$; $p < 0.01$), confirms that consumers concern some food values more than the other food values, which means that the degrees of importance reported by consumers for food values are significantly different. The results indicate that safety is the most important food value, followed by taste, naturalness and nutrition, whereas convenience, appearance, origin and tradition are the least important. Besides, price, environment and fairness are intermediate ranked food values.

Table 2: Descriptive statistics and importance ranking for food values

Food-related values	Mean*	Standard deviation	Score	%	Rank
Naturalness	7.93	1.62	3054	88.14	3
Taste	8.26	1.20	3179	91.75	2
Price	7.45	1.74	2869	82.80	5
Safety	8.41	1.27	3239	93.48	1
Convenience	6.14	2.57	2362	68.17	11
Nutrition	7.57	1.87	2913	84.07	4
Tradition	6.67	2.15	2568	74.11	8
Origin	6.52	2.40	2512	72.50	9
Fairness	7.06	2.16	2717	78.41	7
Appearance	6.46	2.23	2487	71.77	10
Environmental Impact	7.30	1.99	2812	81.15	6

* 1: Not at all important, 9: Very important; Cronbach's Alpha = 0.69; Null hypothesis was rejected under Friedman Test for $p < 0.01$

Table 3 shows the results of research studies that rank food values as the most important, intermediate and the least important. Safety and taste seem to be common food values in the most important group, whereas convenience and appearance are the most common in the least important group. While freshness steps forward in the intermediate group, it is clear that the other food values change between the groups. Although the importance of food values may vary by country, it has been agreed that demographic variables such as education and income have little affect on food values (Lusk and Briggeman, 2009). For instance, Lusk and Briggeman (2009) have drawn a sample with higher education and income than the US average, while Gunden and Thomas (2017) have collected data from the residents of a food desert with a low level of education and income in the US. Both studies have shown that safety, nutrition, taste and price were the most important, and fairness, tradition and origin were among the least important food values (Table 3). Another remarkable point is that the most important food values in the USA are all product values, whereas Turkey has naturalness, Norway has naturalness and animal welfare as process values.

Table 3: Comparative Importance of Food Values by Research Studies

Authors	Country	The most	Intermediate	The least
This study	Turkey	Safety, taste, naturalness, nutrition	Price, environmental impact, fairness	Convenience, appearance, origin, tradition
Lusk and Briggeman (2009)	USA	Safety, nutrition, taste, price	Convenience, appearance, naturalness	Environmental impact, fairness, tradition, origin
Bazzani et al. (2018)	USA	Safety, price, taste, nutrition	Naturalness, animal welfare, environmental impact, fairness	Appearance, origin, convenience, novelty
	Norway	Safety, naturalness, taste, animal welfare	Nutrition, price, fairness, origin	Environmental impact, appearance, convenience, novelty
Gunden and Thomas (2017)	USA	Safety, taste, nutrition, price	Appearance, environmental impact, naturalness, convenience	Fairness, origin, tradition

During factor analysis process, we removed seven problematic food values from the analysis due to low communalities and measures of sampling adequacy, which fell below the cut-off point of 0.50 (Hair et al., 2010). The remarkable finding generated by the factor analysis was that taste, convenience and appearance (all experience attributes); price (search attribute); naturalness, safety and tradition (some credence attributes) from the initial list of food values in the literature (Lusk and Briggeman, 2009; Bazzani et al., 2018) were completely excluded in the analysis. It means that these food-related values do not capture adequately the meaning of food values as represented by the underlying dimension, identified via the factor analysis, as defining health consciousness and food-related behaviors. Consumers may perceive the aforementioned values, removed from the list of food values, as food attributes in general manner. Finally, factor analysis process was replicated using four food values retained.

The results of factor analysis illustrated that the number of retained dimension described in Table 4 was only one with an eigenvalue > 1 employing the Kaiser rule (Merter and Vannatta, 2010). The total variance explained was 58.30%. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy used to examine the appropriateness of factor analysis with high values between 0.5 and 1.0 (Hair et al., 2010) was 0.74 in the study. Bartlett's test of sphericity was significant ($p < 0.001$), indicating that the correlation matrix is significantly different from identity matrix (Mazzocchi, 2008). All these criteria for deriving a dimension revealed that it was appropriate to conduct factor analysis for summarizing data to identify underlying dimension that capture consumers' food values (Mazzocchi, 2008; Hair et al., 2010). Following factor analysis, reliability test conducted to assess the internal consistency among the set of values on the dimension produced a Cronbach's alpha of 0.76. Table 4 presents the dimension that is valid and reliable for defining consumers' food values in Izmir, Turkey.

If paying close attention to the dimension of food values defined by fairness, environmental impact, origin and nutrition in the study area, all food values are credence attributes rather than experience and search attributes classified by Bazzani et. al. (2018). Given the conceptualization of Dagevos and van Ophem (2013), three food values are process (fairness, environmental impact, and origin), and only one is product value (nutrition). In short, it is possible to say that process values are dominant among the food values of the consumers.

Values have been grouped differently in the literature (Rokeach, 1973; Homer and Kahle, 1988; Schwartz,

1992). For example, Rokeach (1973) proposed two groups of values such as terminal (goals) and instrumental (means) values. Rokeach's terminal values were used as the frame of reference for interpreting the extracted dimension (Rokeach, 1973). In this framework, terminal values were categorized as personal (self-centered) and social (society-centered). In the light of what has been explained so far, fairness, environmental impact, origin and nutrition represent a dimension that can be named social food values (Lusk & Briggeman, 2009). Likewise, Gunden and Thomas (2017) determined that two different dimensions underlie food values in the USA: Social (origin, tradition, fairness) and personal values (naturalness, nutrition). In any case, the general idea is that social-oriented values are more related to environmental awareness than to personal values (Pinto et al., 2011).

When food values retained in the study are considered in terms of sustainability (as in introduction), environmental impact is involved in temporal dimension of sustainability, whereas fairness and origin are included in social dimension. Else, sustainable consumers pay attentions to the environment, ethical consumers attach importance to both environment and society. Therefore, environmental impact, fair trade and origin can be incorporated in social issues. In terms of nutritional value, even Lusk & Briggeman, (2009) and Gunden and Thomas (2017) took tradition into social value category in the US, it replaced with nutrition in this study. The reason for this replacement is that the food products produced traditionally are common in the market, and consumers consider tradition as a food attribute when making comparison among food products with different production technologies in purchasing food products. On the other hand, nutritional deficiencies noticeably have a problem in the community. Availability of individuals who can't get the necessary amount of nutrient in the community may cause consumers to recall nutrition as a cue to make judgment about social food values. In this case, traditional consumption is seen as a personal preference, whereas nutrition is considered as a social issue for consumers due to the poor diet problem in the study area. Also, since nutrition is related to health consciousness, which is a part of social sustainability (i.e. environmental and ethical consumption) (Ghavanidze et al., 2016; Kjærgård et al., 2013), then, nutrition can be counted among social issues.

Food production, or agricultural production specifically, can have negative consequences for the environment, which can lead to health-related problems (Pedersen and Land, 2010). Therefore, environmentally responsible consumption or green consumption is defined as any consumption activities aiming to reduce negative impact on the environment. So, environmentally responsible consumers are motivated by environmental values (Schaefer and Crane, 2005). It is well known that environmental protection is considered as the key motivating factors for organic food purchase (Makatouni, 2002; Padel and Foster, 2005). In the study area, we can conclude that environmental consumption is taken into consideration as well. Consumers seek food products produced by sustainable agricultural practices including organic agriculture and Good Agricultural Practices (GAP). It can be said that the fairness is associated with the origin in the study area. In fact, Ghvanidze et al. (2019) has also approved fairly trade and locally grown products as ethical products. The origin of food products plays a large part in consumer food purchases due to increasing awareness of geographical labels. Along with increased importation for food products, consumers intend to buy locally grown products to support small businesses instead of alternatives from abroad, which leads consumers to pay more attention to the origin. Therefore, the origin is more than an attribute in the study area.

In the light of what has been described on value groups so far, the food values captured by the analysis in the study, that are fairness, environmental impact, origin and nutrition (ethical and environmental), were defined as social food values in the study area.

Table 4: Summary of factor analysis results for food values of consumers

Value dimension	Mean*	Standard deviation	Factor loading
<i>Social food values</i>			
Fairness	7.06	2.16	0.808
Environmental Impact	7.30	1.99	0.764
Origin	6.52	2.40	0.761
Nutrition	7.57	1.87	0.719
<i>d</i>			2.332
<i>Total variance explained (%)</i>			58.302
<i>Kaiser-Meyer-Olkin measure of sampling adequacy</i>			0.737
<i>Bartlett's test of sphericity</i>			372.574
<i>Sig.</i>			0.000
<i>Cronbach's Alpha</i>			0.759

* 1: Not at all important, 9: Very important

In value segmentation, researchers attempt to divide consumers into groups, each with different values. Classifying consumers into two segments regarding their perception of social food values showed that 57.4% of the consumers had a positive perception, while 42.6% had a negative perception (Table 5). Then, the segments were named based on consumers' perception: Negative perceivers and positive perceivers. Positive perceivers pay attention to both environmental and ethical aspects of sustainable consumption; on the contrary, negative perceivers are not interested in these issues in food consumption. From now on, we will call negative perceivers as apathetic consumers, positive perceivers as ethical consumers.

Table 5: Value segmentation by consumer's perception

	Segments			
	Apathetic consumers (Negative perceivers)		Ethical consumers (Positive perceivers)	
	Mean*	Standard deviation	Mean*	Standard deviation
Factor score	-0.93034	0.81824	0.69039	0.35409
<i>n</i>	164		221	
%	42.6		57.4	

Hauser et al. (2013) argued that food values could have direct impact on behavior. Examining consumers' food-related behaviors in relation with shopping, cooking and eating behaviors by their perception of social food values provides policy makers, health specialist and extension services an enriched knowledge on consumer segments. Therefore, a statistical comparison was made between the two segments based on the behavioral frequencies of statements in food-related behavior list. Then, consumer profiles in each segment were clarified taking into account statistically significant behavioral statements. Table 10 shows the profiles described using the frequencies of shopping, eating and cooking behaviors reported by consumers.

For ethical consumers, the profile based on food-related behavior is worded as follows (Table 6): These consumers read food labels, shop at the fishmonger's and the cheese shop, and buy ecological food products. Ethical consumers eat green salad, fish, fruit, lentils, and lean meat. Eating with family is common. They spare enough time for cooking. Dinner plans are made the day before. Further, they know how to cook per se. A supporting finding reported that consumers' environmental, and ethical values affected positively their purchase behavior toward green products (Joshi and Rahman, 2015). Apathetic consumers open to new taste experience in food purchase. These consumers eat sweet deserts, sneak food and more than one course at dinner. They lunch out, eat fast food and drink alcohol. Also, they use pre-prepared dishes and mixes at home.

We can say that ethical consumers have healthier nutritional habits and behaviors, which prove the result that they are health conscious stated above. So, health consciousness is associated with environmental and ethical food consumption.

Table 6: Food-related behaviors by consumers' perception of social food values

Behavioral statements	Apathetic consumers ^a	Ethical consumers ^a	Z	Asymp. Sig.
I shop at a supermarket	2.69	2.69	-0.249	0.803
I read advertising circulars about food products	4.68	4.58	-0.611	0.541
I read the informative labels on the food products in the supermarket**	4.12	3.73	-2.206	0.027
I shop at the cheese shop**	4.22	3.93	-2.049	0.040
I shop at the fishmonger's*	4.54	4.09	-2.866	0.004
I shop at the butcher's	4.45	4.26	-1.367	0.172
I shop at the baker's	2.18	2.09	-1.093	0.274
I shop at the fruit shop/greengrocer's	4.12	4.04	-0.606	0.545
I buy food products at the market	3.18	3.14	-1.016	0.310
I eat green salad*	2.80	2.12	-4.526	0.000
I eat fish*	3.99	3.63	-3.176	0.001
I eat fruit*	2.25	1.86	-3.721	0.000
I eat lentils**	3.29	2.96	-2.090	0.037
I eat lean meat*	4.01	3.55	-3.118	0.002
With my food, I eat sauces with cream and butter	3.32	3.15	-1.335	0.182

I eat sweets and cakes**	3.02	3.43	-2.047	0.041
I drink alcohol***	5.01	5.44	-1.935	0.053
I drink milk	4.09	3.95	-0.733	0.463
I spend more than one hour for cooking dinner*	3.62	3.00	-3.099	0.002
I buy ecological food products*	4.86	4.22	-3.849	0.000
I buy new food products, i.e. food products that I have never tried before***	5.15	5.37	-1.782	0.075
In our household we do the baking ourselves	6.31	6.45	-0.037	0.970
In our household we make pickles/preserves ourselves	5.45	5.37	-0.912	0.362
I use complicated and time-consuming recipes	5.52	5.43	-0.106	0.916
I use new recipes, i.e. recipes that I have never tried before	5.30	5.23	-0.353	0.724
I use ready-prepared dishes that just need to be heated up*	5.30	5.88	-3.594	0.000
In our household we use pre-prepared cake mixes**	5.81	6.09	-2.338	0.019
I plan dinner at least one day in advance**	4.12	3.57	-1.978	0.048
At dinner, the entire household comes together	2.01	1.93	-1.424	0.154
I eat more than one course at dinner***	4.08	4.56	-1.732	0.083
I cook without the help of other people in the household***	3.20	2.94	-1.696	0.090
I snack instead of eating a big dinner*	5.45	5.82	-3.242	0.001
I lunch at a cafe/restaurant**	4.10	4.48	-1.892	0.059
I dine at a cafe/restaurant*	4.67	5.13	-2.642	0.008
I lunch with my friends	3.73	4.02	-1.320	0.187
I dine with my family**	1.93	1.60	-2.107	0.035
I eat fast food out*	4.44	5.16	-3.758	0.000
I have guests over for a meal	4.40	4.28	-0.899	0.369

^a 1: Every day or almost every day, 7: Never

* Null hypothesis was rejected under Mann-Whitney U Test for $p < 0.01$

** Null hypothesis was rejected under Mann-Whitney U Test for $p < 0.05$

*** Null hypothesis was rejected under Mann-Whitney U Test for $p < 0.10$

Consumer segments were examined by performing Pearson's chi-square (χ^2) test in order to analyze any association between each consumer characteristic and the segments. Table 7 shows consumer profiles by the apathetic and the ethical segments. The results indicate that two segments are significantly different in terms of the characteristics: Generation, education and marital status.

Older generations were more likely to be ethical consumer than the young generation Z. Also, there was a statistically significant difference between apathetic and ethical consumers, whose average age was 34.56 and 42.10 respectively (Mann-Whitney U test, Z: -5.276; p: 0.000). We concluded that ethical consumers were older than apathetic consumers. Consistently, elderly consumers were found to be more likely than young consumers to have purchase intention of sustainable food products (Robinson and Smith, 2002). In another study whose results overlap with this study, consumers with 40 years old or over were very likely to purchase locally grown products (Ross et al., 2000). Compared to the result about the generations obtained from this study, it can be concluded that the age threshold for purchasing local food products may be around 40. Also, Yadav (2016) stated that egoistic value (health concern) had a stronger influence than altruistic value (environmental concern) in terms of determining young consumers' intention to purchase organic food. Similarly, Kihlberg and Risvik (2007) reported different personal values by age groups, which caused younger consumers to like white bread (conventional wheat) more than older consumers.

Compared to single consumers, married and divorced/widowed consumers were more likely to be ethical consumers. Furthermore, social food values consumers possess showed statistically significant difference between marital statuses (Kruskal-Wallis H: 11.725; p: 0.003). Married and divorced/widowed consumers reported higher degree of importance to social food values than single ones. Studies found that married individuals were prone to keep healthy dietary behavior. For example, Robinson and Smith (2002) found that marital status was independently predictive of intention to purchase sustainable food products, where they reported married couples had healthy dietary behaviors. Gunden et al. (2020) informed that married consumers were more in tendency more to be green consumers in Turkey. In another study, married women consume vegetable frequently, while never married counterparts consume sugared beverage more (Moultapa

and Wallace, 2017). Mata et al. (2015) support our finding, stating that married consumers possessed higher preferences for fair trade, organic, regional and unprocessed food, and lower preference for convenience food compared to never married consumers in the European countries.

As the level of education increased, consumers appeared less likely to be ethical consumer. In other words, more educated consumers looked as if decrease their given importance to social food values. Since we expect that higher educated consumers would be more ethically minded consumer than lower educated ones, this finding may seem that there is a glaring discrepancy in the first instance. Therefore, it may not be possible to interpret the finding directly with food values. Instead, it would be better to evaluate the finding indirectly by taking personal values and food product categories such as organic food products that are associated with environmental friendly production systems into account. For instance, universalist consumers, broad-minded, loyal and wise, tended to protect the environment and buy sustainable food products (Vermeir and Verbeke, 2008). Indeed, education correlates positively with self-direction and achievement values (Schwartz, 1992; Schwartz, 2006). When viewed from this aspect, research show that consumers valuing achievement intend to consume convenience foods (Botonaki and Mattas, 2010). In another study that examines the influence of personal values on environmental awareness, consumers with a primary education are more environmentally aware than consumers with other higher education levels (Pinto et al., 2011). However, research on organic food products suggests different results.

Previous research indicated that demographic variables such as gender, income and education level were not related to purchases of sustainable food products (Robinson and Smith, 2002). In the present study, the level of income also doesn't show statistically significant difference between the segments (Table 11). These findings support that education and income may not influence food values as we mentioned before. Additionally, gender and BMI of consumers are also not statistically significant for differentiating between the two segments (Table 11). Unlike these findings, for instance, research found that females had more positive environmental attitude and green purchasing behavior than males (Dagher et al., 2015). Else, Ross et al. (2000) revealed that females were more likely to purchase locally grown produces.

Table 7: Consumers' profiles by the segments

Variables	Categories	Apathetic consumers		Ethical consumers		Pearson χ^2	Sig.
		n	%	n	%		
Gender	Male	83	46.1	97	53.9	1.707	0.191
	Female	81	39.5	124	60.5		
Generation	<23 Gen Z	33	63.5	19	36.5	26.589	0.000
	24-38 Gen Y	77	49.0	80	51.0		
	39-53 Gen X	39	37.1	66	62.9		
	54+ Baby Boomers & The Silent Generation ¹	15	21.1	56	78.9		
Education	Primary school	20	30.8	45	69.2	8.588	0.035
	High school	35	36.5	61	63.5		
	Undergraduate	96	48.5	102	51.5		
	Graduate	13	50.0	13	50.0		
Marital status	Single	77	51.3	73	48.7	12.444	0.002
	Married	82	39.6	125	60.4		
	Divorced/widowed	5	17.9	23	82.1		
Income (Turkish Liras/month)	<3000	51	39.5	78	60.5	1.936	0.586
	3000-4499	61	46.1	69	53.1		
	4500-5999	26	38.8	41	61.2		
	6000<	26	44.1	33	55.9		
BMI ²	<24.99 (Normal)	87	45.3	105	54.7	1.204	0.548
	25-29.99 (Overweight)	58	39.5	89	60.5		
	30< (Obese)	19	41.3	27	58.7		

¹ Since the number of respondents in the silent generation was not sufficient for the test, it was combined with baby boomers; ² Body Mass Index (BMI) is defined as the weight in kilograms divided by the square of the height in meters (kg/m²). An individual is overweight if their BMI is greater than 25 and obese if their BMI exceeds 30 (WHO).

5. CONCLUSION

This study examined which leading food values drive consumers' food consumption behaviors. The result obtained from multivariate analysis revealed that a unidimensional structure composed of fairness, environmental impact, origin and nutrition was adequate to capture an understanding of food values. These values, called social food values, shape food consumption behaviors representing shopping, cooking and eating habits in the study area. The outcome was then served to create a new composite variable that was utilized to group consumers into segments based on the perception of food values. The segmentation produced two groups: 57.4% of the consumers with a positive perception, and 43.6% of consumers with a negative perception of food values. The segments are then entitled ethical consumers and apathetic consumers respectively.

When the two segments were compared statistically, it was confirmed that ethical consumers had healthier food consumption behaviors than apathetic consumers.

The results reveal the necessity of food policy interventions that increase the importance given on social food values, which results in higher healthy shopping, cooking and eating behaviors.

Policy recommendations

The study may provide policy makers insights to develop interventions to improve public health. An intervention comprises a mixture of policy tools. In this regard, for instance, policy tools are evaluated in four main categories to encourage sustainable consumption (Sonigo et al., 2012): Economic (i.e. taxes, charges, incentives), information-provision (i.e. campaign, labeling), regulatory (i.e. administrative burdens), and behavioral tools (i.e. commitments, community participations). Another alternative policy tool we offer can be a mixed approach that implements information-provision tools along with behavioral tools when required.

At this point, we propose to apply insights from behavioral economics, called nudges that provide simple implementations to change consumer perceptions and priorities for food values in preventing unhealthy nutritional habits. Behavioral economics, combines insights from economics and psychology unlike the mainstream economics (Mullainathan and Thaler, 2000), provides a framework to understand how people make decisions. Behavioral economics assumes that people are irrational (Kahneman, 2003; Kahneman, 2011), but predictably irrational, and tend to make predictable decision-making errors that would be normally avoidable (Ariely, 2008). Nudge is a concept in behavioral economics that alters consumer's behavior in a predictable way (Thaler and Sunstein, 2008). In this framework, consumers can be encouraged to change their behaviors by public policy makers or health professionals as a choice architect using libertarian paternalistic approach without forbidding any alternative that currently exists in the decision-making environment.

Considering the results mentioned so far, the target group that behavioral insights and information-provision will focus on should be composed of the apathetic consumers. As stated above, decision-making environments affect consumers' food-related behaviors. The findings on consumers' self-reported frequency of shopping, cooking, and eating behaviors indicate that 80% of consumers shop at a supermarket and almost 41% of consumers have lunch at a restaurant at least one or two times in a week. Therefore, supermarkets and restaurants can be considered as decision-making environments for implementing policy interventions in the study area. Instead of the generic "one size fits all" interventions, customized policy interventions considering particularly generational characteristics of consumers should be developed by altering these environments in a way that nudges consumers toward making healthier choices.

As an information-provision tool, value-based education should be tailored to strengthen social food values through active or participatory learning. This need for policy may shed light on public health professionals to improve a health promotion campaign aimed at gaining consumers food values. Increasing awareness of consumers on fairness, environmental impact, origin and nutrition will raise consumers' health consciousness, which, in turn, lead consumers towards ethical and environmentally friendly foods that can make more likely to eat healthy foods in the long term. Frame, as a phenomenon from behavioral economics (Tversky and Kahneman, 1981), meaning that consumers dislike losses than they like related gains (Sunstein, 2017), can also be used as an instrument for the mentioned campaign. In other words, consumers are loss averse and more sensitive to losses than gains (Kahneman, 2011). To put consumers into action, the campaign can send a message about what they will lose instead of what they will gain in the future if they do not adopt eating habits based on social food values.

When developing health and food policy tools using behavioral insight, different frameworks have been

proposed to change consumer choice and behavior. In this context, the EAST framework outlined by BIT (2014), can guide on how to promote a behavior through four principles: Make it Easy, Attractive, Social and Timely. Wansink (2015) suggested CAN approach to promote healthy eating. In this approach, healthy food options should be Convenient, Attractive and Normative. Another intervention framework abbreviated TIPPME (Typology of Interventions in Proximal Physical Micro-Environment) was designed and applied to food choice, purchase and consumption (Hollands et al., 2017). TIPPME focused on changing health-related behavior by altering the placement and the properties of food products (such as labeling, sizing, availability, priming etc.) in the physical environment, where consumer makes food choices. Differently, Sunstein (2014) contributed to this field along with the list of ten important nudges with a wide range of applications.

The examined frameworks are similar in many aspects. The ultimate goal in all of this is to change consumer's food-related behavior by altering the decision-making environment. As for this study, we attempt to recommend policy interventions to change consumers' perceptions under the guidance of the nudges that commonly applied in these frameworks explained above.

Make it easy:

As with Cadario and Chandon (2020) classification, convenience enhancements (default option) from behavioral oriented interventions will help perceive social food values positively by consumers. More specifically, status quo bias means that consumers are prone to not change their behavior unless there is a strong incentive (Samuelson and Zeckhauser, 1988). In other words, consumers tend to go with a default or pre-set option when they don't make any choice (Thaler and Sunstein, 2008; Goldstein et al., 2008). Therefore, the default option can be exploited as a powerful nudge and primary tool for policy makers in changing consumer behavior. Furthermore, it is proposed that every policy must have a non-action default (Johnson and Goldstein, 2003). The healthiest food options can be designed as the defaults to take advantage of the default options to promote healthy nutrition (Liu et al., 2014). The default menu having ethical foods (i.e. fairly traded, environmentally friendly, locally produced and nutritious) can be served to government officers in the government-run restaurants in the agencies. Since the target audience is the younger generation in making the perception of food values positive, the same policy intervention can be applied especially to university dining halls and cafeterias in Turkey.

In cases where we can't utilize the default, it is still possible to provide a hassle-free decision-making environment for consumers who attempt to reach food products with the specified values. An application that performs the task, the same as used in commercial advertisements, can be developed to guide consumers. A notification message can be sent to consumers about ethical foods in supermarkets or restaurants near their location. We know that similar products have been developed in practice. For instance, Fokkinga and Desmet (2013) propose to use a product design to increase consumers' awareness of nutritional information. Researchers design a digital nutrition assistant for smartphones that responds directly to consumers' purchasing decisions. When the consumer is shopping in a supermarket, a normal cartoon character is displayed. This character changes shape and expression according to the type of product that the consumer places in the shopping cart. When the consumer chooses only fatty foods the character looks obese, for foods rich in protein and mineral, the character gets a more muscular shape, and choosing low-calorie foods makes it look slimmer. Likewise, Kallahave et al., (2011) developed a persuasive shopping trolley to help consumers make healthier food choice in a supermarket. The trolley was used to reduce unhealthy options, and also to make suggestions for others options considering classified product groups labeled "eat more", "eat less", "eat least". This device partially affected consumer behavior towards reducing the choice of unhealthy food products. In another nudging tool, grocery carts were partitioned into different proportions such as 35:65 and 50:50 for fruit & vegetables and meat & treats respectively in each. The dollars spent on fruits and vegetables increased significantly as their proportion in the shopping cart rose up in the grocery store, which means the size of partition influenced healthy food sales (Wansink et al., 2017). In sum, the effective nudges will increase the awareness of the food values in food consumption over time. These policy implementations will indirectly contribute to the increase in the rate of consumers who are health conscious and healthy nutrition. Ultimately, status quo bias will help consumers gain a habit of having social food values.

Make it attractive:

Cognitively oriented interventions such as visibility enhancements that make socially valued food products more visible, and evaluative nutritional labeling that produce color-coding and special symbols to help

consumers better understand food values (Cadario and Chandon, 2020) can be utilized to attract consumer's attention to social food values. Firstly, three priming nudges pointed out sub-conscious cues such as physical, verbal and sensational (Wilson et al., 2016) can be used as a set of nudge interventions: visibility, accessibility and availability. Since positional changes of food products have a positive effect on food choices (Bucher et al., 2016), ethical food products can be positioned to make more visible, accessible and available on supermarket shelves and restaurant menus in Turkey. Shortly, these products should be convenient to see, pick up and consume (Wansink, 2015). As an example of visibility, Wansink and Hanks (2013) stated that placing healthy foods first encourages consumers to eat better by influencing their choices. To see the effect of availability, van Kleef et al. (2012) found that increasing the assortment of healthy options led consumers to choose healthy snacks. In another research studies, researchers investigated whether food repositioning influenced healthy food choice, concluding that placing healthy foods at the cash register and unhealthy foods at anywhere increased healthy products sales, and repositioning that made healthy food products visible and accessible was an effective nudge (Kroese et al., 2016; Van Gestel et al. 2018).

To adjust food arrangements in Turkey, socially valued food products can be strategically positioned, so consumers first encounter these options and easy to access them in the supermarkets and restaurants. Placing socially valued food products at eye level shelf in the supermarket, and give these products a place on the first page of restaurant menus will increase food values visibility. Also low price and attractive product design can be utilized as alternative ways to improve the appeal of these food products in the supermarkets. The government can sell ethical grain products bought from the producers through Turkish Grain Board in supermarkets. Farmers can sell their own ethical products, especially fresh fruits-vegetables and dairy products, in agricultural cooperative markets without dealers or in other supermarkets through the cooperatives. Removing marketing intermediaries from the food chain will enable consumers to buy these products cheaper. The government and farmers can develop more attractive product designs for their socially valued products than other options in the market. Thus, the conditions, visibility and accessibility, will be met and consumers' attention will be directed to the food values.

Secondly, it is argued that descriptive nutritional labeling, implemented as an information-provision policy, has not much impact on food consumption (Liu et al., 2013). Instead, visual designs can enable consumers to understand overloaded information on labels easier. Different colored labeling on packaged food products (green if socially valued; red: if not) in the supermarkets can contribute to increasing consumer health consciousness and improving food choice decisions. A similar nudge-intervention that combined three priming nudges reported that colored-coded labeling intervention called traffic-light labeling (red: unhealthy, yellow: less healthy, green: healthy) increased healthy food purchases and resulted in sustained healthier choices (Thorndike et al., 2012; Thorndike et al., 2014). For a more effective intervention in the study area, behavioral insight and information-provision tools can be combined, as used in cigarette packets. Photos expressing social food values and information messages can be placed on food packages together in the supermarkets. In the same manner, as a hedonic enhancement, attractive photos that lure consumer to choose dishes associated with social food values can be used in the restaurant menu.

The nudge-interventions, recommended as visual, available, accessible, color-coding sign and symbols for food values, will provide effective tools for designing food and health policies to attract young consumers attention to social food values. Thus, on the one hand, the consumption of young people from these foods will increase; on the other hand, their perceptions of social food values will be changed to positive. Because consumers often prefer popular foods, meaning that their food purchase and eating behaviors are shaped by what is normal, the easiest and effective way to change consumer behavior is to affect normal behavior (Wansink, 2015), as in this study.

Make it social:

Social norms are a common and forceful intervention used to nudge consumers, which is likely to be descriptive such as framing message in a positive way (Vandenbroele et al., 2020). Social support and role models can be presented to leverage social norms. To show that consumers with health consciousness and healthier behavior are prevalent, and bringing these consumers more into view can affect the behavior of consumers with unhealthy eating habits. In policy implication, segmenting consumers based on social food values as clustered in the present study provide leverage point for targeting and addressing unhealthy food choices, cooking and eating habits. Since the health conscious consumers entitled positive perceivers tend to attach more importance to reading food labels, eating fresh fruit, and buying ecological food products etc., health professionals should strengthen this inclination and make these consumers a reference to the negative

perceivers as a motivate sample. In this way, consumers who have unhealthy behavior with the idea of "others do so" may be persuaded to change eating habits. Similarly, providing information about the perceptions and behavior of other consumers can be successful in promoting pro-environmental behavior (Steg and Vlek, 2009). Also, researchers suggest that increasing social peer pressure can stimulate sustainable or ethical-environmental concerned consumers (Grunert et al., 2014). An effective nudge intervention can be one that informs the negative perceivers about what the positive perceivers do in the study area. For example, in the case of the negative perceivers, a message such as "57.4% of consumers in your community are engaged in consuming socially valued foods" may be more powerful than in changing negative value perception and unhealthy eating habits than messages such as merely "eat healthy."

Make it timely:

Determining when consumers are most receptive to health and food policies targeting behavioral changes enables policy makers to design more effective nudge-interventions (BIT, 2014). Timely nudges can be more persuasive to change consumers' food choices and eating behaviors in favor of ethical, environmental and nutritious food products.

The reliability of information spread through mass media and social media is discussed, particularly in health and nutrition issues for the prevention of diseases in Turkey. Especially in order to protect from the colds and flu, consumers are in search of alternative remedies in winter. Therefore, the confused consumers' tendency to purchase medicinal plants, herbs and their grinded mixtures increases unconsciously due to information pollution. For this reason, winter is the time that the daily routines of consumer behaviors are almost broken, and food purchase and eating habits are open to change in Turkey. Thus, we recommend that all the nudging tools and interventions proposed earlier, if applicable, should take the winter season as a starting point to be applied to making them more effective in encouraging consumers to consume socially valued food products. If socially valued food products are framed by increased health consciousness and healthy nutrition, as found in this study, consumers might think to take immediate benefit by consuming these products, which provide resistance to disease.

Although it is thought that it is the right starting point for effective intervention when consumers celebrate important moments, it is known that the meals eaten with crowded family members are higher than the amount of food eaten in normal times by 96% (Wansink, 2006), especially during holy month and moments that have a positive effect on people's lives. For this reason, it is inevitable that the interventions applied in these month and days will have a low impact in Turkey where family reunions are so crowded. Instead, it would be a good idea to alter the menus of the organizations that provide food service in public hospitals. Consumers will be open to changing their habits during their stay in hospitals for treatment and after major surgical interventions. Serving food products with the signs that show the product are locally produced, not harmful for the environment, nutritious and contributing individual's health condition will trigger food values.

Finally, the common view among researchers and policy makers is that consumers' habits are difficult to change. However, policy interventions may be more effective if the policy design involves determining the food values that underlie food purchasing and eating behavior. Then, behavioral insights (nudges) applied in the appropriate places and times can achieve the goal to establish more sustainable and healthier society. It may be more powerful by altering the environment where consumers make decision on food purchasing and eating, considering the factors that lead consumers to healthy nutrition habits.

From an application point of view, the goal of future research studies should be the implementation of the proposed nudge-interventions and discussion of results in Turkey. Future research should also aim to determine whether food values of consumers change during pandemic periods where it seems recently that as the health risk increases, consumers are likely to panic about health and healthy diet. Due to this reason, it is required to monitor and analyze the food values in the pre and post period the pandemic. Because consumers may place an importance and priority on convenience, appearance, taste etc. attributes of food products rather than ethical and environmental values when purchasing food products online in the period of lockdown. This can prevent consumers from becoming health conscious consumers and consuming socially valued food products. This explanation comes up with another relevant and valuable research topic that should be conducted in the future. That is, food values in online shopping are worth investigating.

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Yapay Zeka Uygulaması Olarak Makine Öğrenimi ve Yabancı Dil

Prof. Dr. Hikmet ASUTAY¹

Arş. Gör. Binnur ARABACI CANDAN²

Öğr. Gör. Furkan KOCA³

Nihal URAL⁴

¹ Trakya Üniv. Eğitim Fak. Alman Dili Eğitimi AD. asutay@trakya.edu.tr Orcid-no: 0000-0002-0175-2429

² Trakya Üniv. Eğitim Fak. Alman Dili Eğitimi AD, binnurarabaci1@trakya.edu.tr, ORCID: 0000-0003-2486-5423

³ Alanya Alaaddin Keykubat Üniv., furkan.koca@alanya.edu.tr, ORCID: 0000-0002-7559-3483

⁴ Trakya Üniv. Sosyal Bilimler Enst. Alman Dili Eğitimi Doktora Öğrencisi, nihalural1@gmail.com, ORCID: 0000-0002-0515-6325

Özet: Yabancı dil öğretiminde yöntem ve teknikler, günün teknolojik koşullarına bağlı paralel olarak gelişmiş ve gelişmeye devam etmektedir. Ondokuzuncu yüzyıl koşullarında örneğin mektupla öğretim yöntemi ilk olarak ortaya çıkmıştı. Bu yöntem aynı zamanda uzaktan eğitim biçiminin de ilk ve ilkel haliydi. Yirminci yüzyıl içinde teyp ve kasetlerin ortaya çıkışı ile birlikte audio-lingual denilen işitsel yöntem ortaya çıkmıştı. Tabi televizyonların da ortaya çıkmasıyla birlikte yabancı dil öğretim yöntemi de audio-visuel lönteme doğru evrilmeye başlamış, yetmişli ve seksenli yıllarda çok popülerlik kazanan kulaklıklılı klasik eski dil laboratuvarları ortaya çıkmış ve uzun yıllar boyunca da kullanılmıştı. Bilgisayarların ortaya çıkmasıyla birlikte yabancı dil öğretim yöntemlerinde de evrim ve dijital dönüşümler doğallıkla yaşanmaya başlamıştır. Bilgisayar kavramı aynı zamanda günümüzün yapay zeka adı verilen uygulamalarının da başlangıcı sayılmaktadır. Bu çalışmada da bilgisayar ile birlikte makine öğreniminin yabancı dil öğretiminde nasıl ve ne şekilde işlev üstleneceğinin tartışılmaya açılması hedeflenmiştir. Bunun için de yapay zeka genel sorunsalından özelde makine öğreniminden yabancı dil öğretiminde nasıl yararlanılabileceğine ilişkin öneriler ile birlikte uygulama örneklerine de değinilecektir.

Anahtar Kelimeler: Yabancı dil eğitimi, dijital, online, hibrid, yapay zeka, makine öğrenimi

Machine Learning and Foreign Language as Artificial Intelligence Application

Abstract: Methods and techniques in foreign language teaching have developed and continue to develop in parallel with the technological conditions of the day. In the conditions of the nineteenth century, for example, the method of teaching by correspondence first emerged. This method was also the first and primitive form of distance education. With the emergence of tapes and cassettes in the twentieth century, the auditory method called audio-lingual emerged. Of course, with the emergence of televisions, the foreign language teaching method began to evolve towards audio-visual method, and classical old language laboratories with headphones, which became very popular in the seventies and eighties, emerged and were used for many years. With the emergence of computers, evolution and digital transformations have naturally begun to occur in foreign language teaching methods. The concept of computer is also considered the beginning of today's applications called artificial intelligence. In this study, it is aimed to discuss how computer and machine learning will function in foreign language teaching. For this purpose, application examples will be discussed along with suggestions on how the general problem of artificial intelligence and machine learning in particular can be used in foreign language teaching.

Key Words: Foreign language education, digital, online, hybrid, artificial intelligence, machine learning

1. GİRİŞ

İkibinli yılların başından bu yana resmi olarak dijital dönüşüm konusu tüm dünyada olduğu gibi ülkemizde de gündemde idi. E-Devlet ve benzeri uygulamalar örneğinde olduğu gibi pek çok alanda dijital dönüşüm gerçekleştirilmeye başlanmış idi. Yüksek Öğretim dünyasında da dijitalleşme ve dijital dönüşüm ile ilgili çalışmalar başlatılmış ve devam ettirilmekteydi (Gümüsoğlu 2017: 30-42). Çinden başlayarak tüm dünyayı saran 2019 yılındaki Covid-19 pandemisi nedeniyle daha önce gündemde olan dijitalleşme konusu mecburen çok hızlı bir şekilde ve neredeyse birkaç ay içinde gerçekleştirilmek zorunda kalmıştı. Bu zorunluluk en çok da sağlık ve eğitim alanında kendini göstermişti.

Dolayısıyla eğitim bağlamında ve özelde de yabancı dil eğitiminde dijital dönüşüm daha hızlı bir sürece girmiştir. Tüm bu süreçler üzerine alanyazında çok değerli çalışmalar da yapılmış ve yapılmaya devam etmektedir (Bkz. Karaman 2022). Bu nedenle uzaktan eğitim modeline zorunlu geçiş yapılmış bunun için pek çok uzaktan eğitim platformları ya da uygulamaları kullanılmış ve halen kullanılmaktadır. Pandemi sonrası dönemde ise tekrar yüz yüze eğitim modeline aşamalı olarak geçilmiş fakat dijital dönüşüm çalışmaları hız kesmeden devam ettirilmiştir. Bunun da sonucu olarak hibrit (karma) eğitim modeline geçilmiştir. Bu yıl içinde maalesef yaşanan

Maraş depremi nedeniyle uzaktan eğitim sürecine zorunlu geçiş yapılmış hatta içinde bulunduğumuz 2023-2024 öğretim yılında deprem bölgesindeki üniversitelerde uzaktan eğitim yapılabileceğine dair YÖK tarafından karar çıkmış bulunmaktadır. Yabancı dil öğretiminde bugün için gelinen aşamaya değinmeden önce uzaktan eğitimin gelişimine bakmakta yarar vardır.

2. UZAKTAN EĞİTİM VE YABANCI DİL ÖĞRETİMİ

Uzaktan eğitim¹, “öğrenenle öğretenin fiziksel olarak birbirinden uzakta olduğu eğitim biçimidir” (Adıyaman 2002: 92). Bir başka deyişle uzaktan eğitim; “aynı ortamda gerçekleşmeyen tüm eğitim ve öğretim süreçlerini kapsar” (Karasu, Sarı 2019: 321). Uzaktan eğitim yöntemi iki gruba ayrılır:

- *Tek Yönlü Eğitim Ortamları:* Radyo/ TV programları, ses görüntü kasetleri, CD/ DVD ve basılı materyaller.
- *Çift yönlü eğitim ortamları:* etkileşimli medyalar, kanallar, telefon, internet aracılığıyla eşzamanlı eğitim, e-posta yazışmaları, mektuplaşma, mesajlaşma, cep uygulamaları, tele / video ya da internet konferansları gibi karşılıklı etkileşime dayalı dersler şeklindedir (Bkz. Adıyaman 2002).

Ondokuzuncu yüzyılda mektupla yabancı dil öğretimi uzaktan öğretim anlamında Avrupa’da başlamış idi. (Örneğin Almanya’da Langenscheidt kurumu ile). Uzaktan Yabancı Dil Eğitimi bağlamında ilk kez 1856 yılında Gustav Langenscheidt (1832-1895) Fransızca derslerini içeren ve Fransızca öğretmeni Charles Toussaint (1813-1877) ile birlikte hazırladığı „*Brieflicher Sprach- und Sprechunterricht für das Selbststudium der französischen Sprache*“ (Mektupla Fransızca Dersleri) başlıklı yayını, uzaktan dil öğretiminde ilklere aittir. “Methode Toussaint-Langenscheidt (MeTouLa)” yöntemi olarak da anılan bu yöntem; mektuplu öğretimin ilklere aittir olup, 19. Yüzyılın belli başlı dil öğretim yöntemlerinden biri olarak da anılmıştır (wikipedia). Bu yöntemin temel ilkesi, öğrencinin kendi başına özerk öğrenme çalışmasını yapmasıdır. Kendi kendine öğrenme ya da özerk öğrenme biçimi olarak da bilinir.

2.1. Yeni tekniklerle Birlikte Yeni Yabancı Dil Öğretim Yöntemleri

Yirminci yüzyılın ortalarına kadar yabancı dil öğretim yöntemi olarak çeviri – gramer yöntemi kullanılmıştır. Ellili yıllarda ortaya çıkmaya başlayan teknolojiler ile birlikte yabancı dil öğretiminde de bu teknolojilerden yararlanılmaya başlandı. Örneğin kasetçalar ve teyplerin² ortaya çıkmasıyla birlikte audio-method dediğimiz işitsel dil öğretim yöntemi ortaya çıkmış ve yaygın olarak uygulanmıştır. Televizyon ekranlarının da devreye girmesiyle birlikte audio-visuelle Methode adı verilen görsel-işitsel dil öğretim yöntemi doğmuş ve uzun yıllar da kullanılmıştır. Bu yöntem dil laboratuvarları ile birlikte öyle yaygınlık kazanmıştır ki okullarda hemen her sınıfta TV dolabı şeklinde yerini almış ve uzun yıllar hizmet etmiştir. Tüm bunlar zamanla günümüze doğru yerlerini bilgisayar ya da akıllı tahtalara bırakmıştır. Kaset ve benzeri araç gereçlerin en önemli özelliği veri depolama

¹ *Alm. Fernunterricht, İng. Distance Education.* Uzaktan Eğitim Yoluyla Yabancı Dil Öğretim Yöntemi, uzaktan eğitim kavramıyla doğrudan ilişkilidir. Uzaktan eğitim kavramı olarak oldukça eski ve köklü bir yöntem olup ilk kez Wisconsin Üniversitesi’nin 1892 yılı katalogunda terim olarak geçmiştir (Kaya 2002: 27). Tarihçesi konusunda farklı görüşler olsa da “20 Mart 1728 tarihli Boston gazetesindeki steno dersleri” (Fogolin 2012: aktaran Karasu & Sarı 2019: 325), 1843’te bir İsveç gazetesinde mektupla yazılı anlatım dersi verileceğine ilişkin ilan vb. girişimler uzaktan eğitim bağlamında ilklere aittir. Kaya’ya (2002: 30) göre ise ilk uzaktan eğitim uygulaması, 1840’ta İngiltere’de Isaac Pitman tarafından başlatılan stenograf dersleridir. Uzaktan eğitim yoluyla yabancı dil öğretiminde ilk olarak Ch. Toussaint ve G. Langenscheidt 1856’da Berlin’de (Almanya) Langenscheidt Dil Okulunu kurmuşlardır. 1884 yılında da yine Berlin’de üniversite giriş sınavlarına hazırlık amacıyla “Rustinsches Lehrinstitut für Fernunterricht” uzaktan eğitim okulu kurulmuştur. Aslında 18. Yüzyıl Avrupa’sında Aydınlanma olarak anılan dönemde edebiyatın amacı kitlelerin eğitimi ve aydınlatılması idi. Bu amaçla ilk ansiklopediler o dönemde yazılmaya başlamış ve eğitsel içerikli yapraklı duvar takvimleri ortaya çıkmıştır. Bu açıdan bakıldığında yazılı metinlerin (kitap veya yazışmalar) uzaktan eğitim bağlamında çok daha eskilere dayandığı öne sürülebilir.

² İlk kaset formatını 1962 yılında geliştiren Philips, Compact Audio Cassette (CAC) ya da Musicassette (MC) olarak adlandırdığı bu büyük yeniliği ilk olarak 1963 Berlin Radio Show’da görücüye çıkarttı. İlk kaset kaydedici, basit tek kanal mono kayıt yapan ve dinamik bir mikrofon bağlanabilen Philips EL 3300 modeliydi. “Küçük Kutu” anlamına gelen Compact Cassette, genel olarak “kaset” olarak anılmaya başladı (<https://www.broadcasterinfo.net/ContentDetails-1821-manyetik-kayit-tarihi-> [3]#:~:text=%C4%B0lk%20kaset%20format%C4%B1n%C4%B1%201962%20y%C4%B1%C4%B1nda,ba%C4%9Flanabilen%20P hilips%20EL%203300%20modeliydi; 12.10.2023).

araç gereçleri olarak kullanılmaları idi. Ekranların en büyük yararı ise, tamamen tekrarlara bağlı olan yabancı dil öğretiminin kayıtlı sesli-görüntüler aracılığıyla doğala en yakın şekilde tekrar edilebilmesiydi.

Makine öğrenimi günümüzde yabancı dil öğretiminde elektronik öğrenme olarak da düşünülebilir. Bu anlamda dijital ortamlarda sürdürülen yabancı dil öğretim tekniği elektronik öğrenme ya da İngilizce tanımıyla e-Learning olarak da bilinmektedir³. Elektronik öğrenme, bilişim tabanlı öğrenme olup, dil öğretim sürecinde bilişim tabanlı medyaların, teknik donanım, yazılım, ağ ve altyapılarının, yeni medyaların kullanımı anlamına gelmektedir. Kullanılan medyalar ile araç-gereç türlerine göre farklı adlarla anılabilir, örneğin; bilgisayar destekli öğretim, web tabanlı eğitim, multimedya destekli eğitim, dijital öğrenme, uzaktan / açık öğretim, eşzamanlı / eşzamansız öğretim, sanal eğitim, internet temelli eğitim, çevrimiçi eğitim (çevrimiçi – çevrimdışı), mobil öğrenme vb. gibi.

Bilgisayarların zamanla gelişerek eğitim süreci içinde yer almalarıyla birlikte dil öğretim süreçlerinde de kullanılmaya başlanmış, yetmişli yıllardan itibaren okullarda bilgisayarlar kurulmaya başlanmıştır. Yetmişli yıllardaki görsel-ışitsel dil öğretim araçlarının tamamı yerlerini bilgisayarlara bırakmıştır denebilir. Dolayısıyla bilgisayarların gelişmesiyle birlikte dil laboratuvarları yürürlükten kalkmış, yerine bilgisayarlar gelmiştir. Doksanlı yıllardan itibaren ise internetin yaygınlaşması ile birlikte ağ bağlantılı öğretim programları geliştirilmiş, bu sayede tek bir bilgisayar bir dil laboratuvarının tüm işlevlerinin çok daha fazlasını yerine getirebilir olmuştur. Doksanlı yıllarla birlikte “e-learning” kavramı çok daha etkin ve işlevsel olarak kullanılmaya başlanmıştır. Günümüzde mobil öğrenme sayesinde akıllı cep telefonlarının artık bilgisayarların yerini almaya başladığı söylenebilir. E-öğrenme kavramı ile birlikte medyalararasılık, çoklu medya ortamları, çoklu kodlama, eğitim-öğretim yazılımları gibi bilişim tabanlı yeni terimler de ortaya çıkmıştır.

2.2. Dil Öğretiminde Makine Öğrenmesi ve Yapay Zekânın Temelleri

Yirminci yüzyılın ortalarından itibaren bilgisayar bilimi, matematik ve algoritmalar üzerindeki çalışmalar sayesinde bir tür makine öğrenimi kavramı ortaya çıkmış, böylelikle yapay zekâ kavramının da temelleri atılmış oluyordu. Bilgisayar denince elektronik devreler anlaşılmaktaydı, bu da dijitalleşme kavramını öne çıkarmaktadır. Dijitalleşme sadece bireylerin, kurumların değil nesnelerin, makinelerin de birbirleriyle bağlantılı ve hatta iletişimde olduğu yeni bir aşamaya geçiş süreci olarak tanımlanabilir (TÜSIAD, 2017: 13). Bu yeni aşamayla dijital teknolojiler yalnızca üretimin değil; işlerin, iş yapış biçimlerinin ve insan kaynağının da dönüşmesine neden olmaktadır (Varol, 2017: 13). Yabancı dil eğitimi ele alındığında konuya birkaç farklı açıdan bakma gerekliliği ortaya çıkmaktadır. Birincisi; gelişen akıllı telefon, tablet vb. teknolojiler ile birlikte son yıllarda artan akıllı uygulamalardır. İkincisi ise yapay zeka teknolojisi ile geliştirilen uygulamalardır.

Makine Öğrenmesi⁴ yapay zekanın bir alt kavramı ve temellerinden biri olarak adlandırılmaktadır. İlk olarak IBM çalışanı Amerikalı Arthur Samuel tarafından icat edilmiştir⁵. Olasılık hesaplamaları ile algoritmalar üzerine kurulu örüntü veri tabanı gibi alanlar üzerinde çalışır. Algoritmaların tasarlanması ve örüntü geliştirilmesi asıl çalışma alanıdır⁶. Daha açık olarak tanımlamak gerekirse makine öğrenmesi bilgisayarların, görevleri nasıl yerine getirebileceklerini, nasıl algoritmalar üretebileceği ve geliştirebileceği konusunu ele alır. Burada elbette makinelerin bellekler sayesinde sonsuz denebilecek sayı ve hacimde olasılık hesaplarını, algoritma olasılıklarını kaydedebilmeleri, tüm bunların üzerine yeni algoritma ve olasılıkları geliştirme olanağı ortaya çıkarmaktadır.

³ Alm. Elektronisch unterstütztes Lernen, İng. E-Learning / Electronic Learning.

⁴ Machine learning (ML) / Alm. Machinelles Lernen

⁵ 1960'larda makine öğrenimi araştırmasının temsili bir kitabı, Nilsson'un Öğrenme Makineleri hakkındaki kitabıydı ve çoğunlukla örüntü sınıflandırması için makine öğrenimi ile ilgiliydi. Model tanıma ile ilgili ilgi, 1973'te Duda ve Hart tarafından tanımlandığı gibi 1970'lerde de devam etti. 1981'de, bir sinir ağı'nın bir bilgisayar terminalinden 40 karakteri (26 harf, 10 rakam ve 4 özel sembol) tanımayı öğrenmesi için öğretme stratejilerinin kullanımına ilişkin bir rapor verildi.

⁶ Makine öğrenimi veya makine öğrenmesi, bilgisayarların algılayıcı verisi ya da veritabanları gibi veri türlerine dayalı öğrenimini olanaklı kılan algoritmaların tasarım ve geliştirme süreçlerini konu edinen bir bilim dalıdır. Makine öğrenimi araştırmalarının odaklandığı konu bilgisayarlara karmaşık örüntüleri algılama ve veriye dayalı akılcı kararlar verebilme becerisi kazandırma. Bu, makine öğreniminin istatistik, olasılık kuramı, veri madenciliği, örüntü tanıma, yapay zekâ, uyarlamalı denetim ve kuramsal bilgisayar bilimi gibi alanlarla yakından ilintili olduğunu göstermektedir.

3. YAPAY ZEKÂ VE YABANCI DİL ÖĞRETİMİ

Yapay zeka, bilgisayar ve robotik elektronik sistemlerin insan benzeri bilişsel yetileri yapabilme becerisi olarak adlandırılabilir. İnsansı davranışları taklit ederek hayatı kolaylaştırabilen teknolojik aletlerdir. Kod yazılarak ve programlanarak üretilmiş bilgisayar beyinli bir robotun, hangi durumda ne tepki vereceğinin belirlenmesi amaçlanır⁷. Toparlanacak olursa, insan zekası gerektiren görevleri yerine getirebilecek akıllı makineler oluşturmakla ilgilenen geniş kapsamlı bir bilgisayar bilimi dalıdır. Ayrıca, temelde çoklu yaklaşımları olan disiplinler arası bilim olarak da tanımlanabilir (Kopar 2023). ChatGPT⁸ uygulamasıyla ülkemizde de tanınırlığı ile popüler olmuş, robot Sophia ilgi çekmiştir.

Yapay zeka, eğitim alanında iki şekilde katkı sağlayabilir; Birincisi, eğitimin yönetimi aşamasında öğrencilere ve eğiticilere bilginin yönetimi ve sunumunda yardımcı olur. İkincisi ise öğrenme ve öğretme süreçlerine doğrudan dahil olarak öğretici rol oynar. Bu konuyla ilgili olarak Microsoft Edge uygulamasının yapay zeka destekli Bing uygulaması şu an için ücretsiz olarak kullanılabilir. Yapay zeka, eğitimde birçok alanda etkili olabilir. İşte yapay zekanın eğitimdeki potansiyel etkilerinden bazıları:

- *Otomatik Notlama: Yapay zeka, öğrenci ödevlerini ve sınavlarını notlayacak verimli bir sistemin geliştirilmesine yardımcı olabilir.*
- *Kişisel Asistan: Yapay zeka destekli asistanlar, öğrencilerin sorularına hızlı yanıt almasını sağlayabilir ve bilgi kaynaklarına yönlendirebilir.*
- *Akıllı İçerikler: Yapay zeka destekli bir eğitim çözümü, öğrencilere uygun içeriklere daha rahat ulaşma imkanı sunabilir.*
- *Kişiyeye Özel Eğitim: Yapay zeka, her öğrencinin ihtiyaçlarına uygun kaynaklara erişmesine yardımcı olabilir.*
- *Yapıcı Geri Bildirim: Yapay zeka, kullanıcıların yapıcı geri bildirimlerde bulunmasına izin vererek eğitim sürecini iyileştirebilir*

Yapay zeka, eğitimde daha verimli bir öğrenme deneyimi sunmak için kullanılabilir. Ancak, yapay zekanın öğretmenlerin yerini tamamen alacağına dair tartışmalar da bulunmaktadır. Bu konuda gelecekte neler olacağını zaman gösterecektir.

Genel olarak eğitimde kullanılacak yapay zeka uygulamaları ile avantajları elbette yabancı dil eğitimi için de geçerli olacaktır. Ayrıca spesifik olarak yabancı dil eğitimi bağlamında yapay zeka kullanımı dendiğinde kişiselleştirilmiş öğrenme ile özerk öğrenme kavramlarının çok fazla öne çıktığı söylenebilir. Yalnız şunu belirtmekte yarar vardır: Bilinçli ve özerk çalışma alışkanlığı edinebilmiş öğrenciler için bu tür uygulama destekli öğretim programları etkili ve verimli olabilir. Yapay zeka uygulamaları dijital ya da uzaktan yabancı dil eğitimi

⁷ YZ, İngilizce: Artificial intelligence, AI), Almanca: "Künstliche Intelligenz (KI)" / "artifizielle Intelligenz (AI)", "Yapay zekâ" kavramının geçmişi modern bilgisayar bilimi kadar eskidir. Fikir babası, "Makineler düşünebilir mi?" sorusunu ortaya atarak makine zekâsını tartışmaya açan Alan Mathison Turing'dir. 1943'te II. Dünya Savaşı sırasında Kripto analizi gereksinimleri ile üretilen elektromekanik cihazlar sayesinde bilgisayar bilimi ve yapay zekâ kavramları doğmuştur. Alan Turing, Nazilerin Enigma makinesinin şifre algoritmasını çözmeye çalışan matematikçilerin en ünlü olanlarından biriydi. İngiltere, Bletchley Park'ta şifre çözme amacı ile başlatılan çalışmalar, Turing'in prensiplerini oluşturduğu bilgisayar prototipleri olan Heath Robinson, Bombe Bilgisayarı ve Colossus Bilgisayarları, Boole cebirine dayanan veri işleme mantığı ile Makine Zekâsı kavramının oluşmasına sebep olmuştu (Wikipedia). İlk önemli gelişmelerden biri, 1997 yılında IBM (International Business Machines)'in ürettiği Deep Blue adlı bilgisayar, dünyanın en ünlü satranç ustası Garry Kasparov'u yenmesidir. Yapay zekâ çeşitleri: Tip 1: Tamamen reaktif (basit yapay zekâ) İlk yapay zekâlardır. Kasparov'u yenen bilgisayar, Google'ın AlphaGo adlı oyun oynayan yapay zekâsı Tip 2: Sınırlı hafıza; Mevcut birçok yapay zekâ bu kategoridedir; kendi kendine giden arabalar, ezberden konuşan robotlar ve dijital asistanlar. Tip 3: Zihin Teorisi; Gelecekte olması beklenen yapay zekâ türüdür. İnsan davranışlarını etkileyebilir ve duyguları anlayabilir. İnsanlarla sosyalleşebilir ve tamamen bir insan gibi davranabilir; Starwars'taki C-3PO ve R2-D2 I, Robot filmi (milliyet.com.tr).

⁸ Prototipi Kasım 2022, son sürümü ise Mart 2023 tarihinde OpenAI tarafından halkın hizmetine sunulmuş ChatGPT-4 bir yapay zekâ uygulamasıdır. Bu robot, insan zekâsı doğallığında, arkadaşça diyalog kurabilme ve sorulara mantıklı yanıtlar verebilme özelliğinin yanı sıra büyük miktarda metin verisinden yararlanarak yeni metinler üretebilmektedir. Ayrıca geniş dil seçenekleriyle çeviri uygulamalarında da kullanılmaktadır. Uygulama bu özellikleri sayesinde Ocak 2023 itibarıyla 100 milyondan fazla kullanıcıya ulaşmıştır (Karakoç Keskin 2023). Uygulamanın, eğitim alanında özellikle öğrenciler tarafından da yoğun ilgi gördüğü bilinmektedir.

platformlarına entegre edilebilmektedir. Bu tür öğrenme yöntem ve platformları da artık yeni nesil yabancı dil öğrenme yöntemleri olarak da adlandırılabilir⁹.

Yapay zeka, yabancı dil öğretimi alanında giderek daha fazla ve önemli bir rol oynayabilecektir gelecekte. Yapay zeka teknolojileri dil öğrenme uygulamalarının daha kişiselleştirilmiş hale gelmesine ve kullanıcılara daha iyi geri bildirimler sağlamasına olanak tanır. Örneğin, bazı yapay zeka destekli dil öğrenme uygulamaları, kullanıcının dil becerilerini değerlendirebilir, dilbilgisi yönünden hata analizi yapabilir ve geri dönütler sunabilir ve öğrenme sürecini buna göre şekillendirebilir. Ayrıca, yapay zeka teknolojileri, kullanıcı kaynaklı hataları tespit edebilir ve düzeltmeler yapabilir.

Yapay zekâ, yabancı dil öğretiminde birçok farklı şekilde kullanılabilir. Örneğin, yapay zekâ tabanlı dil öğrenme uygulamaları, öğrencilerin kelime bilgisi, gramer ve telaffuz becerilerini geliştirmelerine yardımcı olabilir. Bu uygulamalar, öğrencilerin öğrenme hızını ve verimliliğini artırabilir. Ayrıca, yapay zekâ tabanlı dil öğrenme uygulamaları, öğrencilerin öğrenme sürecini kişiselleştirebilir ve onların öğrenme stillerine uygun bir şekilde öğrenmelerine yardımcı olabilir. Yabancı dil öğretmenlerinin iş yükünü azaltmalarına yardımcı olabilir. Örneğin, yapay zekâ tabanlı dil öğrenme uygulamaları, öğrencilerin yazılı çalışmalarını otomatik olarak değerlendirebilir ve geri bildirim sağlayabilir. Bu sayede, öğretmenler daha fazla zaman kazanarak öğrencileriyle daha fazla ilgilenilebilirler. Yapay zekâ tabanlı dil çeviri uygulamaları da doğal dil işleme yöntemi¹⁰ ile yabancı dil öğretiminde kullanılabilir.

Yapay zekâ, „öğrencilerin; dikkat ve motivasyon eksikliği, bireysel farklılıkların özümselememesi gibi geleneksel sınıf sorunlarına çözüm sunabilir“ (Zileli 2023: 43). Öğrenci başarı seviyelerinin yükseltilmesi, öğrenme sürecine karşı olumlu tutum, sınıf içi etkileşim ve geri bildirim gibi alanlarda etkili olabileceği ve eğitimde yapay zekâ kullanımının öğretme ve öğrenme sürecini olumlu yönde etkileyeceğini belirten Zileli, yabancı dil öğreniminde özellikle dil bilgisi, kelime dağarcığı ve konuşma becerilerinin geliştirilmesinde fayda sağlayabileceği, kişiselleştirilmiş geri bildirim ve çeşitli öğrenme materyalleri sunduğu için öğrenme sürecini zenginleştirilebileceğini belirtir. Ancak „öğretme ve öğrenme sürecinde öğrenci ve öğretmen etkileşiminin yerini tutamayacağı, yapay zekânın yalnızca öğretmenin rolünü desteklemek ve zenginleştirmek için kullanılabileceğini değerlendirmektedir (Zileli 2023: 43-45).

Sonuç olarak, yapay zekâ tabanlı çeviri sistemleri, çevirmenlerin iş yükünü azaltabilir ve iletişimi kolaylaştırabilir. Ancak, insan çevirmenlerin yerini tamamen alması muhtemel değildir. İnsanların dilin inceliklerini ve duygusal/kültürel bağlamı daha iyi anladığı düşünüldüğünde, insan çevirmenlerin değeri hala önemlidir.

Yapay zeka uygulamaları yardımıyla yabancı dil öğretimi, kullanıcıların kendi hızlarında ve kendi ihtiyaçlarına göre öğrenmelerine olanak tanır. Yapay zeka destekli dil öğrenme uygulamaları, kullanıcılara pratik yapma imkanı sunar ve gerçek hayattaki durumları taklit ederek dil becerilerini geliştirmelerine yardımcı olur. Ayrıca, yapay zeka teknolojileri sayesinde, kullanıcıların ilgi alanlarına ve öğrenme stillerine uygun içerikler sunulabilir. Bu teknolojilerin gelişmesiyle birlikte, yabancı dil öğretimi alanında daha da yenilikçi çözümler beklenmektedir; örneğin, sanal gerçeklik veya artırılmış gerçeklik gibi teknolojiler, dil öğrenme deneyimini daha etkileşimli hale getirebilir. Ayrıca, doğal dil işleme ve konuşma tanıma teknolojileri sayesinde, kullanıcılar gerçek zamanlı olarak

⁹ *Application* adı verilen ve kısaca *Apps* olarak adlandırılan uygulamalar, Budiu (2013: Falk 2016)"e göre üçe ayrılmaktadır: "*native App*, *Web-App* ve *Hybride App*" (Budiu 2013 aktaran Falk 2016: 15). *nativ-App* ios veya android sistemlerde kullanılmak üzere geliştirilen ve telefonlara yüklenebilen çeşitli işlevler kullanabilen uygulamalardır. *Web-App* uygulamaları ise HTML5 yazılım dilinde kodlanan ve web siteleri üzerinden çalıştırılabilen, mobil cihazlarla erişilebilen uygulamalardır. Cihazlara yüklenmeden, web üzerinden çalıştırılabilen uygulamalardır. *Hybride-App* olarak adlandırılan uygulamalar ise her iki uygulamanın teknik biçimlerini kullanabilir. Bunlar da HTML5 ile yazılır ve App-Stores denen sunucularda bulunur.

¹⁰ Doğal dil işleme, bilgisayar bilimi ve dilbilimim ortak bir alanıdır. Doğal bir dille ilgili çözümleme, yorumlama ve üretme gibi eylemleri gerçekleştirecek bilgisayar sistemlerinin tasarlanmasını ve geliştirilmesini konu edinir. Doğal dil işleme iki kategoriye ayrılır: 1. Ses işleme, 2. Dil işleme. Ses işleme ses teknolojileri yardımıyla dilin fonolojik özelliklerinin incelenerek ses ve yazı arasında çevirimler yapılmasıdır. Dil işleme ise birkaç basamaktan oluşan bir süreçtir: Biçimbilim (Morphology) analizi. Analiz edilen kelimenin kökünü ve eklerini doğru olarak tespit ve tasnif edebilmeyi amaçlar. İkinci basamak cümlelerin oluşturulmasını veya bir cümlelerin ana bileşenlerine ayrılmasını amaçlayan Sentaks (Syntax) analizidir (Cümle analizi). Bir sonraki analiz, çözümlenmiş kelimelerin ve ayrıştırılmış cümlelerin gerçek dünyadaki yankılanmaları üzerinde duran Anlam (Semantics) analizidir (Kuşçu 2015).

pratik yapabilir ve geribildirim alabilir. Bu bağlamda yabancı dil öğretimi alanında gelecekte daha fazla yenilik ve gelişme beklenmektedir. Şu an için popüler olarak kullanılan ChatGPT uygulamasında yüz milyarlarca kelime (45 terabayt metin) üzerinden eğitilen (URL-4) GPT-3.5 dil modelinin çalışma prensibiyle ChatGPT, bilgi derleme, çeviri yapma, dilbilgisi düzeltme, soru yanıtlama gibi pek çok durum için kullanılabilme imkânına sahiptir (Karakoç-Keskin 2023: 115). Dolayısıyla yabancı dil öğretimi alanında mükemmel bir ders araç-gereci, kaynak ve materyal kaynağına sahip olduğumuz söylenebilir. Burada şöyle bir sakınca doğduğu değerlendirilebilir; öğrenci ödevleri ChatGPT örneğinde olduğu gibi yapay zekâ uygulamaları aracılığıyla hazırlanmaya başlanmış, makaleler yazılmaya başlanmıştır. Bu da etik ve intihal sorunlarıyla çok daha fazla karşı karşıya kalacağımızı göstermektedir.

4. SONUÇ

Yapay zeka konusunun yakın gelecekte gerek öğretmenlik, gerek çevirmenlik mesleği açısından tehdit değil, doğru kullanıldığında özerk çalışma yöntemine alışık olan bilinçli öğrenciler açısından mükemmel bir yardımcı, asistan, kaynak ve hatta teknolojik ders araç-gereci olabileceği değerlendirilmektedir. Nasıl bugün tablet, bilgisayar, ekran vb. teknolojiler eğitimde vazgeçilmez ise, yapay zeka uygulamaları da vazgeçilmez ders teknolojileri ya da araç gereçleri olarak yerini alacaktır. Nitekim bu konuda da çeviri / çeviribilim bağlamında olduğu gibi rehber / öğretmen olmadığı sürece yanıltıcı, yanlış pek çok bilgi ve uygulamalara neden olabilecektir. O yüzden üstün donanımlı öğretmen gerçeği aslında çok daha vazgeçilmez ve çok daha önemli hale gelecektir. Bu bakımdan asıl tartışılması gereken sorun; yapay zeka ve çok gelişmiş uygulamalar çağını yaşadığımız ortamlara uygun öğretmen yetiştirebilmek ve varolan öğretmenleri de asgari teknik donanım ve yeterliklere hazır hale getirebilmektir.

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Bitcoin, Tether Ve Litecoin Özelinde Kripto Paraların Spekülatif Balon ve Volatilite Dinamiklerinin Analizi

Selçuk BÜKLÜ¹

¹İstanbul Sabahattin Zaim Üniversitesi İslam Ekonomisi ve Uluslararası Finans Programı Doktora Öğrencisi; Albaraka Katılım Bankası Yönetmeni, mail:sbuklu@albarakaturk.com.tr, İletişim: 0542 443 66 45 ,ORCID: 0000-0002-5947-6172

Özet: Çalışmada son dönemde gerek popülaritesi gerekse güvenilirlikleri konusundaki tartışmaların arttığı kripto paraların en yüksek hacimli Bitcoin ile yüksek popülariteye sahip Tether ve Litecoin özelinde volatilite özellikleri modellenmiş olup fiyat balonlarının varlığı ve tarihleri belirlenmiştir. En uygun modeller olarak Bitcoin için EGARCH, Tether ve Litecoin için TGARCH olduğunun tespitinden sonra gerçekleştirilen analiz sonuçlarına göre Bitcoin için katsayılarının negatif olması negatif şokların pozitif şoklara göre volatiliteleri artıracak şekilde etki göstereceği anlamı taşımaktadır. Bu durum kaldıraç etkisinin bulunduğu anlamına gelmektedir. Tether ve Litecoin için kaldıraç etkisine ulaşamamış olup pozitif şokların negatif şoklara göre volatiliteleri artıracak şekilde etki göstereceği anlaşılmaktadır. Ayrıca her üç kripto para için balon varlığına ulaşılmıştır.

Anahtar Kelimeler: Kripto Para, Volatilite, Finansal Balon, Ethereum, Ripple

Jel: C01, C13, C51, E42.

Analysis of Speculative Bubble and Volatility Dynamics Of Crypto Currencies, Specially Bitcoin, Tether and Litecoin

Abstract: In the study, the volatility characteristics of Bitcoin, the highest volume of cryptocurrencies, and the highly popular Tether and Litecoin, whose popularity and reliability have recently increased, were modeled and the existence and dates of price bubbles were determined. According to the results of the analysis performed after determining that the most suitable models are EGARCH for Bitcoin and TGARCH for Tether and Litecoin, the fact that the coefficients for Bitcoin are negative means that negative shocks will have an effect that will increase volatilities compared to positive shocks. This means that there is a leverage effect. The leverage effect has not been reached for Tether and Litecoin, and it is understood that positive shocks will increase volatilities compared to negative shocks. Additionally, bubble existence was found for all three cryptocurrencies.

Keywords: cryptocurrency, volatility, financial bubble, Ethereum, Ripple, Bitcoin

Jel: C01, C13, C51, E42.

GİRİŞ

Sınırsız istek ve ihtiyaçlara sahip olan bir varlık olarak yaratılan insanın, tarih süresince bu istek ve ihtiyaçlarını tek başlarına karşılamaları da mümkün olmamıştır. Bu bağlamda ortaya çıkan ticaret (alım-satım) sırasında kullanılan trampa ekonomisinin güçlükleri de paranın bulunmasını gerekli kılmıştır. Paranın bulunmasından önce kumaş, kurutulmuş balık, tütün, kürk, deniz kabuğu, gibi insanoğlu tarafından kıymet atfedilen bazı değerli maddeler ve mallar takas aracı olarak kullanılmıştır (Carradice-Price, 2001:14) Günümüzde ekonomi ve finans alanında karşılaşılan yapay zeka, robotik uygulamalar ve insansız araçlar maliyetleri azaltıp hayatı kolaylaştırırken alım-satım fiillerinde dijital para kullanımı işlemlere hız ve kolaylık sağlamıştır. Bununla beraber ülkeler arası sınırlar ortadan kalkmış ve resmi prosedürler ortadan kaldırılmıştır. Çalışmanın amacı en yüksek piyasa değerine sahip ve en popüler kripto paralardan Bitcoin için 2018 ile 2022 periyodunda farklı koşullu değişen varyans modelleri kullanılarak volatilitelerin elde edilmesinde en uygun modelin ve balon fiyat oluşumlarının belirlenmesidir. Bilhassa Covid salgını yıllarının da analize dahil edilmesi, aynı zamanda balon ve oynaklığın aynı analizde olmasının çalışmayı özgün kılacağı düşünülmektedir.

1.Finansal Varlıklarda Balonlar ve Volatilite

Ekonomik anlamda, balonlar, gerçek içsel değerlerle aynı olmayan normal üstü fiyatlarla yapılan yüksek hacimli ticaret seviyeleridir. Diğer bir ifade ile değeri şişirilen varlıkların alım satımıdır. Balonların şişmesi yatırımcıların varlık fiyatlarının olması gerekenden çok daha yüksek olduğunu fark edinceye kadar devam etmektedir. Akabinde hızlı bir satış dalgasıyla birlikte varlık fiyatlarında ciddi düşüşler yaşanır. Bazen varlık fiyatlarındaki bu düşüşler piyasada çökmesine neden olabilecek boyutlara ulaşabilmektedir (Altunöz, 2022:49).

Piyasalarda ya da herhangi bir finansal enstrümanda meydana gelen fiyat oynaklığı olarak bilinen volatilité kavramı, belirsizliğin yükseldiği dönemlerde ön plana çıkmaktadır. Volatilité kavramı meydana gelen fiyat değişimlerinin ne kadar yüksek aralıklarda oluştuğunu, diğer bir ifadeyle fiyatlardaki değişimin ne kadar yüksek aralıklarla gerçekleştiğini ve finansal ürünün fiyat hareketleri arasındaki farkın büyüklüğünü ölçer. Bu bağlamda herhangi bir üründe volatilitesi yüksek bir aracın riskinin yüksek olduğu söylenebilir.

Korku endeksi ya da Belirsizlik Endeksi olarak da adlandırılan volatilité endeksi 1993 yılında Chicago Opsiyon Borsası için hesaplanmaya başlayan ve 2000’li yıllarla birlikte popüleritesi artan bir endeks olup piyasada aşırı coşku ya da aşırı korku durumlarının saptanmasına yardımcı olmaktadır. Oynaklığın yüksek olması (Piyasaların volatil /oynak olduğu) durumunda volatilité endeksi değerlenmekte, tersi durum volatilité endeksi değer kaybetmektedir. Belirsizlik yaratan ekonomik kriz, savaş, hükümet krizi gibi durumlarda volatilité endeksi yükseliş kaydetmektedir. Yine alım ve satım opsiyon fiyatları arasındaki yüksek bir fark bulunması, volatilitenin ve dolayısıyla VIX Endeksi’nin değerinin de yükselmesi beklenmektedir (Fountain, Herman ve Rustvold, 2008, 469).

2. Analize Konu Olan Kripto Paraların Balon Varlığının ve Volatilité Dinamiklerinin Ekonometrik Analizi

Bu kısımda, kripto para birimlerinin volatilité dinamikleri ile balon varlığı, analize konu olan kripto paralar üzerinden iki aşamalı olarak belirlenecektir. Çalışmada Altunöz (2023) çalışmasındaki ampirik analiz referans alınacaktır. Bu çerçevede, volatilité dinamiklerini belirleme sürecinde ARCH, GARCH, TGARCH ve EGARCH metotları kullanılacak; balon varlığının belirlenmesinde ise üst (Sup) ADF (GSADF) birim kök testi kullanılacaktır. Analizlere başlamadan önce, analizde kullanılacak olan kripto paraların sembolleri, kullanılan kaynaklar ve analiz dönemleri Tablo 1’de izlenebilmektedir.

Tablo 1: Analizdeki kullanılan Değişkenler, Simgeleri, Kaynak ve Dönemleri

Değişken	Simgesi	Elde Edilen Kaynak	Dönem
Bitcoin	BTC	coinmarket cap	01.01.2019-31.012.2022
Tether	USDT	coinmarket cap	01.01.2019-31.012.2020
Litecoin	LTC	coinmarket cap	01.01.2019-31.011.2022

01.01.2019 ile 31.12.2020 arasındaki 4 yıllık analiz döneminde üç kripto paranın kapanış değerlerine ait günlük veriler kullanılmıştır. Tanımlayıcı istatistikler Tablo 2’de sunulmuştur.

Tablo 2: Bitcoin, Ethereum ve Ripple İçin Tanımlayıcı İstatistikler

	BTC	USDT	LTC
Ortalama	0,0051	-0,003	-0,003
Ençok	0,601	0,314	0,322
Enaz	-0,511	-0,127	-0,170
Standart Sapma	0,051	0,066	0,074
Eğiklik	1,153	1,121	1,123
Basıklık	16	7	7
Jarque Bera Testi	2009(0,000)	131,109(0,00)	139,002(0,00)

Tablo 2’de en az ile en çok arasındaki farkın yüksek olması volatilité ve dalgalanmanın var olduğuna işaret etmektedir. Bu durum standart sapma değerleri ile de desteklenmektedir. Jarque Bera testine göre normal dağılımın geçerli değildir.

2.1. Volatilité Dinamiklerinin Analizi

Analizde kullanılacak kripto paralarının volatilité durumunun incelenmesi Volatilité analizi için Genelleştirilmiş Otoregresif Koşullu Değişen Varyans (GARCH) metodu tercih edilmiştir. GARCH modelleri oluşturabilmek için değişkenlerin durağan olması gerekmektedir.

Zaman serileri, ekonometrik analizlerde sıklıkla kullanılmakla birlikte, çoğunlukla durağanlık özelliği göstermezler. Bu durum, birim kök taşımaları nedeniyle, oluşturulan modellerin sahte regresyon sorunlarına yol açabilir. Bu tür problemleri çözmek için, volatilité dinamikleri analizine başlanmadan önce, değişkenlere Augmented Dickey-Fuller (ADF) ve Ng Perron (2001) tarafından geliştirilmiş birim kök testleri uygulanacaktır.

Dickey ve Fuller (1981) tarafından ifade edilen ADF birim kök testi, Altunöz (2015: 38)'de eşitlik (1) ile belirtilmektedir.

$$\Delta Y_t = \beta_1 + \beta_2 + \delta Y_{t-1} + \sum_{i=1}^k \alpha_i \Delta Y_{t-i} + \varepsilon_t \quad (1)$$

ADF testine ilişkin sonuçlar Tablo 3'te izlenebilmektedir.

Tablo 3: ADF Testi Sonuçları

Değişkenler	Test İstatistikleri		Kritik Değerler	
	Seviye Değeri	Birinci Fark	1%	5%
BTC	-4,21(4) *	-	-4,10	-3,54
USDT	-10,90 (0) *	-	-4,90	-3,54
LTC	-8,22 (3) *	-	-4,90	-3,54

Not: *, %1, anlam seviyesini, parantez içine alınan değerler ise, Akaike Bilgi Kriteri ile belirlenen optimal gecikme uzunluklarını ifade etmektedir.

Değişkenlerin tümü durağan olup birim kök içermemektedir. Analizde kullanılacak diğer bir birim kök testi ise PP (Phillips-Perron) testlerinde ortaya çıkan hata teriminin hacmindeki boyut dağılımı çarpıklığını düzeltmek için M-testleri olarak geliştirilen Ng-Perron birim kök testidir (Sevüktekin ve Nargeçekenler, 2007:33). Phillips-Perron birim kök testlerinde kullanılan Z_α ve Z_t testlerinin geliştirilmiş şekli olan MZ_α ve MZ_t testleri, MSB testi ve ADF-GLS testlerinin geliştirilmiş olan MPT testidir. Söz konusu testler eşitlik (2), (3), (4) ve (5)'de izlenebilmektedir.

$$MZ_\alpha = Z_\alpha + (T/2)(\hat{\Theta}_1) \quad (2)$$

$$MSB = \left(T^{-2} \sum_{t=1}^T Y_{t-1}^2 / s^2 \right)^{1/2}$$

$$MZ_t = MSB * MZ_\alpha \quad (3)$$

$$MZ_t = MSB * MZ_\alpha \quad (4)$$

$$MPT = \left[\hat{c} T^{-2} \sum_{t=1}^T Y_{t-1}^2 - \hat{c} T^{-1} Y_t^2 \right] / S_{AR}^2 \quad (5)$$

Ng-Perron birim kök testi sonuçları Tablo 4'te izlenebilmektedir.

Tablo 4: Ng-Perron Birim Kök Testi Sonuçları

Değişkenler	MZ_α	MZ_t	MSB	MPT
BTC	-122,91*(0)	-11,30*(0)	0,01*(0)	0,09*(0)
ETH	-21,19*(2)	-6,01*(2)	0,09(2)	1,16(2)
XRP	-8,18*(0)	-1,73(0)	0,11*(0)	1,11*(0)

Not: Ng-Perron birim kök testinde Schwarz(SIC) bilgi kriteri kullanılarak gecikme uzunluğu maksimum 7 olarak belirlenmiştir. Hesaplanan gecikme uzunlukları parantez içinde belirtilmiştir. Kritik değerler Ng ve Perron (2001)tablo1 den alınmıştır. *,%1 anlamlılık seviyesinde birim kökün varlığını ifade etmektedir.

Tablo 4'te sunulan Ng-Perron birim kök sonuçlarına göre diğer bir ifadeyle her üç kripto para seviyede durağandır.

2.1.1 GARCH Tipi Modeller ve Volatilitelerin Tahmini

Birim kök analizleri serilere uygulandıktan sonra, en uygun koşullu ortalama denklemi, en küçük kareler yöntemi kullanılarak tahmin edilmektedir. Auto-korelasyon ve katsayıların anlamlılığı değerlendirildiğinde, Bitcoin ve Ethereum için en uygun modelin ARMA (1,1) olduğu, Ripple için ise AR (2) modelinin en uygun olduğu tespit edilmiştir. İlgili modellerle elde edilen sonuçlar, Tablo 5'te görülebilir.

Tablo 5: Koşullu Ortalama Denklemlerine Ait Sonuçlar

Model	Bitcoin		Ethereum		Model	Ripple	
	Katsayı	p	Katsayı	p		Katsayı	p
Sabit Terim (c)	0,003*	0,032	0,005*	0,054	Sabit Terim (c)	0,066*	0,068
AR (1)	-0,212**	0,000	0,543*	0,000	-	-	-
MA (1)	0,212**	0,000	-0,734**	0,000	AR (2)	0,161**	0,000

Not: * ve ** sırasıyla %1 ve %5 seviyesinde anlamlılığı göstermektedir.

Analiz edilen üç kripto para biriminin sabit terimleri %1 düzeyinde, AR ve MA katsayıları ise %5 düzeyinde anlamlı bulunmuştur. Her bir model için $1 > AR(1)$, $2 > AR(2)$ ve $1 > MA(1)$ koşulları sağlanmıştır. Ek olarak, kullanılacak değişkenlerdeki heteroskedastisite problemi ARCH testi aracılığıyla değerlendirilmekte ve Q^2 testi kullanılarak otokorelasyon problemi araştırılmaktadır. Bahsi geçen test sonuçları, Tablo 6'da gösterilmektedir.

Tablo 6: ARCH-LM ve Q^2 Testi Sonuçları

Test İstatistikleri	Bitcoin		Ethereum		Ripple	
	F İst.	N^*R^*	F İst.	N^*R^*	F İst.	N^*R^*
ARCH	22,124*	84,001	28,0010*	96,21	7,09*	15,43
	Q^2 ist.	p	Q^2 ist.	p	Q^2 ist.	p
Q^2	1,000	0,432	2,312	0,109	7,13	0,01

Tablo 6'da verilen Q^2 sonuçları ışığında, incelenen üç kripto paranın getiri serilerinde otokorelasyon sorunu belirlenmemiştir. Heteroskedastisite analizine dair yapılan ARCH testi ise, kalanların sabit varyansa sahip olduğu hipotezini reddetmiştir. Bu durum, mevcut bir güçlü ARCH etkisi ve değişen varyans problemi olduğunu göstermektedir. Belirtilen güçlü ARCH etkisi, ARCH tipi modellerin uygunluğunu göstermektedir.

ARCH ve GARCH modelleri için, parametrelerle alakalı olarak iki temel şart bulunmaktadır. İlk şart, varyansın pozitif olması yani negatif olmamasıdır; bu da şartlı varyans denkleminde sağ tarafta yer alan sabit katsayı >0 ve diğer değişken katsayılarının ya sıfıra eşit ya da sıfırdan büyük olması anlamına gelir. İkinci şart ise otoregresif modellerle alakalı olarak durağanlık şartıdır (Özden, 2008: 342). GARCH modellerinin en büyük eksikliklerinden biri, volatilitenin negatif ve pozitif şoklara karşı simetrik tepki vereceği varsayımıdır. Ancak, mevcut koşullarda volatilitenin negatif ve pozitif şoklara asimetrik tepkiler de gösterebilmektedir. Bu çerçevede, Nelson (1991) EGARCH (Üstel GARCH) modellerini ortaya koymuştur.

Tablo 7: Bitcoin Getiri Oranına Ait Volatilité Model Sonuçları

Değişken	ARCH(2)	GARCH (2,1)	TGARCH(2,1)	EGARCH (2,1)
BITCOIN				
Ortalama Denklemi				
c	0,002*	0,003*	0,003*	0,003*
AR(3)	-0,003*	-0,005	0,002	0,007*
MA(4)	0,054**	0,023*	0,025*	0,022
Varyans Denklemi				
c	0,002*	0,002*	0,003*	-133*
ε_{t-1}^2	0,312*	0,113*	0,266*	-
ε_{t-2}^2	0,121*	-0,123 *	-0,331*	-
h_{t-1}	-	0,311*	0,619*	-
I_{t-1}	-	-	0,316*	-
$\varepsilon_{t-1}/h_{t-1}^{0.5}$	-	-	-	-0,083*
$\varepsilon_{t-1}/h_{t-1}^{0.5}$	-	-	-	-0,442*
$\varepsilon_{t-2}/h_{t-1}^{0.5}$	-	-	-	-0,144*
$\ln(h_{t-1})$	-	-	-	0,725*
AIC	-2,109	-4,111	-4,231	-5,000
SIC	-2091	-4,105	-4,449	-5,113
Değişken	ARCH(2)	GARCH (2,1)	TGARCH(2,1)	EGARCH (2,1)
TETHER				
Ortalama Denklemi				

c	0,002*	0,002*	0,004*	0,005*
AR(3)	-0,005*	-0,005	0,007	0,004*
MA(4)	0,031**	0,023*	0,035*	0,018
Varyans Denklemi				
c	0,004*	0,003*	0,004*	-161*
ε_{t-1}^2	0,555*	0,134*	0,266*	-
ε_{t-2}^2	0,145*	-0,119 *	-0,161*	-
h_{t-1}	-	0,551*	0,619*	-
I_{t-1}	-	-	0,046*	-
$\varepsilon_{t-1}/h_{t-1}^{0.5}$	-	-	-	-0,081*
$\varepsilon_{t-1}/h_{t-1}^{0.5}$	-	-	-	-0,312*
$\varepsilon_{t-2}/h_{t-1}^{0.5}$	-	-	-	-0,188*
$\ln(h_{t-1})$	-	-	-	0,745*
AIC	-2,133	-4,321	-4,587	-3,789
SIC	-2,323	-4,105	-4,449	-3,113
Değişken	ARCH(2)	GARCH (2,1)	TGARCH(2,1)	EGARCH (2,1)
LITECOIN				
Ortalama Denklemi				
c	0,004*	0,003*	0,004*	0,005*
AR(3)	-0,005*	-0,005	0,002	0,006*
MA(4)	0,054**	0,023*	0,035*	0,018
Varyans Denklemi				
c	0,004*	0,003*	0,004*	-161*
ε_{t-1}^2	0,555*	0,134*	0,266*	-
ε_{t-2}^2	0,145*	-0,119 *	-0,161*	-
h_{t-1}	-	0,551*	0,619*	-
I_{t-1}	-	-	0,046*	-
$\varepsilon_{t-1}/h_{t-1}^{0.5}$	-	-	-	-0,081*
$\varepsilon_{t-1}/h_{t-1}^{0.5}$	-	-	-	-0,312*
$\varepsilon_{t-2}/h_{t-1}^{0.5}$	-	-	-	-0,188*
$\ln(h_{t-1})$	-	-	-	0,745*
AIC	-2,000	-4,018	-4,587	-3,789
SIC	-2,068	-4,310	-4,449	-3,113

Tüm katsayılar %1 düzeyinde istatistiksel olarak anlamlılık taşımaktadır. Katsayıların negatif yönlü olması, negatif şokların, pozitif olanlara kıyasla, volatilitenin artmasına neden olacağı, yani kaldıraç etkisi olduğu şeklinde yorumlanabilir. Tether ve Litecoin için seçilmiş olan en verimli model TGARCH olarak tespit edilmiştir. Varyans denklemi çerçevesinde elde edilen tüm sonuçlar istatistiksel açıdan anlamlıdır. Tether ve Litecoin için incelenen TGARCH katsayısı I_{t-1} pozitif sinyale sahiptir ve kaldıraç etkisi gözlemlenememiştir. Ancak, bu katsayının anlamlı olması, pozitif şokların, negatif olanlara göre volatilitenin yükselmesine sebep olacağını göstermektedir. Ele alınan her üç kripto para birimi ile ilgili olarak elde edilen bulgular, ARCH Testi sonuçlarına dayanarak, heteroskedastisite problemiyle başarıyla başa çıkıldığını ve otokorelasyon problemi olmadığını belirtmektedir.

Kripto Para Piyasasında Balon Varlığının Analizi

Bu bölümde, analiz, spekülasyon balonlarının varlığını belirlemeye odaklanacak ve balonların ortaya çıkış süreçleri ile Phillips et al. (2011) tarafından geliştirilen Genelleştirilmiş Sıralı (Sup) ADF (GSADF) birim kök testi bu balonların tespiti için kullanılacaktır. GSADF testi, analizde kullanılan örneğin başlangıç ve bitiş noktalarını belirli bir pencere aralığında modifiye eder, böylece sadece başlangıç noktasını sabitlemez (Güler ve Gökçe, 2020:997). Bu nedenle, GSADF testi, uzun zaman serisi analizleri için daha elverişlidir. Bahsedilen testin kritik değerlerine ulaşmak için Mante Corlo simülasyonu kullanılır. Bu çalışmanın ilgili kısmında, balonların belirlenmesi konusunda daha etkili olan GSADF testi öne sürülmüştür. GSADF analizi yapılırken, eşitlik (6) içerisindeki regresyon denklemi temel alınmaktadır.

$$y_t = m + \lambda y_{t-1} + \sum_{i=1}^p p_i^j r_2 \Delta y_{t-1} + \varepsilon_t, \varepsilon_t \sim iid N(0, \sigma^2), t = 1, \dots, T \quad (6)$$

Eşitlik (12) de y_t haftalık kapanış fiyatlarını ifade etmektedir. Benzer şekilde en çok gecikme sayısı p , fark Δ , toplam verinin pencere uzunluğu r ve r_2 ile ifade edilmektedir. Sıfır hipotezin reddedilmesi balonların var olduğunu ifade etmektedir. Bu doğrultuda kurulacak denklem eşitlik (7)'deki gibidir.

$$GSADF_{r_0} = \sup_{r_2 \in (r_0, 1)} SADF_{r_2}(r_0) \quad (7)$$

Balonların tespit edilmesi durumunda balonların hangi döneme ait olduğunun belirlenmesi için geriye yönelik SADF(BSADF) istatistiklerinden faydalanılmaktadır. Bitiş noktası r_2 değişmemek üzere başlangıç yerinden $r_2 - r_1$ noktasına giden alt örneklemelere ait ADF dizisi $(ADF_{r_1, r_2})_{r_1 \in (0, r_2 - r_0)}$ olacak şekilde BSADF istatistiği eşitlik (8)'deki gibi ifade edilmektedir (Ceylan vd.2018: 270).

$$BSADF(r_0) = \sup_{r_1 \in (0, r_2 - r_0)} (ADF_{r_1, r_2}) \quad (8)$$

Ulaşılan BSADF dizileri Monte Carlo simülasyonu kullanılarak belirlenen istatistiğe ait sağ kuyruklu kritik değerler dizisiyle karşılaştırılmaktadır. Bu sayede hangi tarihlerde balon oluştuğu belirlenmektedir. GSADF Test Sonuçları Tablo 8'de izlenebilmektedir.

Tablo 8: GSADF Test Sonuçları

Değişken	Test İstatistiği	Pencere Uzunluğu	Gecikme	Sonuç
Bitcoin	11.321*	21	0	Balon var
Tether	10.412*	21	0	Balon var
Litcoin	12.891*	21	0	Balon var

Not: * GSADF test istatistiklerinin sırasıyla %1 seviyesinde istatistiksel olarak anlamlı olduğunu göstermektedir.

GSADF istatistiklerine ait kritik değerler %1 anlamlılık düzeylerinde bitcoin için sırasıyla 2.662'tir, Ethereum için 2.677 Ripple için 2,77 Tablo 8'de, pencere uzunluğu, literatürde genel kabul görmüş olan gözlem sayısının %2'si olarak, 21 şeklinde ayarlanmıştır. Test istatistiklerinin elde edilen değerleri, kritik değerden yüksek olduğu için sıfır hipotezi reddedilmiştir. Bu, incelenen dönemlerde spekülasyon balonlarının mevcut olduğunu ortaya koymaktadır.

SONUÇ

Çalışmada, yüksek hacimli 3 farklı kripto para mercek altına alınmış ve piyasalardaki volatilité ve fiyat balonları detaylı bir şekilde incelenmiştir. Finansal balonların belirlenmesinde sıklıkla başvuru ve güncel olan GSADF testi kullanılmıştır. Elde edilen bulgular, balonların var olduğunu göstermiş ve bu balonlar istatistiksel olarak anlam teşkil etmiştir. Volatilité analizi sonuçlarına göre; Bitcoin için EGARCH, Teether ve litecoin ve Ripple içinse TGARCH en uygun model olarak seçilmiştir. Bitcoin için elde edilen katsayıların negatif olması, negatif şokların, pozitif şoklara nazaran volatilitéyi artırıcı yönde etki yapacağına işaret etmektedir, bu da kaldıraç etkisinin var olduğu anlamına gelir. Ethereum ve Ripple için ise kaldıraç etkisi gözlemlenememiş ve pozitif şokların, negatif şoklara kıyasla volatilitéyi arttıracağı sonucuna varılmıştır.

Bulunan sonuçlar, konuya merak salmış araştırmacılar, finans profesyonelleri, yatırımcılar ve politika belirleyiciler için çarpıcıdır. Analizin güncel oluşu, pandemi döneminin yarattığı etkiler ve 2020'nin sonlarına doğru ortaya çıkan finansal balonların analizini mümkün kılmıştır. Bulgular, risk almayı seven yatırımcılar için, balon tespit edilen dönemlerde fiyat artışının devamlı olacağı varsayıldığında, kripto paraların diğer yatırım araçlarına bir alternatif olabileceğini göstermektedir.

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Activities of Municipal Solid Waste Management Systems

Assoc. Prof. Dr. Nurcan ÖZKAN¹

¹ University of Trakya, Faculty of Education, Department of Mathematics and Science Education,
nurcanozkan@hotmail.com, ORCID: 0000-0001-5045-6186

Abstract: In parallel with the economic and technological developments in recent years; The amount and variety of both domestic and industrial solid wastes are increasing. In our country, solid wastes are mostly collected without recovery and are generally removed by irregular storage. A very small part of the valuable materials in solid waste is recovered and the rest is buried in the soil. Thus, a potential economic value turns into a potential source of pollution. Reasons such as odor formation as a result of garbage storage in uncontrolled landfills, reproduction of pests, formation of a feeding environment for stray animals, spreading of garbage around and risk of fire require such garbage dumping sites to be controlled. This situation necessitates the use of regular (controlled) storage areas instead of uncontrolled storage areas. One of the most important duties of local governments is the collection, transportation and removal of solid wastes in accordance with the technique. Solid waste storages are important engineering structures in terms of preserving waste, reducing environmental pollution, and preventing soil and water pollution. In order to control the environmental pollution caused by the wastes, the wastes should be properly stored in the landfills. In this study, a literature review was conducted on the practices in the world and in Turkey in terms of the general procedures of the conceptual framework of solid waste, solid waste management and municipal solid waste management.

Keywords: Solid waste, solid waste facility, recycling, sustainability

Belediyelerin Kentsel Katı Atık Yönetim Sistemlerinin Faaliyetleri

Son yıllarda ekonomik ve teknolojik gelişmelere paralel olarak; hem evsel, hem de endüstriyel katı atıkların miktarı ve çeşidi giderek artmaktadır. Ülkemizde katı atıklar, çoğunlukla geri kazanılmadan toplanmakta ve genellikle de düzensiz depolama ile uzaklaştırılma yapılmaktadır. Katı atık içerisinde değerli maddelerin çok az bir kısmı geri kazanılmakta, kalanı ise toprağa gömülmektedir. Böylece potansiyel bir ekonomik değer, potansiyel bir kirlilik kaynağına dönüşmektedir. Kontrolsüz atık sahalarında çöp depolanması sonucu koku oluşması, haşere üremesi, başıboş hayvanların beslenme ortamının oluşması, çöplerin etrafa yayılması ve yangın riski gibi sebepler bu tür çöp döküm alanlarının kontrol altına alınmasını gerektirmektedir. Bu durum kontrolsüz depolama sahalarının yerine düzenli (kontrollü) depolama sahalarının kullanımını zorunlu kılmaktadır. Yerel yönetimlerin en önemli görevlerinden birisi de katı atıkların tekniğine uygun olarak toplanması, taşınması ve uzaklaştırılmasıdır. Katı atık depoları atıkların muhafaza edilmesi, çevre kirliliğinin azaltılması, özellikle toprak ve su kirliliğinin önlenmesi açısından önemli mühendislik yapılarıdır. Atıkların neden olduğu çevre kirliliğini kontrol etmek için atıklar uygun şekilde depolama alanlarında muhafaza edilmelidir. Bu çalışmada katı atık, katı atık yönetimi ve belediye katı atık yönetiminin kavramsal çerçevesinin genel prosedürleri açısından dünyada ve Türkiye’deki uygulamaları konu alan literatür taraması yapılmıştır.

Anahtar kelimeler: Katı atık, katı atık tesisi, geri kazanım, sürdürülebilirlik

1. INTRODUCTION

The environment, which was previously perceived as only narrow-scale pollution problems and short-term solutions for their elimination, has now begun to show itself as a whole of natural, economic, social and cultural values. The most important factor determining this development is the rapid and irreversible destruction of the resources used in the realization of social and economic development (Güler, 2008).

While efforts are being made to solve the environmental problems experienced in developed industrial countries with technological change, one of the problems created by the consumer society created and the products offered to this society has emerged as the problem of waste and garbage. In Turkey, the total solid waste (garbage) amount has reached enormous dimensions due to reasons such as rapidly increasing population, migration and unhealthy urbanization (Zengin and Ulutaş, 2016).

Increasing population and developments in the field of industry bring along the problem of waste. If waste generation cannot be avoided, as much material as possible should be recovered. Such an increase in solid wastes makes it necessary to systematically recycle them. Determining the amount of waste, recycling the waste as much as possible, minimizing the harm of wastes to the environment and society are the objectives of recycling. Waste that cannot be recycled or reused should be stored in landfills or safely incinerated. Both methods are risky in terms of environmental health and should be closely monitored with systematic monitoring programs (Çevresel Kirlilik İzleme Rehberi, 2007). Domestic solid wastes pose a biological, physical

and chemical hazard for human and environmental health. If solid wastes are not disposed of in accordance with the technique; Leakage waters generated in landfills can cause pollution of soil, surface and underground waters, and landfill gas can cause air pollution due to the high methane content in it, causing chemical and biological problems (Durmaz Bekmezci and Çetin, 2020; Gündüzalp and Güven, 2016).

When solid waste (garbage) pollution is mentioned, it is expressed as the pollution that occurs when the waste is not collected effectively. Depending on the type of origin, it is understood that it is not removed with a garbage bag, carelessly thrown into the environment, irregular collection, insufficiency or overfilling of containers (large garbage collection container) and waste bins. In addition, not keeping the front of the building doors and walking paths clean by the users, not cleaning the streets by the responsible municipality, not collecting and disposing of hazardous and medical wastes properly and not continuing the recycling projects effectively are considered as solid waste pollution (Çoban and Kılıç, 2009).

Waste management, on the other hand, is all of the activities of prevention of waste production, reduction at source,, reuse, separation according to characteristics and type, accumulation, collection, temporary storage, transportation, intermediate storage, recycling, recovery including energy recovery, disposal operations, monitoring after disposal, control and monitoring (Acar and Acar, 2022). The detailing of all legal studies in order to ensure that the said administration is practical in practice, and the preparation of the legal framework and accompanying regulations in this regard is also an indicator of the sensitivity shown by the countries to the issue. The aim of waste management is to minimize or eliminate the effects of waste on the environment. While achieving this aim, all waste management technologies including storage, incineration, reduction, recycling and reuse methods are used (Ayberk, 2006).

The most widely used method in our country is the removal of solid waste. With the idea of "keep out of sight", garbage is generally thrown away from the living environment of people by randomly throwing garbage in open areas outside the city and town. As a result of these practices, "mountains of garbage", harmful leaks, diseases spread by harmful pests, bad odor are among the most important problems that threaten public and environmental health. For example, in 1993, 39 people lost their lives as a result of the explosion of methane gas accumulated in the Hekimpaşa garbage dump in Ümraniye, Istanbul (Güler, 2008).

Solid wastes originating from houses and industrial facilities are collected by municipalities. The collected wastes are separated according to their types, such as organic (biodegradable) and hazardous recyclable wastes (packaging, etc.) in mechanical separation facilities. It is recycled by making compost from biodegradable wastes. In addition, methane gas (landfill gas) obtained from biodegradable wastes is used in the production of electrical energy by burning and thus recycling is provided. The integrated facilities where all these processes are carried out are called "Solid Waste Landfill Facility" (URL 1).

1.1. Applications of Municipalities in Solid Waste Management

While municipalities directly participate in some environmental services, some are authorized by law, including partially. Municipalities are an institution that should be used especially in environmental management. While municipalities affect the environment with some of the public services they provide, they also apply a direct environmental management function with some of their services (Acar and Acar, 2022).

The legal system enables the municipalities, which are obliged to meet the local common needs, to fulfill all necessary environmental services (Zengin and Esedov, 2010). In Article 15 of the Municipality Law No. 5393, the authorities and privileges of the Municipality are "to perform and have all services related to the collection, transportation, separation, recovery, disposal and storage of solid wastes." listed as. In the 14th paragraph of the 11th article of the Environmental Law No. 2872, "Metropolitan municipalities and municipalities are obliged to establish, have them set up, operate or have them run domestic solid waste disposal facilities. The beneficiaries and/or beneficiaries of this service are obliged to participate in the investment, operation, maintenance, repair and improvement expenditures to be made by the responsible management. Solid waste collection, transportation and disposal fees are collected from those who benefit from this service, according to the tariff determined by the municipal council. The fees collected pursuant to this paragraph cannot be used except for services related to solid waste." provision is included (Akdağ et al., 2007).

Solid wastes originating from houses and industrial facilities are collected by municipalities. The collected wastes are separated according to their types, such as organic (biodegradable) and hazardous recyclable wastes (packaging, etc.) in mechanical separation facilities. It is recycled by making compost from biodegradable wastes. In addition, methane gas (landfill gas) obtained from biodegradable wastes is used in

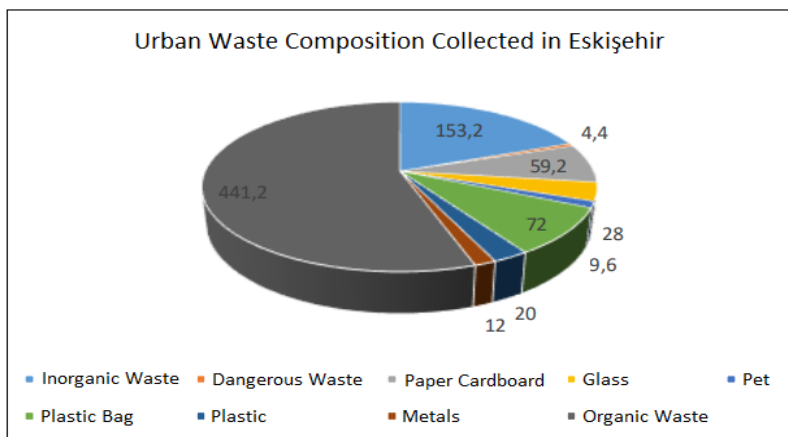
the production of electrical energy by burning and thus recycling is provided. The integrated facilities where all these processes are carried out are called "Solid Waste Landfill Facility" (URL 1).

In today's world, where consumption is increasing rapidly and natural resources are decreasing at the same rate, recovery, recycling and reuse of wastes is of great importance. According to the municipality employees, the biggest problem arises from the mixed collection of wastes. Mixed collected wastes can cause energy, cost and efficiency losses and even irreparable damage to systems. The desired but difficult part of the waste management hierarchy is waste reduction and prevention, the top of the pyramid. In this regard, especially waste producers should take this responsibility and support waste reduction, if not, separate collection of waste and recycling. Unfortunately, social awareness on this issue is quite low. In order to raise awareness, education programs at different levels from pre-school to adult education are organized, and visual media areas are also widely used.

The appropriate site selection decisions of the solid waste landfill must comply not only with national but also international regulations (Demesouka et al., 2019). Therefore, decision makers should be aware of the negative effects of storage facilities that do not have a good selection and management strategy on the environment and public health, and they should take care to keep these risks at the lowest level when choosing the appropriate storage area (Soltani et al., 2015; Torabi-Kaveh et al., 2016; Khan et al., 2018; Ünal et al., 2019).

In 2018, 827,970 tons of waste per day, 32 million 209 thousand tons per year, was collected in the municipalities that provide waste services in Turkey. According to the data obtained from the municipality through official information in the same period, the daily amount of domestic solid waste collected in the first 8 months of the year in Eskişehir is 795 tons. According to this data, the annual amount of domestic waste in 2018 was calculated as 290,175 tons. The economic return for Eskişehir province through waste recovery is expected to be approximately 2.5 million TL per year (Figure 1) (Durmaz Bekmezci and Çetin, 2020; Eskişehir Büyükşehir Belediyesi, 2019).

Figure 1. Composition of solid waste collected daily in Eskişehir



Resource: Eskişehir Çevre ve Şehircilik İl Müdürlüğü (2018).

1.2. Solid Waste Management

The concept of waste should be considered as a sustainable environmentally friendly raw material that should be recycled or recovered for development, rather than useless material that should be disposed of in its classical sense (Igoni et al., 2007). In the world of the future, where natural resources will be insufficient to meet the demand in the face of population growth, development and progress will be related to the recycling and recovery rates of countries. On the other hand, a livable world will depend on our ability to use natural resources in the most efficient and environmentally friendly way. At this point, energy production based on recycling and renewable energy sources, as two important sub-titles, should be the subjects that must be included in all the productive, economic and social systems we will design for the future.

Environmental pollution should be prevented by minimizing the negative effects of leachate and landfill gases that may occur on soil, air, groundwater, and surface waters. According to the type of waste, it is necessary to make appropriate warehouse floor technical designs and to construct sanitary storage facilities. It is necessary to prevent the negative effects that may pose a risk to the environment and human health, including the greenhouse effect, in the operation, closure and post-closure control and maintenance processes of the

sanitary landfills, and the operation, shutdown and post-closure maintenance processes. In order to determine the technical and administrative issues regarding the rehabilitation, closure and post-closure maintenance processes of the existing landfill facilities and the general rules to be followed, the Regulation on the Landfilling of Wastes, which is in force with the Official Gazette dated 26.03.2010 and numbered 27533, was prepared (URL 1).

Reducing the amount of waste and its toxic nature is one of the most basic elements of solid waste management. As the amount, toxic nature and disposal costs of domestic solid wastes increase, the importance of resource reduction in waste management also increases. The less waste is collected, processed and disposed of, the less the waste management and the harm that the produced wastes cause to the environment. Reducing solid waste is possible in many ways. These; redesigning packages and products in the manufacturing process, purchasing and reusing products with less waste in the consumption process, some institutional changes in daily life (such as using both sides of the paper), purchasing more durable and less toxic products, less waste in industries are methods such as choosing the technologies that produce (Banar, 2006; Güler, 2008).

Solid waste must be collected regularly and economically. Containers used for waste in unsystematic collection, which is one of the most frequently used methods by municipalities, are not subject to any standard. In this case, residents can collect their garbage in bags, tins, etc. that they provide themselves. they fill them in containers and leave them in a certain place or by the roadside. These systems can be seen as advantageous for municipalities due to their low cost and ease of organization. Especially in areas where settlement is dense and streets are narrow, this collection method provides convenience. However, serious hygienic problems may occur due to the waste being left open, the bags being torn, and some wastes being thrown openly on the street (Çevre ve Orman Bakanlığı, 2000).

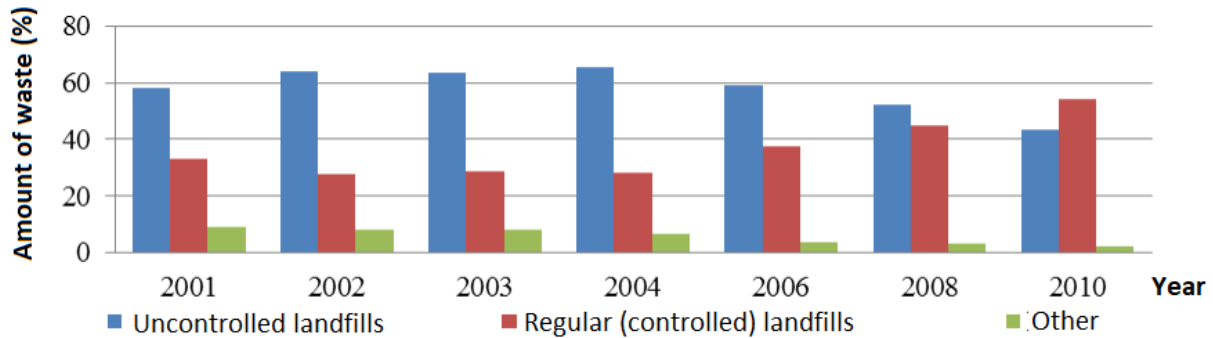
In urban solid waste management systems, the largest part of the total cost comes from solid waste collection and transportation services. For this reason, the shortest distances should be determined when creating waste collection routes, thus minimizing the time and costs for waste collection (Banar et al., 2007; Özkan, 2008; Tchobanoglous et al. 1993).

Necessary measures should be taken to ensure that the land, which is determined as a storage area as a result of the necessary engineering studies, does not cause soil and water pollution. In our country, a large part of domestic solid wastes are stored in uncontrolled landfills without taking any precautions. According to TUIK (Turkish Statistical Institute) data, the amount of waste dumped in the landfill in our country in 2008 was 12678 thousand tons (52% of the total amount) and in 2010 this figure was 11001 thousand tons (43.5%). The amount of waste dumped in regular (controlled) landfills was 10947 thousand tons (44.9%) in 2008 and 13747 thousand tons (54.4%) in 2010. From these statistical data, it is clearly seen that the amount of waste dumped in landfills has decreased and there has been an increase in the amount of waste dumped in landfills. Despite this increase rate, the fact that the amount of solid waste dumped in landfills has a rate of 44.9% shows that the regular waste storage areas are not sufficient. For this reason, studies on the establishment and operation of sanitary landfills should be accelerated (Anonim, 2013; Ayaz et al., 2014; Neyim, 2013).

Waste management includes minimizing household, medical, hazardous and non-hazardous wastes, collecting them separately at the source, storing, recycling, disposal, operation of recovery and disposal facilities, monitoring and control processes. With the landfills, solid wastes are sealed, it is aimed to pour into large areas, compress and turn them into a natural biological reactor by covering them. With regular storage, the mixing of waste water with groundwater is prevented. The gas in the stored waste can be collected and used as fuel. By covering the stored waste with soil at regular intervals, odor formation, pest reproduction, the formation of a feeding environment for stray animals, the spread of garbage and the risk of fire are prevented. The advantages of regular solid waste facilities bring about an increase in such facilities in our country. The TUIK data shared in Figure 2 reveal that the amount of waste disposed of in regular solid waste storage facilities in our country is increasing day by day (Ayaz et al., 2014).

In sanitary landfills, the floor of the warehouse should be covered with impermeable natural or synthetic mattresses. For this purpose, impermeable natural clay mattresses are used in industrial and municipal solid waste warehouses. Produced (low permeability) geosynthetic clay mattresses or synthetic geomembranes are used in warehouses for the same purpose. The design purpose of warehouse mattresses is to prevent the leakage of waste water to the floors under the warehouse in order to reduce the risk of contamination of ground and groundwater. It is important that the selected mattress systems are suitable for the regional geology and environmental conditions (Akbulut, 2003).

Figure 2. Distribution of landfill by years



Resource: Ayaz, M., Erhan, K., Taşdemirci, E. and Karaçor, E. (2014). Bir Katı Atık Bertaraf Tesisi için Otomasyon Sistem Tasarımı ve Uygulaması. Düzce Üniversitesi Bilim ve Teknoloji Dergisi.

Landfill gas, which is naturally formed as a result of anaerobic mineralization of organic wastes in integrated landfills, is an important source of biogas. It has been stated that the biogas potential that can be obtained from animal and agricultural wastes in our country is equivalent to 8.6 MTEP (Million Tons Equivalent Petroleum) and 100 thousand GWh electrical energy for 2015. Annual amount of 14.099.326.31 tons of organic waste and 17.232.509.95 tons of other urban waste has been determined in Turkey. The energy contained in organic waste is 2,315,413.88 TEP per year. The theoretical amount of biogas that can be obtained from 14,099,326.31 tons of organic waste is 1,431,081,620.47 m³ annually. Currently, there are 37 licensed facilities producing electricity from municipal waste, 9 unlicensed facilities, 1 waste tire and 1 power generation facility from industrial waste in our country. The total installed power of these facilities is 241.932 MWh (Çevre ve Şehircilik Bakanlığı, 2017). With the processing of the collected wastes in Eskişehir, energy is produced from the wastes and the economy is benefited (Durmaz Bekmezci and Çetin, 2020).

In recent years, sustainable environment and public space plans have gained importance with the work of both non-governmental organizations and decision makers (architects, city planners, local governments, ministries, etc.) who have a say in the city. Today's conditions, where it is not enough for decision makers to consider only the public interest in order to ensure sustainability, has made it a necessity to produce plans that require a holistic approach including environmental, social, economic and technical issues and that include different professional disciplines (Torabi-Kaveh et al., 2016; Khan et al., 2018; Demesouka et al., 2019, Ünal et al., 2019). Solid waste integrated facilities are one of the study subjects that such plans should be produced and that decision makers have focused on in recent years (Özkan et al., 2005).

1.3. Status of Solid Wastes in the World

The use of packaged products and “disposable” materials, which have become widespread with the change in consumption habits today, have been the starting point of the garbage problem that has reached gigantic proportions. For example, in a study, more than one hundred thousand tons of garbage is thrown into the garbage collection center "Fresh Hills" in New York City, USA. This amount corresponds to a mass ten times larger than the pyramids in Egypt (Güler, 2008).

The amount of unwanted waste in developing countries has reached dangerous levels in recent years. In this regard, it can be said that the rapidly increasing population, the migration from the village to the city, the spread of consumption habits of Western societies all over the world and the widespread use of disposable products and packages play a role. Landfills (wild landfills), which are nothing more than open landfills, are filling up and people are pouring out of the city limits, reducing the capacity to make new landfills. In order to find new solutions to this headache, which is exacerbated in waste, many countries are switching to private sector practices, adopting technology-supported practices and returning to waste incineration techniques, which is an old method. However, there are many problems caused by waste incineration plants wherever they are (Burnley et al., 2007; Güler, 2008).

The basis of EU waste management policies is the "waste management hierarchy" and the "producer responsibility" principle. The primary priority in the hierarchy is to prevent waste at the production stage and to reduce the amount of waste and the level of danger. Recovery of wastes through reuse, recycling and energy

generation, incineration of non-recyclable wastes without harming the environment or their safe storage constitute the last step (Güler, 2008; T.C Sayıştay Başkanlığı, 2007).

1.4. Evaluation from the Perspective of the Country's Economy

Within the scope of the EU acquis, legislative work on waste management in Turkey continues rapidly. There is the Solid Waste Control Regulation (Official Gazette dated 14.03.1991 and numbered 20814), which was first published in 1991 and was revised in the following years regarding urban solid wastes. In addition, with the Regulation on the Control of Packaging Wastes, which was published for the first time on 30.07.2004 and re-published on 24 June 2007 with the amendments made, municipalities were given responsibilities regarding the evaluation of recyclable wastes and important steps were taken in this regard in Turkey.

Approximately 12-15% of solid waste in our country consists of recyclable waste (paper, glass, cardboard, plastic, and metal). The recycling of this waste reduces the amount of waste in landfills and contributes to the country's economy. In addition to recycling waste, energy saving and protection of natural resources are also provided. It also makes significant contributions to the country's economy.

In our country, an average of 1 million tons of metal, plastic, glass and paper waste is collected and recycled every year. Approximately 40-50% of this waste is recycled. However, most of the collected waste is from landfills and garbage cans on the streets under unsanitary conditions. However, since some of these wastes are mixed with organic wastes, recycling is not possible (Acar and Acar, 2022).

0.6 kg per person per day in Turkey domestic solid waste and an average of 1 kg urban solid waste is considered to be generated. According to the final census results of 2000, the population of our country is 67.8 million people and an average of 68.000 tons of urban solid waste is produced per day and around 28.4 million tons of urban solid waste is produced annually. The domestic waste composition determined as a result of the study carried out by the Turkish Statistical Institute (TUIK) in 1992 shows that the wastes in question are 65% organic, 23% ash-slag and 12% recyclable. Since these studies cannot be repeated periodically, up-to-date figures on the amount and composition of domestic recyclable solid waste cannot be given. However, it can be said that the amount of recyclable waste exceeds the level of 3 million tons/year when the solid waste analyzes carried out by the local administrations are evaluated and the data of TUIK. In Turkey, where approximately 800 thousand to 1 million tons of waste is recycled annually, most of these wastes are collected from landfills and streets in primitive and unhealthy conditions. However, some of the waste collected in this way cannot be evaluated because it is mixed with wet waste. The basic condition for creating a healthier and more efficient recycling system is the collection of recyclable waste at its source, ie separately from wet waste in residences, workplaces, schools, hotels and holiday villages. Thus, cleaner and more recyclable waste can be economically evaluated (Banar and Özkan, 2005; Özkan, 2008).

Depending on the population growth in our country, the amount of solid waste is increasing rapidly every year. Accordingly, the amount of waste coming to solid waste facilities is increasing every year. Although the collection of waste by individuals contributes to the national economy to some extent, it is much more likely to be collected by companies with waste collection permits or waste collection cooperatives. Another advantage of waste collection by waste collection companies is employment.

Turkish Statistical Institute (TUIK), as of 2017, the number of approved waste collection companies has exceeded 1,600. The number of employees in these companies has exceeded 60,000, and approximately 3 billion TL has been earned from recycling and recovery facilities. In 2023, these figures are expected to provide 100,000 jobs and 10 billion TL added value (Acar and Acar, 2022).

2. DISCUSSION AND CONCLUSION

Environmental factors and the increase in the amount of waste day by day bring about an increase in the number of landfills. The fact that only half of the total amount of waste can be disposed of in regular landfills today reveals that the regular landfills have not yet reached the sufficient number and capacity. The transition to regular waste landfills instead of uncontrolled dumping sites makes it attractive to work on regular waste landfills (Ayaz et al, 2014).

For our country, where many legal regulations and practices are on the agenda in the process of harmonization with the EU, a model that includes a holistic managerial approach to solid waste has been put forward. Because urban solid wastes cannot be managed by being collected and randomly stored. It is necessary to apply different disciplines and different techniques together at every stage from production to disposal. In this sense, a landfill-based approach will not be sufficient, as is currently being tried to be implemented in our country.

The subject is a complex management system that requires technical, environmental, economic, social and political aspects to be handled together (Özkan, 2008).

Sustainable waste management planning is a complex and interdisciplinary problem involving technical, environmental, economic, social and political factors. First of all, it should be preferred to minimize the waste generation and to recycle the generated wastes as much as possible. For this purpose, packaging wastes should be reused or put into production together with raw materials, organic wastes should be composted to obtain a soil-improving product, or waste should be incinerated to obtain energy. As a matter of fact, nowadays, it is moving from a storage-based approach to a resource reduction and recovery-based approach (Özkan, 2008).

An integrated approach to the solution of the waste problem is of great importance for sustainable development. Because when the continuity of waste generation and its impact on human health are considered, the processes for the reduction, collection, transportation, storage, disposal and evaluation of waste production are carried out regularly, continuously and healthily, taking into account the public interest, with the integrated approach of soil, water, energy, environment and administrative managements, it needs to be carried out in an appropriate way (Demiraslan and Çelik, 2014).

One of the most important stages in the establishment of landfills, which are used as the final disposal method of solid wastes, is site selection. While carrying out these studies, technical, economic, legal, many criteria should be taken into consideration. In addition, the reaction of the people living near the field is very important due to the NIMBY (not in my back yard,) syndrome, which is widely known all over the world (Özkan, 2008).

In the financing of waste management, all costs must be covered by the waste producers in accordance with the principle of “polluter pays” and tools must be created to ensure this. However, effective implementation of this principle has not been possible due to reasons such as not taking into account the cost factor in pricing waste services, insufficient infrastructure and limited inspection and monitoring activities. This situation complicates the effective implementation of basic environmental policies such as waste reduction, recycling and healthy disposal; Encouraging environmentally friendly technologies or discouraging polluting waste practices cannot be achieved sufficiently (Güler, 2008).

Although the separation of wastes at the source and bringing them into the economy as recyclable form the basis of waste management policies, source separation and recovery activities are at a very low level in our country. In fact, our current legislation imposes segregation responsibility on all production, distribution and sales units and final consumers, including households, and envisages criminal sanctions for violating acts. In fact, it has banned the acceptance of wastes other than organic wastes in landfills and made recycling compulsory in one place. On the other hand, recycling is carried out in very unhealthy conditions, mostly through the street collecting system; Production and distribution companies that have a recycling obligation also meet their reporting obligation (quotas) mostly by financing the street collecting system instead of directly undertaking this activity.

The development of a modern and effective waste management system cannot be realized only with the efforts of public institutions and organizations or industrial and commercial organizations. All segments of society have important responsibilities in this area. For this reason, especially non-governmental organizations, professional organizations, educational institutions, academic institutions, media, etc. Participatory policies should be developed to maximize the support and contributions of institutions and organizations.

Effective education programs should be carried out in schools, public and private institutions in order to increase the knowledge and awareness of the society about recycling and to transform it into permanent behaviors and values. Education begins in the family, continues in schools and is shaped in the social community. For this reason, trainings should be carried out in a multi-faceted way, including teachers, students and administrators in schools, all employees in institutions, especially parents. Information brochures on the subject should be distributed and the power of the media should be utilized. Cooperation with non-governmental organizations should be established. Clean school project, Zero Waste Projects, TUBITAK 4004 Nature Schools Projects etc. projects should be supported and encouraged.

Persons who know the job should be employed at every stage of recycling, and these people should be trained in domestic solid waste management. The number of domestic solid waste intermediate stations, temporary storage areas and recycling facilities should be increased. These facilities create an employment area with the working workers. With all awareness activities, it will be possible to build a more conscious society. While resources are regained with responsible individuals living in a more spacious and healthy environment, problems that may arise due to unhealthy management of garbage will be eliminated. With the effective

management of garbage, instead of being a source of leachate, landfill gas and disease, wastes have become an important source of economy for local governments, Turkey and the world.

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Türkiye’de Kuşkonmaz (*Asparagus officinalis*) Üretimi, Ekonomik Önemi ve Ticareti

Gamze SANER¹

Duran GÜLER²

Zekiye ŞENGÜL³

¹Ege Üniversitesi, Ziraat Fakültesi, Tarım Ekonomisi Bölümü, gamze.saner@ege.edu.tr,
ORCID: 0000-0002-2897-9543

²Ege Üniversitesi, Ziraat Fakültesi, Tarım Ekonomisi Bölümü, duran.guler@ege.edu.tr,
ORCID: 0000-0001-8555-0877

³Siirt Üniversitesi, Ziraat Fakültesi, Tarım Ekonomisi Bölümü, zekiye.sengul@siirt.edu.tr,
ORCID: 0000-0002-2496-2867

Özet: Ekonomik açıdan önemli çok yıllık bir bahçe bitkisi olan kuşkonmaz bitkisinin anayurdunun Anadolu toprakları olduğu bilinmektedir. Kuşkonmaz, içerisinde barındırdığı zengin besin öğeleri ile insan sağlığına önemli katkıda bulunmaktadır. Kuşkonmazın mor ve yeşil renkli doğal türlerinin yanı sıra özel yetiştirme yöntemleri sayesinde beyaz renkli olanı da tüketicilerin beğenisine sunulmaktadır. FAO ve TÜİK verilerine göre, dünya kuşkonmaz üretimi 2021 yılında 8,5 milyon ton dolayında iken, Türkiye'nin 2022 yılı kuşkonmaz üretiminin ise 1.342 ton olduğu belirlenmiştir. Ancak, küresel bazda üretimin 2026 yılına kadar yıllık ortalama %1,4 büyümeye ile 10,7 milyon tona ulaşacağı tahmin edilmektedir. Bu artışa rağmen, kuşkonmaz talebinin sürekli artması, global ölçekte bir üretim açığının oluşmasına neden olmaktadır. Kuşkonmaz üretimi konusunda FAO'dan elde edilen istatistiklere bakıldığında, Çin'in lider olduğu görülmektedir. Bu liderliğin ardından sırasıyla Peru, Meksika, Almanya ve İspanya gelmektedir. Dünya kuşkonmaz ticaretinde de Çin ve Peru piyasaya yön veren ülkeler olup, Peru lider ihracatçı konumundadır. Küresel kuşkonmaz pazarı, taze ve işlenmiş ürünler olmak üzere iki ana segmente ayrılmış durumdadır. Taze kuşkonmaz pazarın %35'ini oluştururken, işlenmiş ürünler %65'lik bir paya sahiptir. Türkiye’de, kuşkonmaz üretimi Antalya başta olmak üzere, Eskişehir, Manisa, Muğla, Edirne, İzmir ve Balıkesir illerinde yoğunlaşmıştır. Giderek daha çok market rafında yer bulan bu sebze, lüks restoranlarda ve otellerdeki menülerde kendine yer bulmaktadır. Türkiye'nin tarım stratejileri içerisinde yer alan sözleşmeli üretim modeli kuşkonmaz üretimi için de benimsenmeye başlamıştır. Ancak, genel tüketici kitlesi için kuşkonmaz henüz yeterince tanınmamış bir sebzedir. Bu çalışmada, kuşkonmazın üretim sürecinden, ekonomik değerine, verimliliğinden dış ticaret potansiyeline kadar geniş bir yelpazede değerlendirmeler yapılmış ve Türkiye'nin bu sektördeki konumunu nasıl güçlendirebileceğine ilişkin SWOT analizi, öneri ve stratejiler ayrıntılı olarak sunulmuştur.

Anahtar Kelimeler: Kuşkonmaz, katma değer, maliyet, dış ticaret

Asparagus (*Asparagus officinalis*) Production, Economic Importance, and Trade in Turkey

Abstract: Asparagus, which is an economically important perennial garden plant, is known to be the homeland of Anatolia. Asparagus contributes significantly to human health with its rich nutritional elements. In addition to the natural purple and green varieties of asparagus, white asparagus produced with special cultivation methods is also offered to the consumer market. Data from the FAO and TurkStat indicate that the global production of asparagus was 8.5 million tons in 2021, whereas Turkey's asparagus production in 2022 was quantified at 1,342 tons. However, it is estimated that global asparagus production will reach 10.7 million tons by 2026, with an average annual growth of 1.4%. Despite this increase, the continuous increase in asparagus demand causes a production gap on a global scale. According to statistics obtained from FAO in asparagus production, China is the leader, followed by Peru, Mexico, Germany and Spain respectively. China and Peru are the leading countries in the world asparagus trade, and Peru is described as the leading exporter. The global asparagus market is divided into two main segments: fresh and processed products. While fresh asparagus constitute 35% of the market, processed products have a share of 65%. Within the Turkey context, provinces such as Antalya, Eskişehir, Manisa, Muğla, Edirne, İzmir, and Balıkesir have emerged as hubs for asparagus production. This vegetable, which is increasingly found on market shelves, finds its place in the menus of luxury restaurants and hotels. The contract production model, which is among Turkey's agricultural strategies, has begun to be adopted in asparagus production. However, for the general consumer base, asparagus is a vegetable that is not yet well known. In this study, a wide range of evaluations were made on asparagus, from its production process to its economic value, from its productivity to its foreign trade potential, and SWOT analysis, suggestions and strategies on how Turkey can strengthen its position in this sector were presented in detail.

Keywords: Asparagus, added value, cost, foreign trade

1. GİRİŞ

Kuşkonmaz (*Asparagus officinalis* L.), önemli ekonomik değere sahip, dünya genelinde çeşitli iklim koşullarında yetiştirilebilen çok yıllık bir bahçe bitkisi olarak bilinmektedir. Adaptasyon yeteneği sayesinde geniş bir

coğrafyada üretilebilmektedir (Drost, 2023). Küresel düzeyde en önemli 20 sebze bitkisinden biri olarak kabul edilmekte ve ticari olarak hem yeşil (yeşil-mor) hem beyaz sürgünler (spear) üretilmektedir. Beyaz sürgünler, karakteristik renklerini koruyabilmesi için ışığa maruz kalmadan önce hasat edilmektedir (Pegiou vd., 2019). Kuşkonmaz, küresel ölçekte pek çok kültür ve coğrafyada besleyici özelliklerinin yanı sıra gastronomik adaptasyon yeteneğiyle öne çıkan bir sebzedir (TOB,2022). Dünyada beyaz, yeşil, mor ve pembe (Japonya’da) çeşitleri bulunmaktadır. Kuşkonmazın, yüksek oranda biyoaktif bileşik içeren sağlıklı bir gıda veya sağlığı teşvik eden bir ürün olarak potansiyel bir geleceğe sahip olduğu kabul edilmektedir (Redondo-Cuenca vd., 2023).

Şekil 1: Beyaz kuşkonmazın tohumdan hasada kadar olan süreci



Kaynak: Pegiou vd. (2019).

Kuşkonmazın anavatanının Akdeniz ülkeleri, Avrupa ve Anadolu olduğu kabul edilmektedir. Kuşkonmazın tarihi, 15. yüzyılda Fransa'daki keşişler tarafından yetiştirilmesinden, daha sonraları İngiltere ve Almanya'ya yayılmasına ve 19. yüzyılın ortalarından itibaren ABD'de popülerleşmesine kadar uzanmaktadır (Pegiou vd., 2019).

Küresel kuşkonmaz pazarı, başlıca üretici ülkeler olan Çin, Peru ve Meksika öncülüğünde büyük bir dinamizm göstermektedir. En büyük üretici olan Çin, yıllık 7 milyon tonun üzerinde bir üretim hacmi ile 2021 yılında küresel üretim hacminin yaklaşık %86,35'ini oluşturmaktadır. (FAO, 2023). Taze ve paketlenmiş kuşkonmaz pazarının küresel büyüklüğü 2022 yılında 556,41 milyon ABD doları olup, 2028 yılına kadar 731,6 milyon ABD doları büyüklüğüne ulaşması tahmin edilmektedir. Bu durum bu ürünün ekonomik değerini ortaya koymaktadır (Anonim, 2023a; Anonim, 2023b).

Türkiye'de kuşkonmaz ile ilgili dinamikler, üretim, tüketim ve ticaret faaliyetlerinin bir karışımını sergilemektedir. TÜİK verilerine göre son yıllarda Türkiye'de kuşkonmaz üretiminde belirgin bir artış gözlemlenmiştir ve 2015 yılında 68 ton olan üretim 2022 yılında 1342 tona yükselmiştir (TÜİK, 2023).

Türkiye'nin kuşkonmaz ihracatının başlıca hedefleri Almanya, Rusya ve Bulgaristan olmuş, bu ülkeler toplam ihracatın %79'luk payını oluşturmuştur (Comtrade, 2023). İhracattaki önemli büyüme, Türkiye'nin küresel kuşkonmaz pazarındaki aktif katılımını vurgulamakta olup, Avrupa ülkelerine olan yakınlığı ve iyi kurulmuş lojistik alt yapısı, bu pazarda daha etkin bir rol almasına olanak tanımaktadır. Türkiye'de 2022 yılında yaklaşık 1597 tonluk iç tüketim söz konusudur. Bu durum aynı yılda 294 ton dolayında, çoğunluğu dondurulmuş kuşkonmaz ithalatının yapılmasına neden olmuştur (TÜİK, 2023).

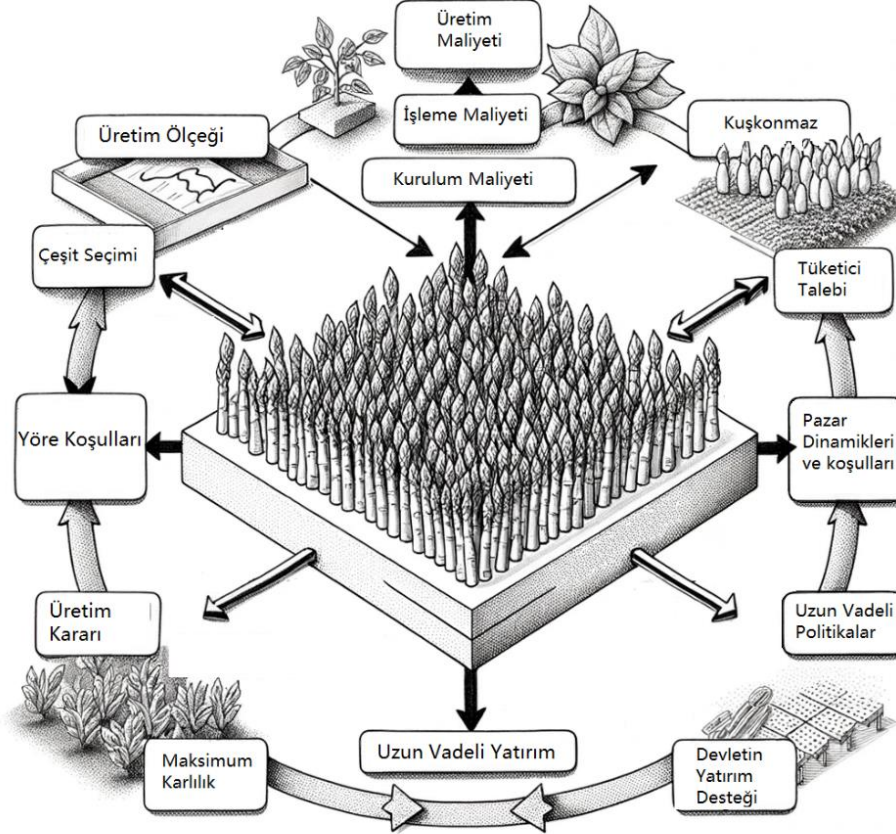
Türkiye’de kuşkonmazın tarihsel olarak tanınmamış olması, tüketim alışkanlıklarının dışında kalmasına neden olmuştur. Kuşkonmazın anavatanının Batı Anadolu olarak bilinmesine karşın, kuşkonmazın Türkiye’ye ilk getirilişinin Gazi Mustafa Kemal Atatürk’ün isteği ile olduğu ve ilk olarak üretiminin Yalova Devlet Üretim Çiftliğinde gerçekleştiği (Akan, 2014) ve 1970’li yıllarda kuşkonmaz üretiminin kültüre alındığı belirtilmektedir (Açıkgöz Altunel, 2021).

Bu nedenle, ilk adım olarak kuşkonmaz bitkisinin tanınmasını ve tüketim şeklinin yaygınlaştırılmasını sağlamak gerekmektedir. Aynı zamanda, üretim kapasitesini artırarak, hem iç pazarda hem uluslararası pazarda daha etkin bir rol oynanabilecektir. Bu nedenle çalışmada, kuşkonmazın üretim sürecinden, ekonomik değerine, verimliliğinden dış ticaret potansiyeline kadar geniş bir yelpazede değerlendirmeler yapılmış ve Türkiye'nin bu sektördeki konumunu nasıl güçlendirebileceğine ilişkin SWOT analizi, öneri ve stratejiler ayrıntılı olarak sunulmuştur. Ayrıca bazı üretici ve konu paydaşlarıyla görüşmeler gerçekleştirilmiştir.

2. KUŞKONMAZ ÜRETİMİNİN KÂRLILIK DİNAMİKLERİ

Dünyada kuşkonmaz üretiminin kârlılık dinamikleri, üretim ölçeği, pazar koşulları, üretim maliyetleri, uzun dönemli yatırımlar ile devlet desteği ve politikaları da dahil olmak üzere bir dizi faktörden etkilenmektedir (Şekil 2).

Şekil 2: Kuşkonmaz üretiminin kârlılık dinamikleri



Kaynak: Yazarlar tarafından hazırlanmıştır.

2.1. Yöre ve Çeşit Seçimi

Yöre ve çeşit seçimi, kuşkonmaz üretiminin kârlılık dinamiklerini önemli ölçüde etkileyen kritik faktörler olarak kabul edilmektedir, ancak bu seçimler verim, kalite ve pazarın kabul edilebilirliği üzerinde belirleyici rol oynamaktadır. Farklı kuşkonmaz çeşitleri (yeşil, beyaz, mor ve pembe), kârlılığı artırma potansiyeline sahip belirgin özellikler sergilemektedir. Örneğin, 'UG Millennium' çeşidi, University of Guelph tarafından geliştirilmiş ve Fox Seeds tarafından ticarileştirilmiş olup, uzun ömür ve verim sağlama kapasitesi ile bilinmektedir. Bu da kârlılık üzerinde olumlu bir etki oluşturabileceğini göstermektedir (Werling, 2015).

2.2. Üretim Ölçeği

Kuşkonmaz üretimi, farklı ölçeklerde gerçekleştirilebilmekte ve üretim ölçeği kârlılık dinamiklerini etkilemektedir. Büyük ölçekte kuşkonmaz üretimi genellikle ölçek ekonomilerinden faydalanabilmektedir. Bu durum birim başına üretim maliyetlerini düşürebilmekte ve potansiyel olarak kârlılığı yükseltmektedir. Bu, özellikle Peru ve Avustralya gibi ülkelerde, büyük ihraç miktarlarının tarihsel olarak ihraç maliyetlerini ölçek ekonomileri aracılığı ile düşürmeye yardımcı olduğu durumlar için geçerlidir (MPI, 2021). Diğer yandan, küçük ölçekte üretim yapan kuşkonmaz üreticileri, niş veya özel pazarlara odaklanarak kar elde edebilmektedir. Kuşkonmaz, küçük ölçekli ve yarı zamanlı tarım faaliyetleri için elverişli bir ürün olup, bir dekar veya daha az ekiliş alanına sahip yetiştiriciler için çeşitli pazarlar bulunabilmektedir. Arazi hazırlığı ve ekim, sürüm gibi makine ihtiyacı duyan birçok iş kiralama ile yapılmakta, bu durum küçük ölçekli üreticiler için başlangıç yatırımlarını ve işletme maliyetlerini azaltmaya katkı sağlayabilmektedir (Sánchez vd., 2021).

2.3. Pazar Koşulları ve Dinamikleri

Kuşkonmaz üretiminin kârlılık dinamikleri, çeşitli pazar koşulları ve dinamiklerden önemli ölçüde etkilenmektedir. Küresel kuşkonmaz pazarı, büyüme eğilimi göstermekte ve pazar büyüklüğünün 2023 yılında

32,44 milyar ABD dolarından 2028 yılında 39,26 milyar ABD dolarına yükselmesi, bu dönemde (2023-2028) yıllık büyüme oranının %3,89 olması beklenmektedir (Anonim, 2023a). Başka bir tahmin, kuşkonmaz pazar payında 2020'den 2025 yılına kadar 33,9 milyar ABD dolarlık bir artış ve yılda %2,53'lük bir büyüme oranının gerçekleşeceğini öngörmektedir (Technavio, 2023).

Kuşkonmaz için talep, mevsimsellik, fiyat, tüketici tercihleri ve diğer sebzelerle rekabet gibi faktörlere bağlı olarak değişebilmektedir. Özellikle sağlık bilincinin artışına bağlı tüketici talebi, bir başka kritik faktör oluşturmaktadır. Kuzey Amerika ve Avrupa'daki tüketiciler arasında artan sağlık bilinci, kuşkonmaz talebini artırmış ve bu trend, dünyanın en büyük ikinci kuşkonmaz üreticisi olan Peru'da da görülmüştür (Anonim, 2023a). Ayrıca, hükümet inisiyatifleri ve önemli pazar oyuncuları arasındaki ortaklıkların, pazar büyümesini daha da hızlandıracağı beklenmektedir. Örneğin 2020 yılında Applewood Fresh Growers LLC'nin New Era's American Asparagus ile ortaklık kurarak taze Michigan kuşkonmazı sunması, Michigan'ı ABD'de önemli bir kuşkonmaz üretim bölgesi durumuna getirmesi, açıklayıcı bir örnektir (Anonim, 2023a).

Bu faktörler kuşkonmaz üretiminin kârlılık dinamiklerini etkileyen pazar dinamiklerine katkıda bulunmaktadır. Kuşkonmaz üretim ve ticaret sektöründeki paydaşlar için bu dinamiklerle ilgilenmek; pazarı etkili bir şekilde yönlendirmek, bilinçli kararlar vermek ve kârlılığı optimize etmek için oldukça önemlidir.

2.4. Üretim Maliyetleri ve Uzun Vadeli Yatırım

Arazi, tohum, işçilik, gübre ve sulama maliyetleri gibi üretim masrafları, kârlılığı doğrudan etkileyebilmektedir. Kuşkonmaz için, uygun bakımla uzun yıllar üretim yapabilmektedir; ancak ilk tesis yatırımının önemli olduğunu belirtmek gerekmektedir. Kuruluş(tesis) maliyetleri, üretim maliyetlerinin önemli bir bölümünü oluşturmaktadır, Michigan'dan alınan verilere göre bir kuşkonmaz tarlasının kuruluş maliyeti dekar başına 1009-1415 dolar arasında değişmektedir (Werling, 2016; Bardenhagen vd., 2023).

2.5. Devlet Desteği ve Politikaları

Bazı ülkeler, kuşkonmaz üretimini teşvik etmek için devlet sübvansiyonları ve destek programları sunmaktadır. Ancak Türkiye'de düşük miktarlarda üretilen kuşkonmaz için spesifik bir devlet desteği bulunmamaktadır.

3. DÜNYADA VE TÜRKİYE'DE KUŞKONMAZ ÜRETİMİ, EKİLEN ALANI, VERİMİ VE TÜKETİMİ

Küresel kuşkonmaz üretimi 2021 yılında 8,5 milyon ton olup, 2026 yılı itibarıyla, yıllık ortalama %1,4'lük büyüme göstererek 10,7 milyon tona ulaşması öngörülmektedir. 1966 yılından günümüze değerlendirildiğinde, dünya kuşkonmaz arzında yıllık ortalama %2'lik bir artış kaydedilmiştir (Anonim, 2023e).

2021 yılı verilerine göre, Çin 7,3 milyon ton üretim kapasitesiyle kuşkonmaz üretiminde lider konumda olup, bu ülkeyi Peru, Meksika ve Almanya izlemektedir (Tablo 1). Almanya %40 ile Avrupa'nın ana üreticisi olurken, onu %21 ile İspanya ve yeşil kuşkonmazda lider, İtalya (%16) ve Fransa (%8) izlemektedir.

Tablo 1: Küresel Kuşkonmaz Üretim Miktarı ve Üretimde Önde Gelen Ülkeler (Milyon Ton)

Yıllar	Dünya	Çin	Peru	Meksika	Almanya	İspanya
2015	8,684	7,665	0,369	0,198	0,114	0,059
2016	8,267	7,203	0,378	0,217	0,120	0,060
2017	8,424	7,306	0,383	0,246	0,131	0,063
2018	8,527	7,391	0,361	0,278	0,133	0,068
2019	8,415	7,300	0,357	0,272	0,131	0,059
2020	8,458	7,333	0,369	0,301	0,118	0,065
2021	8,501	7,341	0,365	0,329	0,119	0,062
Ortalama	8,468	7,363	0,369	0,263	0,124	0,062

Kaynak: FAO (2023).

Örneğin Meksika'da kuşkonmaz üretiminin mevsimselliği oldukça belirgindir. Üretimin çoğunluğu, Ocak ve Nisan ayları arasında gerçekleşir ve bu dönem toplam yıllık üretimin %65,5'ini oluşturmaktadır. Bu süreçte Mayıs ayı en düşük üretim kapasitesine sahiptir (Producepay, 2023).

FAO verilerine göre 2021 yılında Almanya'da kuşkonmaz üretimi 0,119 milyon ton olarak gerçekleşmiştir (Tablo 1). Ülke genelinde kuşkonmaz ekiliş alanı 22280 hektardır (Tablo 2). İhracat bağlamında, 2023 yılında

Almanya'nın kuşkonmazı kg başına 4,90 ABD doları, 2024 yılında ise kg başına 5,00 ABD doları fiyat üzerinden ihraç edeceği tahmin edilmektedir; ayrıca, Almanya kuşkonmaz ithalatı da gerçekleştirmektedir (Wamucii, 2023b).

Kuşkonmazın en büyük ithalatçısı 92.405 ton ile ABD'dir. Avrupa Birliği 18.565 ton ve Japonya 17.148 ton ile ithalatçılar arasında yer almaktadır (Anonim, 2023f). ABD'de 2020 yılında yaklaşık 7700 ha alanda kuşkonmaz hasat edilmiştir. Orta ve Güney Amerika'dan artan ithalat nedeniyle ABD'nin ekilen alanı 15 yıl öncekinin yalnızca üçte birine gerilemiştir (Agmrc, 2023). ABD ticari kuşkonmaz üretiminin tamamı Michigan, Kaliforniya, Washington ve New Jersey'de gerçekleşmektedir. 2020'de ulusal ortalama verim 4,34-4,39 ton/ha olup, 2022 yılında ise 4,53 ton/ha olmuştur (USDA, 2023a). 2022 yılı ABD ticari kuşkonmaz mahsulünün üretim değeri yaklaşık 65,2 milyon dolar olarak belirlenmiştir (USDA, 2023a).

Tablo 2: Küresel Kuşkonmaz Ekiliş Alanı (ha)

Yıllar	Dünya	Çin	Meksika	Peru	Almanya	İspanya
2015	1528611	1390592	22232	33870	20594	11251
2016	1562440	1418275	24791	31967	22274	12589
2017	1546218	1396626	26139	32365	23190	13755
2018	1559921	1406337	30792	31005	23410	14690
2019	1573834	1421445	30842	31700	22980	13370
2020	1583012	1430989	31940	33241	22410	14220
2021	1594380	1440425	34889	31285	22280	13520
Ortalama	1564059	1414956	28804	32205	22448	13342

Kaynak: FAO (2023).

Küresel kuşkonmaz verimi ise Tablo 3'te verilmiştir. Dünyada kuşkonmaz verimi hektara 5,4 tondur. Yetiştiricilerin ve fizyologların ortak çabaları sayesinde açıklanan değişiklikler kuşkonmaz verimliliğini artırabilir, bitkiyi makineleşmeye uyarlayabilir ve sistemi sürdürülebilir ve kârlı kılmak için gereken üretkenlik ve kalite düzeyini iyileştirebilir (Drost, 2023).

Tablo 3: Küresel Kuşkonmaz Verimi (ton/ha)

Yıllar	Dünya	Çin	Meksika	Peru	Almanya	İspanya
2015	5,681	5,512	8,909	10,896	5,517	5,224
2016	5,291	5,078	8,748	11,834	5,388	4,756
2017	5,448	5,231	9,399	11,837	5,644	4,612
2018	5,466	5,256	9,018	11,631	5,682	4,656
2019	5,347	5,136	8,826	11,255	5,681	4,384
2020	5,343	5,124	9,411	11,112	5,246	4,577
2021	5,332	5,097	9,430	11,671	5,353	4,598
Ortalama	5,416	5,205	9,106	11,455	5,504	4,672

Kaynak: FAO (2023).

Kuşkonmaz, dünya genelinde tüketimi hızla artan bir sebze olarak bilinmektedir. Kültürel tercihler, bulunabilirlik ve ekonomik koşullar gibi faktörlerle şekillenen bu tüketim trendi, ülkelere göre değişiklik göstermektedir. Kuşkonmaz, salatalardan wok yemeklerine, fırında ve ızgarada hazırlanan yemeklerde geniş bir kullanım alanına sahiptir. Bu çeşitlilik, küresel talebin artmasına da katkıda bulunmaktadır.

Önemli bir kuşkonmaz üreticisi ve tüketicisi olan Çin'de, beslenme alışkanlıklarının değişmesi ve orta sınıfın gelirlerinin artmasıyla kuşkonmaz tüketimi artmıştır. Çin'in Yangtze Nehri Deltası taze yeşil kuşkonmaz için en büyük iç tüketim bölgesi olarak tanımlanmaktadır. Şanghay, zirve sezonunda günlük taze kuşkonmaz tüketiminde kişi başına en yüksek tüketimi göstermektedir. Çin'in beyaz kuşkonmazının yaklaşık %90'ı, Çinli tüketicilerin konserve yiyeceklerini sağlıklı olarak görmesi nedeniyle, ihracata yönelik olarak işlenmektedir (Bean, 2010).

ABD, global ölçekte önemli kuşkonmaz tüketicilerinden biri olarak dikkat çekmektedir. Bölgede kişi başı kuşkonmaz tüketimi, yıllık ortalama olarak 0,45-0,90 kg arasında değişiklik göstermektedir. Tüketim trendleri incelendiğinde, 2018 yılında kişi başı 0,80 kg olan kuşkonmaz tüketiminin, 2020 yılında 0,83kg yükseldiği gözlemlenmiştir. Ayrıca, 2021 yılında da Amerika'da kişi başı yıllık ortalama olarak 2 pound (0,90 kg) kuşkonmaz tüketildiği belirtilmiştir (Thepacker, 2023; Shahbandeh, 2023). Amerikalılar her yıl 500 milyon poundun üzerinde kuşkonmaz tüketmekte olup, bunun %80-90'ı başta Meksika ve Peru'dan olmak üzere ithal edilmektedir (USDA, 2022).

Almanya, Fransa ve Hollanda gibi Avrupa ülkeleri, mevsimsel yemeklerine sıkça kuşkonmaz eklemektedir. Alman Federal Tarım ve Gıda Ofisi'ne (BLE) göre bu ülkede kişi başına düşen tüketim 1,7 kg'a ulaşmaktadır. Fransa'da ise 1,1 kg dolayındadır. (Fruittoday, 2023). Yılda 25800 ton üretim yapan Fransa'da ise kuşkonmaz alımlarının %58'i süpermarketlerden (HM, SM, EDMP ve GSF taze süpermarketler), % 23'ü yerel pazarlardan, %10'u manavlardan, % 8'i ise doğrudan satış yoluyla yapılmaktadır (Anonim, 2023g).

Kuşkonmaz Japonya'nın da en popüler sebzelerinden biri durumundadır. Yeşil, beyaz, mor ve pembe renkleriyle ülkenin çeşitli bölgelerinde yaygın olarak yetiştirilmekte ve tüketilmektedir (Anonim,2023g). Japonya'da taze kuşkonmaz tüketimi oldukça stabil seyretmektedir. Japonya'da kuşkonmaz, kişi başına yıllık 1-3 kg tüketilmekte olup, tempura ve wok yemeklerinde popüler bir malzeme olarak kullanılmaktadır. Talep, kuşkonmazın hazırlanmasının kolay olması ve sağlığa faydaları nedeniyle yüksek düzeydedir. Brokoli ve diğer yeşil sebzeler gibi, Japonlar kuşkonmazın yüksek amino asit içeriği sayesinde mükemmel bir protein kaynağı olduğuna ve enerji sağladığına inanmaktadırlar. Bu nedenlerle, yeşil kuşkonmaz, beyaz çeşidine göre daha fazla tercih edilmektedir. Taze kuşkonmaz yıl boyunca ulaşılabilir durumda olup, tüketimi yerel üretim sezonu ile örtüşen bahar ve erken yaz aylarında yoğunlaşmaktadır (Latner and Embassy, 2003).

Türkiye'de ise 2021 yılında 1562 dekar arazide, 1342 ton kuşkonmaz üretilmiştir. 2015-2022 dönemi ortalamasına göre dekara verim 540 kg dolayındadır. Türkiye'de yeşil kuşkonmaz üretiminin olduğu bilinmektedir (Tablo 4). Türkiye'de, kuşkonmaz üretiminin Antalya başta olmak üzere Eskişehir, Manisa, Muğla, Edirne, İzmir ve Balıkesir illerinde yoğunlaştığı dikkati çekmektedir. Özel sektör firmalarının ve üreticilerin bu ürüne ilgisi artmaya başlamıştır. Nitekim özel bir firma Antalya'da 48 üretici ile sözleşmeli kuşkonmaz üretimi gerçekleştirmektedir.

Tablo 4: Türkiye'de Kuşkonmaz Üretimi

Yıllar	Ekilen Alan (dekar)	Üretim Miktarı (ton)	Verim (ton/dekar)
2015	193,00	68,00	0,35
2016	416,00	145,00	0,35
2017	518,00	178,00	0,34
2018	488,00	169,00	0,35
2019	499,00	174,00	0,35
2020	1229,00	1079,00	0,88
2021	1391,00	1156,00	0,83
2022	1562,00	1342,00	0,86
Ortalama	787,00	538,88	0,54

Kaynak: TÜİK (2023).

Türkiye'de kuşkonmaz tüketimi; üretim, ihracat ve ithalat miktarı dikkate alınarak hesaplanmıştır (Tablo 5). Türkiye'de kuşkonmaz tüketimi, son yıllarda dikkate değer bir artış göstermekte olup, her yıl en az % 30 oranında bir artış kaydedilmektedir. Bu artan talebi karşılamak adına kuşkonmaz üretici ve satıcıları, Taze Direkt gibi dijital platformlarda aktif varlık gösterirken Migros-Macrocenter, Carrefoursa ve Groseri gibi ulusal ve yerel perakende zincirleriyle de işbirliği içerisinde oldukları görülmektedir. Gastronomi sektöründe, ünlü şefler ve restoranlarla, özellikle Dream ve Doğu Grubu'na ait otel ve restoranlarla, ayrıca BigChefs gibi restoran zincirleriyle olan iş birliklerini sürekli olarak genişletmektedirler. Kuşkonmazın tüketimi sadece taze formda sınırlı kalmayıp, aynı zamanda dondurulmuş ürünlerle de karşılanmaktadır. Ayrıca, ürün yetiştiricileri yenilikçi üretim yöntemlerini benimseyerek, ilkbahar dönemi dışında da kuşkonmaz hasat programını uygulamayı hedeflemektedirler (Anonim, 2023d).

Tablo 5: Türkiye'de Kuşkonmaz İthalatı, İhracatı ve Tüketimi (ton/ha)

Yıllar	İthalat		İhracat		Üretim (ton)	Tüketim (ton)
	Tutar (dolar)	Miktar (ton)	Tutar (dolar)	Miktar (ton)		
2013	659376	171,04	8869	0,87	68	238,17
2014	939821	192,96	25597	1,69	68	259,27
2015	763347	205,24	57755	3,84	68	269,40
2016	509702	160,62	68159	9,60	145	296,03
2017	572762	212,52	36035	8,44	178	382,08
2018	567439	189,31	141695	33,03	169	325,28
2019	518406	203,75	66235	11,86	174	365,89
2020	436707	186,15	56318	19,76	1079	1245,40
2021	469794	189,07	72357	19,14	1156	1325,93

2022	950428	294,38	194387	39,08	1342	1597,30
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Kaynak: TÜİK (2023).

Ayrıca çalışmada kuşkonmaz için kendine yeterlilik endeksleri ortaya konulmuştur. Kendine yeterlilik oranı (KYO) ve ithalata bağımlılık endeksleri (İBE) ülkelere ilişkin kendine yeterlilik seviyesini değerlendirmek için kullanılmaktadır. Bu endeksler bir ülkedeki toplam arzın ne oranda kendi üretiminden ya da ithalattan karşılandığını ölçmektedir. Ayrıca üretimin oransal olarak ne kadarının ihraç edildiğini belirlemek için ihraç edilebilirlik endeksi (İEE) kullanılmaktadır. Kuşkonmaz için KYO, İBE ve İEE değerleri hesaplanmış olup, ilgili değerler Tablo 6'da verilmiştir. Buna göre 2022 yılında Türkiye'nin kuşkonmazda kendine yeterlilik oranı %84,03, ithalata bağımlılık endeksi %18,41 ve ihraç edilebilirlik endeksi %2,44'tür.

Tablo 6: Türkiye'nin Kuşkonmazda Kendine Yeterlilik Endeksleri (2022 yılı)

Parametreler	Formüller	Miktarlar (ton)
Üretim		1342
İthalat		294
İhracat		39
Tüketim	$Tüketim = Üretim + İthalat - İhracat$	1597
Kendine Yeterlilik Oranı (KYO)	$KYO = Üretim / Tüketim$	84,03%
İthalata Bağımlılık Endeksi (İBE)	$İBE = İthalat / Tüketim$	18,41%
İhraç Edilebilirlik Endeksi (İEE)	$İEE = İhracat / Tüketim$	2,44%

Kaynak: TÜİK (2023) verilerinden yararlanılarak hazırlanmıştır.

4. KUŞKONMAZ MALİYETİ, SATIŞ FİYATLARI VE PAZARLAMA ŞEKİLLERİ

4.1. Dünya Kuşkonmaz Maliyeti, Fiyatı ve Piyasa Değerleri

Dünya genelinde farklı ülkelerde gerçekleştirilen çalışmalar, kuşkonmaz üretim maliyetlerinde malzeme ve işçilik masraflarının en büyük paya sahip olduğunu göstermektedir. Slovakya'da yapılan bir araştırmada, yeşil kuşkonmaz üretiminin toplam maliyeti 6540 €.ha⁻¹ olarak belirlenmiştir; buna karşın, beyaz kuşkonmazın maliyeti 13720 €.ha⁻¹ seviyesindedir. Klasik yöntemlerle yetiştirilen kuşkonmaz ve beyaz kuşkonmazın şeffaf filmde oluşturulan tünelli sırtlardaki maliyeti ise yaklaşık 16030 €.ha⁻¹'dir. Ticari olarak üretilen kuşkonmaz çeşitleri arasında, erkek melez türler olan Jersey Giant ve UC157 öne çıkmaktadır. Bu türler, yüksek verim potansiyeline ve hastalıklara karşı dayanıklılığa sahip olup, hasat dönemleri genellikle nisan-haziran ayları arasında gerçekleşmektedir (Anonim, 2023c).

Kuşkonmaz çok yıllık bir ürün olmasına ve her yıl yeniden ekim gerektirmemesine rağmen, ABD'de tahmini ekim maliyeti 375 dolar/dekar belirlenmiştir. İşçilik maliyetleri, toplam maliyetin önemli bir bölümünü oluşturmakta olup, bu süreçte yaklaşık 20-30 saat işçilik gerekmektedir. En son üretim ve fiyat ortalamalarına göre, toptan ve perakende pazarlar için dekar başına tahmini brüt değer sırasıyla yaklaşık 1050-1500 ABD doları arasında değişmekte olup, 2020'de ABD sezonunda kuşkonmazın ortalama çiftlik fiyatı kg başına 1,29 dolar olmuştur (Agmrc, 2023). 2022'de kg başına taze satış fiyatı 1,62 dolar/kg olarak gerçekleşmiştir (USDA, 2023a).

Kanada'nın kuşkonmaz yetiştiriciliği alanında önemli bir konumda olduğunu söylemek mümkündür. Kuşkonmazın yetiştirilmesi gerek maliyetli gerekse emek yoğun bir süreçtir; ancak bu bitki, yatırımın karşılığını fazlasıyla vermektedir. Ontario kuşkonmaz üreticileri temsilcisi, kuşkonmaz yetiştiriciliği ile çiftçilerin tam zamanlı geçimlerini sağlayabileceklerini vurgulamaktadır. Aynı görüş, Kanada'nın tek salamura kuşkonmaz işleyicisi olan Sunshine Asparagus Farms tarafından da desteklenmektedir. Kuşkonmaz yetiştiriciliği için en az 20 dekar arazi gerekmektedir ve bu arazide tam zamanlı geçim sağlamak mümkündür. Çalışma kapsamında görüşülen üreticilerden elde edilen veriler de bu görüşü desteklemektedir. Ancak bu işe başlamak için önemli bir yatırım yapmak gerekmektedir. Tohumun dekar başına masrafı 250 dolar olup, ilk mahsulü almak için ortalama 3-4 yıl beklemek gerekmektedir. Bu bekleme süreci, 15 yıldan daha uzun bir süre boyunca verimli bir şekilde ürün sağlayabilmektedir. Bu alanda yetiştirilen "Millennium" adlı kuşkonmaz çeşidi, kısa bir süre içerisinde yüksek verimlilik göstermektedir. İki ay içinde dekar başına ortalama 792 kg ürün elde edilirken, bu miktar bazı durumlarda 1019 kg/da'a kadar çıkabilmektedir. Bu, dekar başına 3375 dolara kadar bir gelir anlamına gelmektedir. Bir işletmenin 20 dekar olduğu varsayıldığında elde edilen gelir 67500 dolar olacaktır (Farmersforum, 2023). Slovakya'da yapılan bir çalışmada yeşil kuşkonmazın beyaz renkli olana göre daha kârlı olduğu belirlenmiştir (Burg vd., 2014).

Kuşkonmaz yetiştiricisi için çeşitli pazarlama alternatifleri bulunmaktadır. Bunlar toptan pazarlama, ürün açık artırmaları, kooperatifler, yerel perakendeciler, yol kenarındaki standlar ve kendin seç operasyonlarıdır (pick your-own). ABD’de hasat edilen kuşkonmaz ağırlıklı olarak taze olarak satılmaktadır. Geleneksel olarak, lastik bantla tutturulan 1,5-2,5 kiloluk demetlerle paketlenmiş şekilde satılmaktadır (Agmrc, 2023). Kuşkonmaz fiyatı lokasyona, mevsime ve satıcıya göre değişiklik gösterebilmektedir.

Farklı kaynaklardan kuşkonmaz fiyatlarına bazı örnekler verilecek olursa; ABD kuşkonmaz pazarında, Meksika ve Peru en büyük tedarikçi ülkeler arasında yer almaktadır. Ağustos 2022’de, nakliye noktasında 11 kg’lık bir Meksika kuşkonmaz paketinin fiyatı 32,45 dolar iken, Peru’dan gelen benzer bir paketin fiyatı 29,30 dolar olarak belirlenmiştir. Bu iki ülkenin Amerika’daki kuşkonmaz pazarında sahip olduğu büyük pay, aralarındaki fiyat rekabetini de gözler önüne sermektedir (Producepay, 2023).

2023 yılı itibarıyla ABD kuşkonmazının yaklaşık toptan satış fiyatı aralığının kilogram başına 2,8-4,2 dolar arasında olduğu belirlenmiştir (Wamucii, 2023a). Başka bir kaynağa göre taze kuşkonmazın kg satış fiyatı 2022 yılında 2,73-2,79 dolar, işlemeye gönderilecek olan kuşkonmazın fiyatı ise 1,62 dolar/kg’dır (USDA, 2023a).

6 Ekim 2023 tarihli USDA Market News raporuna göre, Los Angeles’taki kuşkonmazın fiyatı kalite ve büyüklüğe bağlı olarak 5 kg’lık paket başına 26 dolar ile 32 dolar arasında değişmektedir (USDA, 2023).

Walmart’ta ise kuşkonmaz, salkım başına 3,47 dolara satılmaktadır (Walmart, 2023). Ancak, HowMuchIsIt.org’a göre, taze kuşkonmazın fiyatı mevsime bağlı olarak pound (0,45 kg) başına 1-4 dolar arasında değişmektedir (Howmuchisi, 2023). Bu bilgiler, kuşkonmazın ABD pazarındaki fiyat dinamiklerini ve bu fiyatların nasıl değişkenlik gösterdiğini belirtmektedir.

Meksika’da ise 2021 yılındaki pound başına 3 dolar olan kuşkonmaz ortalama fiyatı, 2022 yılında pound başına 3,12 dolar olmuştur (Producepay, 2023).

Kanada’da kuşkonmazın toptan satış fiyatı 1,50 dolar olup, mağazalarda bu fiyat pound başına 2,25-2,75 dolar arasında değişmektedir. Özellikle Batı Kanada’da, Sezar içeceği yapılırken kereviz sapının yerine kuşkonmaz turşusu kullanılmaktadır. Bu durum kuşkonmazın popülerliğini artırmaktadır. Ancak 2023 yılında talebin artmasına rağmen arzın düşük olması nedeniyle piyasa fiyatlarında bir yükselme gözlemlenmiştir (Farmersforum, 2023). Fransa’dan örnek verilecek olursa, ortalama perakende satış fiyatının kg başına 5-7 Euro arasında değiştiği belirtilmektedir (Anonim2023g).

4.2. Türkiye’de Kuşkonmaz Maliyet Analizi

Araştırmada kuşkonmaz üretiminin ekonomik analizi amacıyla verim, üretici eline geçen fiyat, brüt üretim değeri, değişken masraflar, toplam üretim masrafları, net kâr, brüt kâr, brüt kâr marjı ve birim maliyet ortaya konulmuştur. Kuşkonmaz yaklaşık 15 yıllık bir bitkidir. İşçilik maliyeti yüksek olduğu için hasat genelde 3.yıl başlar ve 12 yıl boyunca ürün vermektedir. Kuşkonmaz üretim masrafları değişken ve sabit masraflardan oluşmaktadır. Değişken masraf unsurlarını gübreleme, ilaçlama, işçilik, akaryakıt, hasat ve diğer masraflar; sabit masraf unsurlarını ise arazi kirası karşılığı, tesis masrafları amortisman payı, masraflar toplamının faizi ve genel yönetim masrafları oluşturmaktadır. Üretimde sabit masraflardan biri olan arazi kirası karşılığı olarak çok yıllık plantasyonlarda çıplak arazi değerinin %5’i dikkate alınmaktadır (Anonim, 2001). Değişken masraflar toplamının %3’ü ise genel yönetim masrafları olarak hesaplanmaktadır. Masraflar toplamının faiz karşılığının hesaplanmasında, T.C. Ziraat Bankası tarafından bitkisel üretim için verilen kredilere uygulanan faiz oranı (%9,5) üzerinden döner sermaye faizi hesaplanmıştır. Döner sermaye faizinin hesaplanmasında, değişken masrafların üretim dönemine oldukça homojen bir şekilde yayıldığı varsayımından hareket edilerek yarı değeri üzerinden faiz uygulanmıştır (Kiral vd., 1999).

Tesis masrafları amortisman payı ise tesis masrafları toplamından oluşan tesis maliyetinin, kuşkonmazın ekonomik ömrüne bölünmesiyle hesaplanmıştır. Kuşkonmaz üretim maliyetinin hesaplanmasında tek ürün bütçe analiz yöntemi kullanılarak işletme maliyeti belirlenmiştir. İşletmelerde yapılan üretim masraflarının toplamının, elde edilen ürün miktarına bölünmesi yoluyla basit olarak ürün maliyetinin hesaplanması gerçekleştirilmiştir (Erkuş vd., 1995). Ayrıca kuşkonmazdan elde edilen net kârı hesaplayabilmek için brüt üretim değerinden toplam üretim masrafları çıkarılmıştır. Araştırmaya ilişkin yapılan hesaplamalar aşağıdaki formüllerde gösterilmiştir:

Toplam üretim masrafları = Değişken masraflar + Sabit masraflar

Brüt üretim değeri = Ürün miktarı * Ürün fiyatı

Net kâr = Brüt üretim değeri – Toplam üretim masrafları

Brüt Kâr = Brüt üretim değeri – Değişken masraflar toplamı
Brüt kâr marjı = Brüt kâr / Brüt üretim değeri
Birim ürün maliyeti = Toplam üretim masrafları toplamı / Ürün miktarı

Elde edilen sonuçlara göre 2023 yılında işletmelerde toplam üretim masrafı 24.484 TL/dekar olup, değişken masraflar toplamının üretim masrafındaki payı %52,54'dür. Kuşkonmaz üretiminde işçilik masrafı değişken masraflar içinde en fazla paya (%31,49) sahiptir. İşçilikten sonra değişken masraflar içinde en fazla paya sahip olan unsurlar sırasıyla gübreleme (%28,38) ve hasat (%19,44) ve ilaçlamadır (%8,26). Sabit masraflar içinde ise arazi kirası karşılığının payı (%64,54) en yüksektir (Tablo 7).

Tablo 7: Kuşkonmaz Üretim Masrafları

Masraf Unsurları	Masraf Tutarı (TL/dekar)	%
Gübreleme	3650	28,38
İlaçlama	1063	8,26
İşçilik	4050	31,49
Akaryakıt	200	1,55
Hasat	2500	19,44
Diğer	1400	10,88
Toplam Değişken Masraflar	12863	100
Arazi kirası karşılığı	7500	64,54
Tesis masrafları amortisman payı	3124	26,88
Masraflar toplamının faizi	611	5,26
Genel yönetim masrafları	386	3,32
Toplam Sabit Masraflar	11621	100
Toplam Üretim Masrafları	24484	-

Sahadan elde edilen verilere göre yeşil kuşkonmaz verimi yaklaşık 750 kg/dekar, üretici eline geçen fiyat ise ortalama 120 TL/kg'dır. Buna göre dekara brüt üretim değeri 90.000 TL olarak hesaplanmıştır. Ayrıca toplam üretim masrafının verime bölünmesiyle hesaplanan kuşkonmaz birim maliyeti 32,65 TL/kg'dır. Elde edilen sonuçlara göre kuşkonmaz üretiminde net kâr 65.516 TL/dekar iken, brüt kâr 77.137 TL olarak hesaplanmıştır. Kuşkonmaz brüt kâr marjı ise 0,86'dır (Tablo 8).

Tablo 8: Kuşkonmaz (yeşil) ekonomik analizine ilişkin değişkenler

Değişkenler	TL/dekar
Toplam Değişken Masraflar (1)	12863
Toplam Sabit Masraflar (2)	11621
Toplam Üretim Masrafları (1+2)	24484
Brüt Üretim Değeri (3)	90000
Net Kâr (3)-(1+2)	65516
Brüt Kâr (3)-(1)	77137
Brüt Kâr Marjı (3-1)/(3)	0,86

5. SWOT ANALİZİ

Literatürden elde edilen ikincil veriler ve sağlıklı veri sağlanan bazı üreticilerle yapılan görüşmeler doğrultusunda kuşkonmaz üretimine yönelik SWOT analizi yapılmıştır. Buna göre güçlü ve zayıf yönler, fırsatlar ve tehditler ortaya konulmuştur.

Kuşkonmazın gastronomik değerinin yüksek olması ve ihracat olanağının bulunması önde gelen güçlü yönlerdendir. Ancak üretim maliyetinin yüksek olması, işleme tesislerinin yetersizliği ve zirai mücadeleye yönelik sorunlar kuşkonmaz ihracatının kısıtlanmasında en önemli faktörler olup, bu unsurlar sektörün zayıf yönlerinden bazılarını oluşturmaktadır. Oysa hem yurt içinde hem yurt dışında kuşkonmaz tüketimine yönelik ilginin artması bu zayıf yönlerin giderilmesi durumunda kuşkonmazın Türkiye'ye önemli düzeyde döviz geliri sağlayabileceğini göstermektedir. Nitekim gelişen lojistik ağı ve pazara olan yakınlık bu gelirin sağlanması açısından önemli fırsatlardır. Ancak piyasaya ve ekonomiye ilişkin belirsizlikler, dövizdeki dalgalanmalar ve kırsaldan kente göçün artmasıyla birlikte tarımda çalışan nüfustaki azalma diğer tarımsal faaliyetlerde olduğu gibi kuşkonmaz üretimini de tehdit eden unsurlardır (Tablo 9).

Tablo 9: Kuşkonmaz Üretimine Yönelik SWOT Analizi

Güçlü Yönler	Zayıf Yönler
<ul style="list-style-type: none">- Gastronomik değeri çok yüksek bir ürün olması- Katma değeri yüksek bir ürün olması- Özel sektörün kuşkonmaz üretimine ilgisi- Yeterli işgücü- İhracat olanakları- Ulusal ve uluslararası fuarlara katılım- Deniz ulaşımının sağladığı avantaj- Hastalıklara karşı dayanıklı fide bulma kolaylığı- Türkiye’deki iklim özellikleri gereği 6 ay kesintisiz ürün yetiştirebilme olanağı- Mekanizasyonun yıllar itibarıyla artması	<ul style="list-style-type: none">- Gümrük ve sınırlarda uzun bürokratik süreçler- Yeterli düzeyde pazar araştırması yapılmaması- Tanıtım ve reklam yetersizliği- Standart eksikliği- İşleme tesislerinin çok az sayıda olması- Ürünün raf ömrünün kısa olması- İhracat teşviklerinin yetersiz olması- Pesitist kullanımının yüksekliği- Etkin bir zirai mücadele yapılamaması- Karşılaşılan hastalık ve zararlılar- Kuşkonmaz üretiminin uzun vadeli ve yüksek maliyetli bir süreci olması- Kredi finansman yetersizlikleri- Fide veya diğer masraf unsurlarının ithalat nedeniyle döviz bazlı olması- Organik kuşkonmaz üretiminin yüksek maliyetli olması
Fırsatlar	Tehditler
<ul style="list-style-type: none">- Yurt dışında kuşkonmaz talebinin olması ve yurt içinde tüketici ilgisinin yıllar itibarıyla artması- Beyaz, mor ve yeşil kuşkonmaza ilişkin tüketici tercihlerindeki artış- Taşımacılığa uygun lojistik ağı- Yurt içi büyük marketlerde kuşkonmaz ürününün raflarda yer alması- Sözleşmeli üretim modelinin yerleştirilmesi- Emek yoğun bir ürün olduğundan, Avrupa’daki işçilik maliyetlerinin yüksekliğine karşın Türkiye’nin avantajlı olması- Türkiye’nin en büyük pazarından biri olan Avrupa kıtasına lojistik yakınlığı	<ul style="list-style-type: none">- Ülkedeki ekonomik belirsizlikler- Tarımda çalışan nüfusta azalma- Yüksek gümrük vergileri- Dövizdeki dalgalanmalar

6. SONUÇ VE ÖNERİLER

Kuşkonmaz salata, kızartma ve çorba gibi çeşitli yemeklerde kullanılabilen çok yönlü bir sebze olup, uluslararası mutfaklarda yaygın bir şekilde yer almasının arkasında, yüksek besin değerleriyle birlikte farklı yemek kültürlerine kolay entegrasyon kapasitesi bulunmaktadır.

Farklı ülkelerde ortaya çıkan tüketim alışkanlıklarının bu sebzenin evrensel bir kabul görmesine katkıda bulunduğunu söylemek mümkündür. Dünyada birçok şirketin hâlihazırda kuşkonmazlı çorba yapması nedeniyle kuşkonmazın çorba üretim endüstrisinde birincil tercih olacağı da yaygın olarak tahmin edilmektedir.

Kuşkonmaz yetiştiriciliğine ve pazarlamasına giriş yapmayı amaçlayan potansiyel yatırımcılar için, hem lokal hem uluslararası pazar koşullarını derinlemesine incelemek, sürdürülebilir ve kârlı bir iş modeli geliştirmek açısından son derece kritiktir. Bu durum, potansiyel yatırımın geri dönüşü ve risk faktörlerini değerlendirmek için kapsamlı bir fizibilite çalışmasının yanı sıra detaylı bir pazar analizi gerektirmektedir.

Uygun bir bölgede, bilinçli bir stratejiyle ve etkili bir yönetimle yürütülen kuşkonmaz üretimi, önemli kâr marjlarına ulaşma potansiyeline sahiptir. Ancak bu başarının anahtarı, bölgesel ekolojik koşullara dikkatli bir şekilde adapte olan ayrıntılı bir iş planlamasıdır. Stratejik lojistik planlama, üretim maliyetlerini minimize ederken, gelirleri optimize edebilir. Bu bağlamda, ayrıntılı finansal projeksiyonlar, risk analizleri ve derinlemesine pazar araştırmaları beklenen kârlılık oranlarını daha doğru bir şekilde tahmin etmek adına vazgeçilmezdir.

Uluslararası arenada kuşkonmaz ihracatı hedefleniyorsa hedef pazarların dinamiklerini anlamak, erişim kolaylığını değerlendirmek ve potansiyel büyüme fırsatlarına odaklanmak esastır. Bu durum, kuşkonmaz

yetiştiriciliğinin gerek yerel gerekse küresel ölçekte, geniş bir vizyonla stratejik bir şekilde ele alınması gerektiğine işaret etmektedir.

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ABSTRACTS

Government Platforms as an Opportunity for Equal Information and Service

Prof. Assoc. Dr. Albana Demi (Mosho)¹

Phd. Cand. Arjana Kadiu²

Msc. Amina Nuriu³

Msc. Marlind Nuriu⁴

¹Professor, Public Administration Department, “Aleksandër Moisiu”, University of Durrës, Albania, Email: albanamosho@uamd.edu.al, ORCID: 0000-0003-2205-5443

²Lecturer, Public Administration Department, “Aleksandër Moisiu”, University of Durrës, Albania, Email: arjanakadiu@uamd.edu.al, ORCID: 0000-0002-7147-6204

³“Klo-nu” Tirana, Albania, e-mail: aminanuriu5@gmail.com

⁴“Klo-nu” Tirana, Albania, e-mail: mailindnuriu@icloud.com

Abstract: The public sector enables the provision of government services, which are provided in different ways. In order to make information available and accessible, an approach to improving the ability of the public sector oriented towards the provision of electronic services, to act in all social, economic and scientific fields, is observed. The modernizing impact of this process for both citizens, businesses, and public institutions, providing a digital platform, brings equal opportunities in accessing information in real time.

In this research paper, the authors intend to bring attention to the relationship that exists between transparent government policies and the implementation of information technology in public administration. The e-albania portal is now up and running in Albania, which focuses on the online provision of public services.

The methodology used in this paper includes statistical materials and information provided by the distribution of the questionnaire on the impact of the e-albania portal on the citizens and the country's economy. The data have been processed by the authors and will be made available to policy makers to follow their progress and impact on the Albanian economy.

Keywords: public administration, digital platform, e-government, citizen, business, economy.

Sustainable Growth Analysis of Kosovo's Manufacturing Companies: An Investigation Using the PRAT Model

Albina Kalimashi¹

Ardi Ahmeti²

Yllka Ahmeti³

¹Ph.D. candidate, Department of Bank and Finance, Economic Faculty, University of Prishtina "Hasan Prishtina", Kosovo, Email:albina.kalimashi@uni-pr.edu

²Ph.D. candidate, Department of Bank and Finance, Economic Faculty, University of Prishtina "Hasan Prishtina", Kosovo, Email:ardisahmeti@gmail.com

³Ph.D. candidate, Department of Bank and Finance, Economic Faculty, University of Tetovo, North Macedonia, Email:ahmeti.yllka@gmail.com

Abstract: The study's goal was to look at how the PRAT model affected the rate of sustainable growth in a Kosovo manufacturing firm from 2011 to 2021. To assess sustainable growth, the PRAT model was employed, which comprises profit margin (P), retention rate (R), asset turnover (A), and leverage (T). To analyze the association between the variables under study, multiple regression analyses were performed using three alternative models: The Ordinary Least Square Model (OLSM), the Fixed Effect Model (FEM), and the Random Effect Model (REM). When evaluating and determining the validity of statistical measurement models, the fixed effect model was found to be valid for measuring the relationship between the variables in the PRAT model. The findings revealed that all elements in the PRAT model, including retained earnings, asset turnover, and financial leverage, had a substantial impact on the sustainable growth rate in Kosovo manufacturing enterprises throughout the defined time period. The findings highlight the significance of several components within these models and provide important insights for policymakers and industrial businesses operating in Kosovo.

Keywords: PRAT, Manufacturing Companies, Sustainable Growth Rate, Kosovo

Jel Clasification: F43; N60; O47

Mass Labour Migration In The Republic Of Moldova: Causes and Prospects

Anastasia Romanova , PhD¹

Rodica Svetlichnaia, PhD²

¹Academy of Economic Studies of Moldova, Chisinau, the Republic of Moldova,

²State University of Moldova, Chisinau, the Republic of Moldova

Abstract: The aim of this report is to assess the extent and characteristics of migration in Moldova and its impact on the socio-economic situation in the country.

The authors give general overview of demographic and migration trends in Moldova. They also consider basic forms of migration processes and push factors of migration. As surveys show, among them the most important are higher living standards, broader opportunities for personal development, and the availability of social networks created by successful migrants (relatives, friends).

Different statistic sources are used for assessing the scale of migration.

The profile of Moldovan labour migrant is described from different perspectives: gender, age, ethnic background, education, etc.

Special attention is given to migration policies in the Republic of Moldova and cooperation with the diaspora. The authors emphasize that the current topicality of the problem of mass-migration encourages the authorities of Moldova to explore different measures aimed at minimizing the negative effects of this phenomenon and the use of migration for the benefit of the country. Nevertheless, for a long period of time the migration policy was not among the priorities of the authorities of the republic.

The article outlines the priorities of the state policy in the field of migration outlined in the strategic programs. They are the following: Stimulation of return migration. Creating the conditions needed in order to ensure the positive aspects of this process; More efficient management of migration at the level of government agencies, including improved monitoring of migration flows; Ensuring the rights of Moldovan migrants abroad and improving their social status; Strengthening ties with the Moldovan diaspora.

The following trends and changes have been identified in the general structure of Moldovan migration: they are shifting from the CIS towards the EU, from short-term seasonal migration towards long-term stays, and there is increasing migration to the United States and Canada.

Challenges and Needs for Support of Medical Professionals via Supervision in Latvia

Anna Angena¹

Biruta Sloka²

¹ University of Latvia, Anna.Angena@lu.lv, ORCID: 0000-0002-6558-1235

² University of Latvia, Biruta.Sloka@lu.lv, ORCID: 0000-0003-2129-053X

Abstract: Recent situation developments in economics and medicine requires innovative support to keep medical professionals for succesful activities in their practice. In the field of health care where new trends are arising due to Covid-19 pandemia influence, the adoption of new medical technologies, digitalization, and various other advancements, a high degree of professionalism and efficiency among the employess is required. Researchers world-wide, including those in the Republic of Latvia, are conducting studies to analyze indicators of burnout among medical professionals and explore potential strategies for its prevention. One of new findings in mitigation burnout and ensuring professionals can sustain for their activities and avoid burn-out is supervision a reflection and interventions about issues related to work and professional activity. Several measures are taken in Latvia to ensure the professional standards of healthcare personnel, including supervision. Aim of the paper is to prepare recomendations for conducting survey of health care specialists to conduct efficient supervision activities in the field of the health care. Research methods: scientific publications analysis, pilot survey of questionnaire for survey of employees in health care sector to know the views of health care employees on their needs, expections and experience of supervision. Results of research has indicated that there are important aspects in conducting supervision for health-care employees.

Keywords: burn-out, decision making, supervision, medical professionals

Private Law according to Kosovo and international legislation

Phd. Cand. Argona Kuçi¹

Dr. Sc. Kastriote Vlahna²

¹ PhD. Cand. South Eastern European University; Graduated in Master Studies, Chicago-Kent TRCollege of Law

² Dr. Sc. University of Pristina “Hasan Prishtina”, Department of Civile Law, Pristina, Kosovo.
(kastriote.vlahna@uni-prizren.com) Email of the corresponding author

Abstract: Based on the title of the paper, we note that we are dealing with a broad field such as private law and its branches, which still remain to be studied, thus claiming that the branches of private law are only coming and expanding. And since the topic has content from the aspect of international law, then we have tried to clearly define during the content of the paper how the legislation defines the private right in the legislation of Kosovo as well as in international countries, especially when we notice that we are dealing with with any private legal relationship that dominates the foreign element in it. Therefore, I emphasize that the work in general has content from the field of private law and its branches, starting from civil law as the most important branch of private law, as well as other branches with which I think we should be familiar with the laws of both local and international rights. Thus, the content of the paper is defined in chapters, mainly starting from the formulation of private law from Roman times to the present day, as well as focusing on the formulation of private law and specifically of civil law nowadays, especially the state of Kosovo, which right we have not yet formulated in a civil code, although it is claimed that by next year the Civil code of Kosovo will be formulated, so it remains a controversial issue for private law researchers, how to harmonize the laws of Kosovo with the Laws of the Organization of the European Union, with which we have been aligned almost since the formulation of the laws in our country!.

Keywords: Private Law; Branches of Private law; Harmonization of local private law with international countries; Formulation of the Civil Code of Kosovo.

Business system management in the service of business development

Prof. Ass. Dr. Besnik HAJDARI¹

¹University of Mitrovica, Faculty of Mechanical and Computer Engineering, Mitrovica, Kosovo; E-mail:
besnik.hajdari@umib.net.

Abstract: Doing business nowadays is much easier than it was in the past decades. This is due to the fact that information technology and its development has had a positive impact on businesses, specifically on the development of businesses. This is due to the fact that businesses manage to proclaim their products and their work even from their online approaches. For this we can say that information has become a fundamental source of businesses or almost every enterprise. This includes large, medium and also small enterprises, which through Internet access advertise, even sell their products or their business, and also sell through online access. This good method for businesses, in recent years is used to a large extent in businesses in Kosovo, and in the research in some of the enterprises they emphasize that they are very satisfied with the access and information obtained through online access, and not only the information but also data exchange of their enterprises, even the profits which are significantly greater than in previous years. This is due to the fact that their products can be advertised from the workplace and not through any TV or media, for which an advertisement has to be paid for. So, in general, in these cases, it is necessary to know how to manage business information, otherwise, for other cases, in general, this is in favor and for the good of businesses. I will speak more broadly about business management through information technology during the presentation of this paper.

Keywords: Business, technology, information, enterprises, development.

The role of information for a company and the impact of information on it

Prof. Ass. Dr. Besnik HAJDARI¹

¹University of Mitrovica, Faculty of Mechanical and Computer Engineering, Mitrovica, Kosovo; E-mail:
besnik.hajdari@umib.net.

Abstract: For the company or business to be informed about details about its business is quite important and plays a special role in the development or establishment of that business. This is due to the fact that fast-time information creates an impact on business functions, performance and productivity. So if a business is informed in time about its shortcomings then they can be avoided in time and thus have a good system in support, management of marketing, finance and production, I can also influence the overall performance of the staff. Performance is the final result of an activity, while organizational performance is accumulated from the final result of all processes and activities of the organization. By using data provided by systems that are timely, relevant and accurate a manager can do a better job of identifying problems, opportunities and solutions. This can be clearly observed in the companies surveyed. From this it is understood that the information in a company is almost the development of that company itself, since in the case of quick information about both the good and certain negligences, it will be possible to intervene quickly to improve the situation and thus let's not come to the extinction of that company or the reduction of work in that company. Thus, I will speak more broadly about the role of information in a company during the presentation of this paper.

Key words: role, information, company, development, benefit.

Role of State Support and Education Institution Support for Students at Risk in VET

Biruta Sloka¹

Ilze Buligina²

Ginta Tora³

Juris Dzelme⁴

Kristīne Liepiņa⁵

¹ University of Latvia, Biruta.Sloka@lu.lv, ORCID: 0000-0003-2129-053X

² University of Latvia, Ilze.Buligina@gmail.com, ORCID: 0000-0001-9005-9900

³ University of Latvia, Ginta.Tora@lu.lv, ORCID: 0000-0003-0427-7210

⁴ University of Latvia, Juris.Dzelme@lu.lv, ORCID: 0000-0002-7307-1163

⁵ University of Latvia, Kristine.Liepina@lu.lv, ORCID: 0009-0002-6505-0896

Abstract: Latvia, as a country with a decreasing population, especially of working age, has to choose smart decisions to retain students in the education system. Particular attention needs to be paid to students at risk, especially in vocational education and training (VET), as the VET systems prepare a highly demanded labour force. Comprehensive measures need to be implemented to support students to obtain qualifications and find adequate employment. Teaching and support staff play an important role in VET. The aim of this study is to investigate the role of state interventions and education institution support for students at risk in VET in Latvia, to identify and evaluate good practices in motivating students to acquire a profession and become economically active members of society. Materials used in this research are the result of international research in Lithuania, Norway, Estonia and Latvia: focus group discussions, interviews of students as well as survey of Latvian teachers working with students at risk (an analysis of the results performed on the platform *QuestionPro*). Results of the research indicate that collaborative support from the state and VET institutions allows for innovative and creative solutions to effectively support students at risk in VET. The obtained results could be further discussed and analysed and possibly used also in other countries and contexts. Especially remarkable results had been demonstrated by the ESF project PUMPURS which prevented the drop-out of students at risk and retained them in the education system with a good level of achievement.

Keywords: students at risk in vocational education, qualified specialists, state support, school support.

The Concept of Empathy in the Context of Leadership in Education

Christos Kanavas

Abstract: The present paper investigates the concept of empathy in the context of leadership in education. The paper discusses the concept of empathy and its usefulness, as a trait of a school leader. The empirical part of the paper examines the responses of 70 primary education teachers to 15 questions regarding empathy in leadership. Descriptive statistics showed that 94.3% of the participants believe that an emotional identification requires the understanding of the emotional state of the interlocutor. Moreover, 100% of the participants stated that the school manager is obliged to perceive their feelings, while 91.5% stated that the manager's emotional intelligence had a great effect on their actions. Furthermore, the responses of the teachers highlighted the necessity of emotional proximity between the school manager and the staff in order to provide functional solutions in various problematic situations, which may arise within a school context. In conclusion, the results showed that teachers recognized the contribution of empathy to school management.

Synthetic taxes and their importance in the formation of the budget

Mr. Sc. Dafina Vlahna¹

¹Department/ Financial Law/University of Pristina “Hasan Prishtina”, Pristina, Kosovo,
dafinaa_55@hotmail.com, Email of the corresponding author

Abstract: In the Republic of Kosovo, the formation of the state budget consists almost to a greater extent of synthetically collected taxes. Thus we say that synthetic taxes are of particular importance since they and the large amount of money collected from them make up the state budget. Thus we can say that synthetic taxes are those taxes with which the general economic power of the taxpayer is taxed. These taxes are the mandatory taxes that come from the population as well as the legal entities of the country. These taxes are collected depending on the person's income, so e.g. based on the salary and the amount of the payment, the tax is withheld. They are important and are quite a big help for the state since at the end of the month they are received by each natural or legal person, and without the consent of the public, which go in favor of the state since the budget is formed from them. Thus, more broadly related to synthetic taxes, their number in Kosovo and the income that comes from these taxes, I will present during the presentation of this paper.

Key words: tax, synthetic, importance, budget, state.

Customs as a public entry in Kosovo and their importance

Mr. Sc. Dafina Vlahna¹

¹ Department/ Financial Law/University of Pristina “Hasan Prishtina”, Pristina, Kosovo,
dafinaa_55@hotmail.com, Email of the corresponding author

Abstract: Customs, as well as other revenues for the state of Kosovo, have a special role since a large number of financial means for the formation of the state budget is realized by Customs. Thus, we can emphasize that customs are paid not only for the passage of the goods across the state border, but also for the internal circulation of the goods, i.e. for the internal circulation of the goods, i.e. for the passage of the goods from one country to another, which can be different we call it internal customs. More specifically, the term customs in the Albanian language means a state tax in money, which is collected according to the laws in force for goods entering or leaving one country in another. At the same time, this term also means the state institution that deals with the controls that can be made to businesses in the transportation of their goods. Thus, in Kosovo, Customs are considered public revenues of particular importance, since they provide financial means from which the state budget is formed. Thus, I will speak more broadly about customs and the customs system in Kosovo during the presentation of this paper.

Key words: customs, customs system, public revenue, control, collection.

The Role and Impact of National Funds on Agriculture Production: A Case Study of Kosovo

Dina KOPEVA¹

Ekrem GJOKAJ²

Sokol SALLAHU³

¹Diana Kopeva, University of National and World Economy, Sofia, Bulgaria; e-mail: dkopeva@unwe.bg

ORCID: 0000-0001-51460793

²Ekrem Gjokaj, University of Prizren, Faculty of Life and Environmental Science, Prizren, e-mail: ekrem.gjokaj@uni-prizren.com, ORCID: 0000-0002-1649-4098

³PhD Candidate University of National and World Economy, Sofia, Corresponding author, e-mail: sokolsallahu1@gmail.com, ORCID: 0000-0002-5109-9421, corresponding author

Abstract: This study seeks to investigate the impact of national funds on the agricultural production sector in Kosovo. As a region striving for economic growth and self-sustainability, Kosovo's agricultural sector plays a vital role in ensuring food security and enhancing rural livelihoods. The allocation and implementation of national funds have a significant impact on overall agricultural production, affecting aspects such as land, technological advancement, infrastructure development, and market integration.

This study employs a mixed-methods approach to analyse the relationship between national funds and agricultural production outcomes. The quantitative study involves assessing the correlation between the disbursement of funds from national programs for rural development and direct payments and the yield, diversity, and quality of agricultural products. Alongside this, the qualitative phase deals with interviews with beneficiary and non beneficiary farmers, and policymakers to unravel the mechanisms through which funding influences decision-making, innovation adoption, and sustainable practices.

Keywords: agriculture, sustainable, rural development, policymakers, beneficiary, funds.

Effective Strategies for School Improvement and Educational Leadership

Dușe Carmen Sonia¹

Dușe Dan Maniu²

¹ Lucian Blaga University of Sibiu, carmen.duse@ulbsibiu.ro ORCID: 0000-0001-8704-8442

² Lucian Blaga University of Sibiu, Romania, dan-maniu.duse@ulbsibiu.ro, ORCID: 0000-0003-3114-6312

Abstract: The field of educational management is constantly evolving, driven by the need to improve educational outcomes and meet the diverse needs of students in today's rapidly changing world. Effective Strategies for School Improvement and Educational Leadership examines in a theoretical way, the critical role of educational leaders in shaping the future of education.

In the dynamic landscape of education, the role of Educational Management is of paramount importance. The proposed subject provides a comprehensive theoretical exploration of the multifaceted responsibilities and challenges facing educational leaders in today's complex educational environments.

Educational leaders, whether principals, superintendents, or other administrators, play a critical role in promoting school improvement and ensuring the success of both students and educators. We propose in the paper to explore a series of innovative strategies and best practices in educational management, with a particular emphasis on effective leadership techniques.

Educational institutions are entrusted with the critical task of cultivating the next generation of leaders, innovators and global citizens. This subject immerses participants in the essentials of educational management, equipping them with the knowledge and skills needed to drive school improvement and provide visionary leadership.

Understanding effective strategies for school improvement and educational leadership has a very big importance because it leads to achieving several aspects: improving student performance, creating a conducive learning environment, improving teaching practices, implementing data-driven interventions that ultimately lead to increasing the level of assurance of student performance. Educational leaders are responsible for setting and achieving academic goals. Knowledge of effective school improvement strategies ensures accountability in providing quality education and meeting educational standards and standards.

In essence, knowing effective strategies for school improvement and educational leadership is vital for fostering positive learning environments, ensuring accountability, and ultimately shaping the future of education. It equips leaders with the tools and skills necessary to navigate the complex challenges of the education sector and drive continuous improvement in schools, benefiting both students and the broader community.

Keywords: Educational Leadership, School Improvement, Effective Strategies, Student Achievement, Equity in Education.

The Impact and Significance Of The Statement Of Cash Flows

Igor Zdravkoski PhD¹

University "St.Kliment Ohridski" – Bitola, Faculty of Economics - Prilep, igor.zdravkoski@uklo.edu.mk

Abstract: The cash flow statement is part of the set of financial statements and its usefulness is seen in the concentration of sources and uses of cash that show the liquidity and solvency of enterprises. Hence, users can form an opinion and make an assessment about the changes that have occurred in the net assets, the financial condition and the ability of the enterprise to prepare for the changes and adjustments in the future.

Namely, the great importance of cash assets makes this report one of the key balance sheets in operations because it allows managers and investors to feel the pulse of cash assets. The cash flow statement not only shows the company's cash inflows and outflows but also classifies them as financial, investment and operating cash flows. That is, this report explains the flow of where money comes from and where it is spent during a certain period.

The statement of cash flows provides users of financial statements with basic and relevant information for evaluating the capabilities of a business entity. Cash flow information can be used as an indicator of the amount, timing and certainty of cash flows. Specifically, past predictions of future cash flows can be checked for accuracy, ie. how the actual figures are realized. Also, the relationship between profit and cash flows can be analyzed as can price changes over time. And the significance is perceived in the management's ability to control costs, by controlling cash flows.

The statement of cash flows also facilitates comparability in reporting the operational performance of different business entities, because it eliminates the effects of using different accounting procedures for the same accounting transactions and events.

Keywords: money, inflows, outflows, information, balance.

Too Little, Too Late, Totally Inadequate: Communication Management Failures In Public Sector

Irina Teodora Manolescu¹

¹ Alexandru Ioan Cuza University of Iasi, Romania, irina.manolescu@gmail.com, <https://orcid.org/0000-0002-1869-1343>

Abstract: The management of public institutions is often associated with inefficiency, in contrast to the management of organizations in the private sector. Poor communication, especially in the context of crises, is a major source of generating a negative organizational image for public entities. This work aims to identify the main communication errors at the organizational level in public institutions from various fields and the main negative effects associated with inadequate public discourse. The methodological approach is qualitative, consisting of an initial research phase to identify representative cases of inadequate communication in different public sectors, followed by an analytical phase using focus groups. The target group consisted of employees in public institutions pursuing master's or specialization courses. The problematization within the focus groups included the causes of communication errors in the specific cases analysed, as well as their short-term and long-term effects. Participants sequentially ranked these components based on individual analysis and then, after substantiating their choices. Inadequate training in specific communication competencies within formal and non-formal education, the nascent stage of organizational spokesperson roles, the absence of consultation and decision-making groups regarding public discourse, lack of studies regarding the expectations and interests of key stakeholders, and insufficient databases are identified as sources of organizational communication inefficiency, specific to the public sector, with scores varying significantly from one field to another. Altering the image of public institutions and thereby decreasing trust in their ability to address societal issues is the main effect of poor management of organizational communication, but a domino effect on the efficiency of other organizational activities has also been highlighted. The research results are relevant for decision-makers and employees in public institutions.

Keywords: public management, communication plan, organizational crises.

The outbound tertiary students' mobility from post-communist European countries

Jana Kubicová¹

¹ University of Economics in Bratislava, jana.kubicova@euba.sk, ORCID: 0000-0002-8816-3968

Abstract: For several last decades we have been witnessing high intensity of movement and migration of people around the World, including higher inflow or outflow of students in tertiary education across countries. Abundant empirical research in this field presents results regarding range of possible factors that might motivate students to move and enrol into tertiary education programmes abroad, among them socio-economic, qualitative and political determinants in both, home and host countries. Let us mention, among others distance between home and host countries, economic growth and income level in either of two countries, language of foreign study programmes, climate, political instability, the effect of populism on high-skilled migration, limited employment and tertiary education opportunities, institutional factors, regional attractiveness of universities, inequality of access to higher education, economic crisis in home countries, post education opportunities in personal and professional life of graduates, destination countries' academic ranking, GDP per capita, and linguistic and colonial ties, different stages of development in origin countries, valuing of international studies by employers, 'signalling effects' of employing international graduates and many others. In this paper I focus on factors that determine outflow of students in tertiary education from post-communist European Union Member States being provoked by the fact, that Slovakia observes the strongest share of outbound of students in tertiary education among the EU Member States. The purpose of the paper is to reveal whether study fields and programmes like arts, business, engineering, natural sciences and construction, health, wellness or education studies offered in destination countries play significant role in decision making regarding enrolment of students from post-communist countries into tertiary education abroad. As a control variable the income level in home and host countries is used. By exploring panel data extracted from UNESCO, OECD and Eurostat databases and by operating a panel data regression analysis I arrived to the conclusion that income level, employment opportunities, play more significant role than study programmes of receiving universities.

Keywords: outbound students' mobility, tertiary education, study field and programmes, post-communist countries

Cash-Flow vs HR management, in the corporate Strategy

Karanasios Nikolaos¹

Reitano Antonella²

Bitonti Angelita³

Fazio Marco⁴

Stavrova Elena⁵

¹Retired Ass.Prof. At the Dpt of Business Administration of the (IHU.gr) International Hellenic University & CEO of the Business & Innovation Centre of Serres, ORCID 0000-0002-1513-8438.

²Professor at the Univesity of Calabria; antonella.reitano@unical.it, /orcid.org/0000-0003-4792-123X

³Ph.D Pegaso International angelita.bitonti@gmail.com

⁴Adjunct Professor at the University of Calabria., marco.fazio@unical.it, ID Orcid:
<https://orcid.org/0000-0002-6933-5963>

⁵Associate Professor, PhD στην εταιρεία SWU "Neofit Rilski", helena_stavrova@abv.bg,
orcid.org/0000-0003-0162-7916

Abstract: Business top management is changing orientation over time, oscillating between Technological progress, Marketing, Strategic decision making, Human Resources Management, Managerial Accounting and Mathematical Business Modeling, in search of profit making, frequently even its maximization. Yet, the driver is always the Human Resources Management.

Stock exchange listed enterprises are showing their profitability as an attraction of demand for their shares and thus increase the wealth of the shareholders.

In the same times, in several occurrences, there have been big fails because the profits, even those really made, could not be distributed as dividends, because the profits were invested in profit making assets, especially inventory.

The international standards system is aware and has introduced a Cash-Flow account, together with the annual balance sheet. This is showing the annual results several months after the end of the yearly operation.

The top management is still oriented to demonstrate profits rather than cash-flow stability.

To do this, they are using techniques for people orientation towards profit making.

The research group examined a 10 Stock Exchange listed companies sample (the first in the alphabetic list) and their share price related to profits, for the last 5 years in Greece, Italy and Bulgaria, retrieved at the last week of June, after the publication of the balance sheets.

The importance of the arbitration procedure in local and international disputes

Dr. Sc. Kastriote Vlahna¹

Phd. Cand. Argona Kuçi²

¹Dr. Sc. University of Pristina “Hasan Prishtina”, Department of Civile Law, Pristina, Kosovo.

²PhD. Cand. South Eastern European University; Graduated in Master Studies, Chicago-Kent, College of Law.,
(kastriote.vlahna@uni-prizren.com) Email of the corresponding author

Abstract: There are many reasons why the plaintiff initiates the dispute procedure. So, regardless of the purpose of leading any contentious procedure, the purpose of the parties is oriented towards the rapid adoption of the judicial decision, which will eliminate any unpredictability in the contentious law between the parties. On the other hand, the state expects legal decisions from the court, and these two are often difficult to harmonize. The parties go from what court decisions become immediately final, while the state wants to ensure the possibility of additional re-examination of the regularity of the judgment. So that due to legal certainty and every dispute must come to an end and this is the purpose of the existence of the institute of the omnipotence of the judicial decision. Arbitration as a private-non-public binding decision-making alternative very useful in a large number of disputes, mainly civil disputes. In this procedure, the decision to resolve disputes is made by a neutral third party (arbitration or arbitration). In this aspect, it can be seen that we are dealing with a trial that, in general terms, we can say that: arbitration is one of the fastest and most efficient alternative ways of choosing disputes that the trends of modern society require today. In this way, businesses are interested in the quick and non-bureaucratic resolution of disputes. Arbitration is a procedure which now globally dominates disputes between businesses. The most complex and high-value disputes are resolved by arbitral tribunals around the world. The arbitration procedure is transparent and provides means of control of the procedure by the parties. The procedure is provided by the arbitration rules, but the duration, the administration of the evidence and some other elements of the procedure are decided by the agreement of the two parties in the contest. Thus, we can emphasize that the arbitration procedure today plays a special role for civil society in general. Therefore, we will talk about the topic in more detail during the presentation of this paper.

Key words: arbitration, alternative procedure, importance, role, development.

Stages of the criminal procedure according to the procedural code in Kosovo

Cand. Phd. Kosovare Sopi¹

University Gjilanit “ Kadri Zeka ”Pristina, Kosovo, Email: kosovare.sopi@uni-gjilan.net

Abstract: In the criminal legislation in the Republic of Kosovo a very clear division is made between the stages of criminal offenses that this division is very much in matters of trial in criminal cases. According to the code of criminal offences, the stages of Kosovo's procedures are in the first stage at that time of the further investigation of the indictment, the examination of the procedure according to legal remedies. Also the second stage is the exclusive competence of the prosecution and the indictment is filed and in the third stage where the trial is this stage by the courts and in the end we have seen it in the strikes of the decisions that judge according to the legal remedies that of the complaint or their remedies are realized by the defense. In this dispute, through the following study it will be presented as the initial stages of the investigation and the filing of the accusatory act, then as the first stage of the trial, giving details about the compilation of legal remedies. The methods applied in this study are normative legal methods ,analytical and comparative methods.

Keywords: Investigation phase ,decision and other regular means

Welfare State and Education In Greece

Kyriaki Efthalitsidou¹

Ioannis Betsas²

Marina Vezou³

Nikolaos Sariannidis⁴

Konstantinos Spinthiropoulos⁵

¹Corresponding author, Department of Accounting and Finance, University of Western Macedonia, GR50100 Kozani , Greece, efthalitsidou.kiki@hotmail.gr

²Faculty of Education, School of Primary Education, Aristotle University of Thessaloniki, GR54124 Thessaloniki, Greece, impetsas@eled.auth.gr

³Marina Vezou, Department of Management Science and Technology, University of Western Macedonia, GR50100 Kozani , Greece, E: mvezou@uowm.gr

⁴Department of Accounting and Finance, University of Western Macedonia, GR50100 Kozani , Greece, nsariannidis@uowm.gr

⁵Department of Management Science and Technology, University of Western Macedonia, GR50100 Kozani , Greece, kspinthiropoulos@uowm.gr

Abstract: The Greek educational system obliges us to make certain clarifications of the basic concepts used. The concept of education includes all kinds of institutionalized teaching that takes place in schools of all levels, technical and vocational schools and universities whether provided by the state or by private bodies.

However, the cost of all these educational and research activities is too high to be covered by private capital alone, and this is where government intervention comes in. Thus, we have the implementation of the Welfare State to balance the social system in the national states but also in the European Union.

Keywords: Welfare state, education, social policy, Greece.

The Relationship between Social Entrepreneurship, CSR and Values in Theory and Practice

Laura Diaconu (Maxim)¹

¹ Professor PhD., Department of Economics and International Relations, Faculty of Economics and Business Administration, “Alexandru Ioan Cuza” University of Iasi, Romania, e-mail: lauradiaconu_07@yahoo.com, ORCID: <https://orcid.org/0000-0001-5745-3850>

Abstract: The main goal of both social entrepreneurship and corporate social responsibility is the enhancement of the society's well-being. Thus, the business model of social enterprises is not primarily aimed at the maximization of profits, but rather at carrying out goals for the benefit of the society. Meanwhile, the corporate social responsibility defines the active behavior of a company, which can offer new solutions to meet the needs of the society. Considering these aspects, the purpose of the present paper is to underline the role of CSR in transforming businesses into an engine for sustainable development, by focusing on the informal factors that are influencing the social entrepreneurship in Romania. We started our investigation by assuming, firstly, that the higher the level of social justice and of post-materialist values is in a country, the greater the level of CSR. Secondly, we assumed that the higher the level of CSR is in a country, the lower the size of social entrepreneurship is. We tested these two assumptions on the case of Romania by using partial least squares–structural equation modelling. Our findings underline that social entrepreneurship is influenced by post-materialist values, social justice and CSR. These results have important implications for the policy makers responsible for enhancing social entrepreneurship.

Keywords: Corporate Social Responsibility, post-materialist values, Romania, social entrepreneurship, social justice.

Professional Development Needs and Employment Satisfaction of Beginning Instructors of the College of Education

Nisperos, John Noel S.¹

¹Associate Professor V, Don Mariano Marcos Memorial State University-South La Union Campus, Philippines, johnnoelsnisperos@gmail.com, ORCID: <https://orcid.org/0000-0003-1244-6053>

Abstract: The study determined and assessed the professional development needs and employment satisfaction of beginning instructors of the College of Education. Specifically, the study determined the kind of assistance wanted most by beginning instructors; and determined any significant difference in the perceived needs of beginning instructors during the first three years of service along with personal support, task-related assistance, problem-related assistance, support for professional growth, and monitoring and evaluation in teaching; determined any significant difference in the perception of beginning instructors and their immediate supervisors regarding their identified professional needs; and determined the significant relationship between the instructors' professional needs and employment satisfaction.

The perceived needs of the beginning instructors are significantly different except for the Problem-Related Assistance and Support for Professional Growth and Support for Professional Growth and Monitoring and Evaluation in Teaching as not significant. This implies that if the need for Problem-Related Assistance is high then the Support for Professional Growth is also high and vice-versa. Likewise, in the Support for Professional Growth, and Monitoring and Evaluation in Teaching. There is a significant relationship between the instructors' professional needs and employment satisfaction.

Key Words: Professional Development Needs, Employment Satisfaction, Beginning Instructors, College of Education

Azerbaycan'da Göç Süreçlerinin Düzenlenmesinde Uluslararası Deneyimin Rolü

Ruhangiz Aliyeva¹

Hanım Kuluyeva²

¹Azerbaycan Üniversitesi, ruhangiz.aliyeva@au.edu.az, ORCID; 0000-0001- 5744-9042

²Azerbaycan Üniversitesi, ORCID; 0000-0002- 5973-6181, Khanim.guliyeva@au.edu.az

Özet: Makalede Azerbaycan'da göç süreçlerinin düzenlenmesinde dış faktörlerin etkisi araştırılmıştır. 21. yüzyılda göç süreçleri dünya siyasetinin daha fazla tartışıldığı küresel bir sorun olarak nitelendirilmektedir. On yıl önce göçün sosyo-ekonomik eğilimleri analiz edilirken, artık mevcut alandaki olumsuz durumlara dikkat çekiliyor. Bu nedenle küresel göç krizinden muzdarip olan işçi göçü tehlike altındadır. Uluslararası göç süreçlerinde yaşanan çelişiklere rağmen bu süreç insanlığın başlangıcından bu yana devam etmektedir. Her gün yüzlerce göçmen daha iyi bir yaşam için mücadele ediyor ve gelişmiş ülkelere yöneliyor. Doğdukları evleri belirsiz bir süreliğine terk eden göçmen işçiler, yaşadıkları ülkelerin ekonomisinde önemli bir rol oynamasalar da istikrarlı sosyo-ekonomik kalkınmayı desteklemektedirler. Ayrıca bu kategoriye dahil olan kişiler düzenli olarak ülkelere para transferi yaparak o ülkelerin sosyal kalkınmasına bir miktar destek sağlamaktadırlar. Göçmenler yaşadıkları ülkelerin çok kültürlü ortamının oluşumuna da yakından katılmaktadırlar. Bu, çok kültürlü toplumlarda insan hak ve özgürlüklerinin korunması gibi daha acil konularda gelişmiş ülkelerin politikalarında farklılık yaratmaktadır. Azerbaycan'da göç süreçlerinin araştırılmasına ve çeşitli güncel sorunların incelenmesine destek veren düşünce kuruluşları bulunmaktadır. bilimsel, ekonomik, politik ve hukuki açıdan yani devlet ve devlet dış kurumların faaliyetleri de ilgi çekicidir. Azerbaycan bu konuda Amerika ve Avrupa deneyimine daha fazla önem veriyor. İster Amerika'da, ister Almanya'da, ister diğer gelişmiş ülkelerde düşünce kuruluşlarının gelişiminde çığır açan noktalardan biri de göç yasasına yapılan eklemelerdir. Bu kanunlar, yabancı bilim insanlarına ve düşünce kuruluşu çalışanlarına maddi güvenceyi de dikkate alarak aileleriyle birlikte sorunsuz çalışma ve araştırma yapma hakkı veriyor.

Anahtar Kelimeler: işgücü piyasası, istihdam, işgücü kaynakları, insan sermayesi

The Role of International Experience in Regulating Migration Processes in Azerbaijan

Abstract: In the article, the impact of external factors on the regulation of migration processes in Azerbaijan was investigated. In the 21st century, migration processes are described as a global problem that is increasingly discussed in world politics. While socio-economic trends of migration were analyzed ten years ago, attention is now drawn to the negative situations in the current area. Therefore, suffering from the global migration crisis, labor migration is in danger. Despite the contradictions experienced in international migration processes, this process has continued since the beginning of humanity. Every day, hundreds of immigrants struggle for a better life and head to developed countries. Migrant workers, who leave their homes of birth for an indefinite period of time, support stable socio-economic development even though they do not play a significant role in the economy of the countries they live in. In addition, people in this category provide some support to the social development of those countries by regularly transferring money to their countries. Immigrants also closely participate in the formation of the multicultural environment of the countries they live in. This creates a difference in the policies of developed countries on more urgent issues such as the protection of human rights and freedoms in multicultural societies. There are think tanks in Azerbaijan that support the research of migration processes and the examination of various current problems. The activities of state and non-state institutions are also interesting from a scientific, economic, political and legal perspective. Azerbaijan attaches more importance to American and European experience in this regard. One of the groundbreaking points in the development of think tanks, whether in America, Germany or other developed countries, is the additions to immigration law. These laws give foreign scientists and think tank employees the right to work and conduct research with their families without any problems, taking into account financial security.

Key Words: labor market, employment, labor resources, human capital

Harmonization Standards and Regulations: The Role of the EU in Promoting the Single Market

Simeana Beshi¹

Driola Susuri²

¹Faculty of Law, University “Ukshin Hoti” Prizren, Republic of Kosovo, Email: simeana.beshi@uni-prizren.com

²Faculty of Law, University “Ukshin Hoti” Prizren, Republic of Kosovo, Email: driola.susuri@uni-prizren.com

Abstract: The article discusses the essential role the European Union (EU) has played in promoting the Single Market by harmonizing standards and regulations. This study's objective is to analyze what strategies and mechanisms the EU utilizes to promote market integration, guarantee consumer safety, and facilitate cross-border commerce among its member states. The study focuses at how harmonization affects different economic sectors and what the implications are for consumers and businesses. In this research, is used a mixed-method approach, applying qualitative and quantitative analyses. The study finds that the EU's harmonization standards and regulations have been crucial in building a single market, eliminating trade barriers, and promoting the free movement of goods, services, capital, and people. Harmonization has resulted in increased market efficiency, enhanced competitiveness of European businesses globally, and improved consumer protection. Additionally, it reveals challenges encountered throughout the harmonization process, such as different national interests, diverging regulatory systems, and resistance from certain businesses. This study contributes to the existing body of knowledge by offering a thorough examination of the EU's function in advancing the Single Market through harmonization of standards and regulations. The results provide insight into how well harmonization works to achieve economic integration, guarantee high product standards, and boost consumer trust. This research can help researchers, businesses, and policymakers establish better policies and acquire insights into the success elements and challenges that were encountered during the harmonization process. Additionally, the study highlights the ongoing importance of harmonization efforts in an ever-changing global economic landscape and provides valuable lessons for other regional blocs seeking to achieve similar economic integration goals.

Keywords: Market integration, Consumer safety, Cross-border commerce, Divergence, Competition.

Latest Amendments to the European Union's Artificial Intelligence Act - The Emergence of General-Purpose and Generative AI Technologies

Dr. Szabolcs Diósi¹

¹Faculty of Law, University of Pécs, diosi.szabolcs@ajk.pte.hu

Abstract: This paper offers a comprehensive overview of the European Union's legislative initiatives aimed at regulating Artificial Intelligence (AI) technologies. It focuses on the regulatory path leading to the European Commission's draft regulation released on April 21, 2021. It examines the risk-based approach advocated in the draft, specifically the measures proposed to ban certain disruptive technologies and practices that pose unacceptable risks. It also explores key amendments introduced by the Council of the European Union, which were adopted into its common position on December 6, 2022. Additionally, the paper discusses the EU's forward-thinking approach to regulating emergent generative AI technologies capable of autonomously generating a wide range of content, from text to sound, images, and videos (e.g., ChatGPT). The study concludes by highlighting the EU's significant role in shaping policies that could establish enduring global standards in AI governance (Brussel Effect).

Keywords: Artificial Intelligence Act, European Union, disruptive technologies, General-purpose AI

Implementation of the most favorable law according to the Criminal Code of Kosovo

Phd. Cand. Triumf SADIKAJ¹

¹Phd. Candidates. at the University of Southeast Europe, Criminal Justice department, employed at the University of Prizren "Ukshin Hoti", Prizren, Republic of Kosovo, Email: triumf.sadikaj@uni-prizren.com

Abstract: At the moment of committing the criminal offense, the time of committing the offense is determined. In this case, at the moment when the time of commission is determined, then at that time it is looked at which law is in force to be applied to that criminal offense caused. Thus, 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 law in force changes before the pronouncement of the final decision, then the law that is more favorable is applied to the principal. This is due to the fact that in the event that any amendment or amendment to the law is made and that amendment is more favorable to the perpetrator of the criminal offense, then the Criminal Code of Kosovo allows the application of the law which is more favorable to the party. But it can only happen if a decision has not yet been made and that decision has not become final. 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 stopped if it has begun. Thus, I will speak more broadly about the implementation of the most favorable law during the presentation of this paper.

Key words: law enforcement, most favorable law, time of commission, criminal offense, perpetrator.

Criminal sanctions and mandatory treatment measures

Phd. Cand. Triumf SADIKAJ¹

¹Phd. Candidates. at the University of Southeast Europe, Criminal Justice department, employed at the University of Prizren "Ukshin Hoti", Prizren, Republic of Kosovo. Email: triumph.sadikaj@uni-prizren.com

Abstract: The perpetrator of the criminal offense at the moment when it is determined by the court that the accused person is the perpetrator of the criminal offense, then the punishment is pronounced, specifically the sanction which is foreseen in the Criminal Code, based on the gravity of the criminal offense, the punishment for that criminal offense is also determined. Thus, according to the Criminal Code of Kosovo, sanctions for the perpetrator of the criminal offense are divided into main, alternative and supplementary. In most cases, based on judicial practice, the main punishments for the perpetrator of the criminal offense are pronounced, such as life imprisonment, imprisonment, and a fine. In addition to the main punishments, there are cases when only an alternative punishment is imposed on the perpetrator along with a complementary punishment. Such as e.g. Punishment with a fine and obtaining a driver's license or passport. In addition to the above-mentioned penalties, the court can also issue judicial remarks. Among other things, the Criminal Code of Kosovo provides for mandatory treatment measures, which can be imposed on the perpetrator who is not criminally responsible or is addicted to drugs or alcohol, which are: compulsory psychiatric treatment with detention in a health care institution; mandatory psychiatric treatment in prison; and mandatory rehabilitation treatment of drug or alcohol addicts. Therefore, the perpetrators of the criminal offense can be imposed the above-mentioned sanctions, limiting them to a certain extent, which is also allowed by the Criminal Code of Kosovo. Thus, according to the Criminal Code of Kosovo, it is stated that: with the execution of the criminal sanction or measure of compulsory treatment, the perpetrators of the criminal offense may be denied or limited their rights only to the extent that corresponds to the nature or content of the sanction or measure and only in the way that ensures respect for his or her human dignity, in accordance with international law. Thus, in more detail regarding criminal sanctions and their pronouncement by the court, I will speak during the presentation of this paper.

Key words: criminal sanction, main, alternative, supplementary, judicial remark, limitations.

Modern Elektronik Yönetim Teknolojilerinin Siyasi Kültüre Etkisi

Ulker İMAMALİYEVA¹

¹Doctor of Philosophy, Baku State University, e-mail:İmameliyeva_ulker@mail.ru

Özet: Siyasal kültürün oluşumunda hükümet faaliyetleri, liderin yaklaşımı ve becerileri, siyasal iletişim ve siyasal kurumlar önemli rol oynamaktadır. Ayrıca modern küresel zorluklar bu faktörleri etkilemekte ve dolaylı olarak siyasi kültürün değişimine müdahale edebilmektedir. Modernleşme, siyasi gelişme ve demokratikleşme gibi modern küresel zorlukların siyasi kültür üzerindeki bu etkisi, yeni bilgi ve iletişim teknolojilerinin hem medyada hem de yönetimde uygulanmasıyla ilgilidir. Günümüzde bilgi ve iletişim teknolojilerinin yönetimde kullanımı çoğunlukla Web 1.0 teknolojilerinin Web 2.0 teknolojileriyle değiştirilmesi, Web 3.0 ve Web 4.0 teknolojilerinin uygulanmasıyla ilgilidir.

Yeni teknolojiler ve bunların ara bağlantıları (İnternet ile yapay zeka, sosyal ağlar, İnternet ile medya) ve bunların tüm eyaletlerde uygulanması (yapısal yakınsama), toplumların modern gereksinimlerinin yanı sıra yeni bilgilerin, yaşam tarzlarının oluşmasına yol açmaktadır. Bu da siyasi kültürün değişmesini sağlar. Bilgi ve iletişim teknolojilerinin siyasi kültüre bu yöndeki etkisi, e-devlet ve e-demokrasi biçiminde yönetim süreçlerinde ve devlet ile vatandaşlar arasındaki etkileşimde köklü değişiklikler için potansiyel koşulların yaratılmasında da görülebilir.

"E-devlet, yalnızca kamu yönetiminde büyük ölçekli değişikliklere değil, aynı zamanda şeffaf ve etkili yönetim ilkelerinin anlaşılmasına, toplum ve devlet arasındaki siyasi ilişkilerin etkileşimli doğasına ve muhtemelen hesap verebilirliğin ve siyasi okuryazarlığın artmasına dayanmaktadır. yani yeni dijital bağlamda hükümet şeffaflığının kaçınılmaz olarak artması, yeni bir siyasi kültürün yaratılmasını gerektirmektedir".

1995 yılında "Çevrimiçi Devlet Girişimi" şeklinde ortaya çıkan bu fikir, 2008 yılından itibaren açık devlet ve akıllı e-devlet kavramlarını içeren e-devlet kavramının devreye girmesiyle tüm dünya ülkelerini kapsayan ve aynı zamanda küresel bir değer ve aynı zamanda zorluk haline geldi.

Anahtar Kelimeler: siyasal kültür, elektronik hükümet, teknolojiler, yönetim, toplum, devlet

Impact Of Modern Electronic Management Technologies On Political Culture

Abstract: Government activity, leader's approach and skills, political communication, as well as political institutions play a significant role in the formation of political culture. In addition, modern global challenges influence these factors and can indirectly interfere with the change of political culture. Such influence of modern global challenges such as modernization, political development and democratization on political culture is related to the application of new information and communication technologies both as media and in administration. Today, the use of information and communication technologies in management is mostly related to the replacement of Web 1.0 technologies with Web 2.0 technologies, and the application of Web 3.0 and Web 4.0 technologies.

New technologies and their interconnection (artificial intelligence with the Internet, social networks, media with the Internet) and their implementation in all states (structural convergence) lead to the formation of new knowledge, lifestyles, and modern requirements of societies. This, in turn, ensures the change of political culture.

"E-government is based not only on large-scale changes in public administration, but also on understanding the principles of transparent and effective governance, the interactive nature of political relations between society and the state, and probably the increasing accountability and political literacy of public bodies, that is, the inevitable increase in government transparency in the new digital context requires the creation of a new political culture".

This idea, which came up in 1995 in the form of the "Online Government Initiative", has since 2008, with the introduction of e-government, which includes open government and smart e-government, covering all the countries of the world, and also the global value and also the challenge has become.

Keywords: political culture, electronic government, technologies, management, society, state

Dünya Nüfus Artışının Dinamikleri: Sorunlar ve Etkileri

Professor Vaskhanim Orujova ¹

¹Baku State University, e-mail: vaskxanimorucova.55@mail.ru

Özet: Nüfus artışı kendiliğinden gelişen bir süreçtir. Doğumu teşvik etmeye veya sınırlandırmaya yönelik devlet politikası, yasal ve diğer tedbirler bunu etkiler. Yerleşim, demografik gelişmeye ve hızlı nüfus artışına olanak tanır. Bazı ülkeler yüksek nüfus yoğunluğuna sahipken (Bangladeş), diğer ülkeler (Butan, İsviçre, Nepal, Afganistan, Bolivya vb.) seyrek nüfusludur. Bu durum sosyo-demografik süreçlerde niceliksel ve niteliksel değişikliklere neden olmakta, demografik göstergeleri (nüfusun doğal büyümesi, ölüm oranlarının azalması, yaşam süresinin uzaması vb.) etkilemektedir. Nüfusun farklı bölgelere eşit olmayan şekilde dağılımı yoğunluğa, toplumun refahına neden olmaktadır. İnsanlar, sağlık sisteminin gelişimi vb. duruma göre değişir. Çok çocuk sahibi olma eğilimi Müslüman nüfusta erken evliliğin nedenlerinden biridir. Günümüzde çoğu ülkede doğum oranlarının azalması nüfus artış hızının yavaşlamasına yol açmıştır.

Arap dünyasının en fakir ülkeleri Somali ve Sudan'da anne ve çocuk ölümleri yüksekken, bölgenin zengin ülkeleri Kuveyt, Suudi Arabistan ve Birleşik Arap Emirlikleri'nde bu gösterge düşük. Arap ülkelerinde nüfus artışının azalması iç istikrarsızlık, doğal afetler, ekonomik gerileme, göç vb. nedenlerden kaynaklanmaktadır. Nüfus artışı Asya, Afrika ve Latin Amerika'daki birçok ülkede demografik durumu zorladı.

Nüfus artış hızındaki değişimi 4 aşamada ele almak mümkündür:

I aşama- "demografik patlama"

II aşama - çok çocuklu ailelerden az çocuklu ailelere geçiş (Doğu Avrupa ve BDT ülkeleri).

III aşama - ölümden artış ve doğum oranında azalma. Bu aşamada doğal büyüme zayıflar.

IV aşaması - doğum ve ölüm oranlarının yakınlaşması, yüksek nüfus artış hızının azalması.

Dünya ülkelerindeki ekonomik gelişme ve nüfus artış hızı eşitsizliği, gelişmiş "zengin Kuzey" ile gelişmekte olan "fakir Güney" arasında çatışmalar yaratmış, kıtalararası göçü teşvik etmiş ve demografik durumu ağırlaştırmıştır.

Anahtar kelimeler: nüfus artışı, demografik durum, yerleşim, demografik göstergeler

Comparative study on children's rights

Veronica Gisca ¹

Tonu Renata ²

¹ PhD, associate professor, Academy of Economic Studies of Moldova, gisca.veronica@ase.md,

ORCID: 0000-0002-0781-1995

² Undergraduate, Academy of Economic Studies of Moldova, tonu.renata@ase.md ,

ORCID: 0009-0002-7687-943X

Abstract: In a legal sense, a child is considered a person who has not reached the age of 18 (majority). He has a range of rights enshrined in the legislation of each state, in treaties, protocols and international conventions adopted by up to 196 states. According to the legislation of the Republic of Moldova, the child is guaranteed the protection of his legitimate rights and interests. The protection of the rights and legitimate interests of the child is ensured by the parents or the persons who replace them, and in the cases provided by law - by the local/territorial guardianship authority or other competent bodies. Parents are liable, provided by law, for the non-fulfillment or improper fulfillment of the obligations of care and education of the child.

Therefore, it follows that children have the right to education from their parents, to the development of intellectual capacities, to freedom of thought and conscience, to the defense of dignity and honor. Even if children are separated from their parents, the child's rights to care and education are ensured, namely by the legal representative. However, the minor who acquired the full capacity to exercise until reaching the age of majority defends his rights and legitimate interests independently, as well as from the moment of reaching the age of majority. Legal relations between parents and children are present regardless of whether the children are born in wedlock or out of wedlock, whether they live together with the parents or separately, with the parents having equal rights and obligations towards the children.

Thus, the child is a member of society, of the family in which he shapes his personality, and when the parents or the guardian authority makes certain decisions, they must think about how these decisions will affect the children. According to the United Nations Convention on the Rights of the Child, "all adults must do what is best for children. Governments must support the protection and care of children by parents or, when necessary, by other people. Governments must ensure that the people and institutions responsible for the protection and care of children perform their duties properly."

Key words: child, full age, parent, guardianship authority, rights, society, education, UN Convention on the Rights of the Child.

The impact of financial and economic crime upon poverty – a panel data approach

VĂIDEAN VIORELA-LIGIA

ARDELEAN ANDREEA-SIMINA

Faculty of Economics and Business Administration, Babeş-Bolyai University Cluj-Napoca, Romania

Abstract: Poverty reduction represents a top target of worldwide current agendas. The purpose of this presentation is to evaluate the impact of financial and economic crime upon poverty rates of EU-27 member states. Using a panel dataset for the EU-27 countries between 2015-2022, we validate the negative impact of corruption and shadow economy on various poverty proxies. Policy recommendations are sketched.

Modern Trends Analysis in the Development of Regional Economy (Case of ATU Gagauzia, the Republic of Moldova)

Vitali CHIURCCIU¹

Aliona YAMBOGLO²

¹ Comrat State University, economic faculty, university lecturer, kyurkchu@gmail.com,

ORCID: 0000-0002-7218-7121

² Comrat State University, economic faculty, student of specialiation Business and Administration, iamboglo555@gmail.com

Abstract: In the scientific publication, authors focus on the study of modern trends in the development of the economy at regional level, taking a closer look at the case of ATU Gagauzia (Gagauz Yeri) Republic of Moldova. Nowadays, one of the most effective strategies for a sustainable economy is related to striving for self-sufficiency at all levels. That's why it is a quite common tendency to restore the local expenses by local revenues, because it would be simply unfair to force the whole of society to bear costs that benefit only a part of it.

In ATU Gagauzia this activity is directed by the Executive Committee of Gagauzia (regional government) through General Department of Economic Development. Therefore, the analysis carried out in this article will mostly refer to the annual reports about social and economic development in Gagauzia region.

The main aim of the study is to analyze the current situation in the economy of the region, identify current trends and problems that have an impact, and determine possible ways to improve the situation.

An integral part of the analysis is the assessment of legal norms of the current legislation of the Republic of Moldova and local legislation of ATU Gagauzia, which determine the economic norms of functioning of the region's economy. The analysis in the publication is conducted for the years 2018-2022.

The study results in this paper provide a reference for further research on the modern trends of the regional economy, as well as reveal several areas for possible improvement of the regional economic strategy. In the process of analysis, problems affecting the economy of Gagauzia were identified, trends and challenges were revealed. Based on this, conclusions were made and recommendations for possible improvement of the situation were formulated.

Keywords: regional economy, development, trends analysis, revenue, ATU Gagauzia.

The impact of budget deficit on Macroeconomic Variables: A case study from Palestine

Wisam A Samarah¹

Mohammed Yahya²

Assistant Director, Al Quds Open University, Palestine, Wsamarah@qou.edu

Abstract: We will study the effect of the Palestinian Government's Budget Deficit on its economy using a number of macroeconomic variables. The purpose of this paper is to investigate the effect of the Budget Deficit on unemployment rate, inflation, and Real GDP per capita. The data was collected from the Palestinian Central Bureau of Statistics covering the period from 1996 to 2022. The Vector Error Correction Model was used to analyze the data. The results had indicated that there is no short run relation between the variables, however, in the long run, there is a relation between the variables. According to the Vector Error Correction Model, the Budget Deficit has a negative cause and effect relation with unemployment. Meanwhile the Budget Deficit has a positive effect on the inflation rate. Finally, the Budget Deficit has a negative effect on the Real GDP per capita.

Keywords: Budget Deficit, Macroeconomic Variables, Palestinian Economy, Vector Error Correction Model.

The Impact of Gender Equality and Inequality in Albanian Society Today.

Alerta Basha¹

Santina Dervishi²

Sara Hoxha³

¹Department of Mathematics and Informatics, Faculty of Economy and Agribusiness, Agricultural University of Tirana/ Tirana, Albania 1

²Candidate in the Master of Science Degree, Department of Economics and Policy of Rural Development, Faculty of Economy and Agribusiness, Agricultural University of Tirana/ Tirana, Albania

³Candidate in the Master of Science Degree, Department of Economics and Policy of Rural Development, Faculty of Economy and Agribusiness, Agricultural University of Tirana/ Tirana, Albania

Corresponding author: +355682991566 ashtepani@ubt.edu.al

Abstract: This paper highlights the phenomenon of gender equality in Albania. It examines the importance of gender equality and the empowerment of women and girls in reducing poverty. This research is based and is conducted on the basis of 100 randomly selected respondents with the most reliable answers regarding gender equality. The interviews were done face-to-face with the individuals and the data were then processed through the SPSS statistical program. We hope that this research will serve in the future for young researchers as an effective and positive study for today's society in the world. Going beyond the literature documenting the impact of women's education on fertility, this document presents facts on the role of women in labor markets, wages, and pensions. This paper also summarizes the function of supportive policies from the government in the framework of gender equality and the World Bank's support for its expansion. The paper ends by analyzing the current situation of equality through a case study.

Key Words: gender equality, Woman, Man, poverty, Society, Education

The Factors that Determine Financial Freedom of a Country: Case of Albania

Gerta Gogo¹

Fiqiri Baholli² Albana Gjoni³

¹Ph.D, Agricultural University of Tiranagogo@ubt.edu.al, ORCID: 0000-0002-4945-9459

²Ph.D, Bank of Albania, fbaholli@yahoo.com, ORCID: 0000-0003-2936-1363

³ Associate Professor, Agricultural University of Tirana, agjoni@ubt.edu.al, ORCID:0000-0001-7875-0387

Abstract: This study is realized to identify the factors that impact a country's financial freedom. The data used in this paper are received from the Heritage Foundation database for 180 countries, aiming at the analysis of financial system freedom as an important measure of banking efficiency and independence from government control and intervention in the financial sector. Study findings showed that trade freedom, government integrity, and investment freedom play an important role in defining financial freedom. The role of government in financial freedom proved to be significant in the model. Legal efficiency and monetary freedom after the study did not prove important for determining the financial freedom of a country and consequently were removed from the model studied. Based on the findings of the study, the respective limits and recommendations are discussed.

Key Words: financial freedom, freedom of trade, government integrity, investment freedom

Factors for Development of the Entrepreneurial Initiative Among Young People in Republic of North Macedonia

Hristina SERAFIMOVSKA¹

¹Assistant Professor, Faculty of Tourism and Business Logistics, Goce Delcev University, Stip, North Macedonia, hristina.serafimovska@ugd.edu.mk, ORCID: 0000-0003-2264-6411

Abstract: In order to contribute to the development of entrepreneurship, the research is aimed at discovering those factors that have significant impact on building the entrepreneurial attitude among youth. Taking into account that young people according to their age and interests differ from others, it is the interest of each country to identify those factors that motivate them in order to have a positive impact on the economy. As it is known, entrepreneurship offers the most opportunities for self-employment and it perfectly corresponds to the unemployment rate among youth. It's crucial for state policy to know how to motivate entrepreneurial behaviour among young people and support their attempts at self employment. In order to find the real essence of the youth behaviour, the paper relates to the theoretical postulates of Theory of Planned Behaviour and provides set of determinants from which young people should recognize those who have the greatest importance for them. The conclusions are based on primary data obtained from empirical research conducted in Republic of North Macedonia among young students aged 18 to 29 years. The paper is also important because of the opportunities it opens for future research aimed at examining the quality of those selected factors that will be detected as important, opportunities for their improvement, comparative analyzes to this issue in developed economy and developing economy etc.

Key words: youth entrepreneurship, entrepreneurial behaviour, Theory of planned behaviour

Treatment and Legal Protection During the Resolution of Employment Relationships Disputes in The Republic of Kosovo

Alban Kryezi¹

Arif Riza²

¹ University “Ukshin Hoti” Prizren, Faculty of Law, Republic of Kosovo, albankryeziii@gmail.com, ORCID: 0000-0002-6171-3210

² University “Ukshin Hoti” Prizren, Faculty of Law, Republic of Kosovo, arif.riza@uni-prizren.com, ORCID: 0000-0003-1288-4619

Abstract: This paper in the comprehensive aspect is of a combined character, which includes the summary and research features of the research topic, providing sufficient knowledge for the employment relationship and rights from this field in Kosovo. The paper initially contains historical aspects of the development of law and labour relations in Kosovo. In addition to this, it further contains important comparative aspects, offering the possibility of dealing with labour disputes, as well as to analyse the advantages and difficulties offered by the legal framework in dealing with this issue. The paper presents the role of responsible institutions, including the court, respectively, the trend of judicial practice for conflicts arising from labour relations. On the other hand, it also includes statistical data based on the annual work reports of the competent institutions that inspect the respect of the rights derived from the employment relationship. In order to secure the data, the comparative method of interweaving the main legal sources that determine the field of competence of the competent institutions was used. The second method is the research method through interviews conducted with officials in charge of state institutions whose duty is to protect the rights of this category. In order to provide numerical data, a statistical method was used, through which the number of complaints received by the Independent Supervisory Council for the Civil Service of Kosovo was presented, and on the other hand, the total number of employees without labour contracts in the inspected institutions by the Labour Inspectorate was presented in three last years. Based on the interviews conducted with judges, it is emphasized that regarding the nature of the disputes that are presented the most are: requests for the annulment of the employer's decisions which, as a result, have caused the termination of the labour contracts, complaints for returning to the workplace with all the rights guaranteed by law as well as requests for the cancellation of competitions. The data indicate that during these last three years, the year 2021 has been the year with the most complaints registered by the Independent Supervisory Council

Key Words: Employment Relationship, Labour Disputes, Legal Framework, Employer, Labour Rights.

Understanding Financial Contagion: Insights into Transmission Mechanisms and Their Contribution in Shock Intensification

Meri Boshkoska¹

¹ Full Professor, Faculty of Economics - Prilep, University “St. Kliment Ohridski” - Bitola, Republic of North Macedonia, meri.boshkoska@uklo.edu.mk, ORCID: 0000-0001-6540-9032

Abstract: The main goal of this paper is to identify and analyze the key mechanisms that can lead to financial contagion and their function in the dissemination of shocks within the financial system.

The key mechanisms discussed in the paper include interbank lending, bank runs, asset price contagion, the role of asymmetric information, moral hazard and herd behavior among the investors. By exploring these mechanisms, the paper seeks to enhance the understanding of how shocks are transmitted and intensified within the financial system. To achieve the aim of this paper, secondary research was conducted, utilizing relevant research papers, conference papers, open-access materials, and study reports relating to the research topic.

The findings draw attention to the possibility of banking system contagion effects, especially due to interbank credit exposures, which might affect a small number of banks and potentially spread to a large amount of the system. The incidence of bank runs, which are brought on by economic instability and a lack of faith in the banking system, worsens the spread of shocks. Additionally, the spread of contagion, which results in market crashes and price spillovers, can be aided by investor herding behavior and confusion brought on by asymmetric information.

Key Words: financial contagion, financial crises, asymmetric information, bank run, moral hazard, herd behavior.

Davranışsal Kamu Maliyesi: Nudge Teorisi ve Kamu Politikalarındaki Rolü

Dr. Ali Gökhan Gölçek¹

¹Niğde Ömer Halisdemir Üniversitesi, İİBF, Maliye Bölümü, aligokhangolcek@ohu.edu.tr, ORCID: 0000-0002-7948-7688

Özet: Davranışsal ekonomi, bireylerin ekonomik kararlarının sadece rasyonel bilgilere dayanmadığını, aynı zamanda sosyal, bilişsel ve duygusal etmenlerle de etkilendiğini savunmaktadır. Bu kavramsal çerçeve içerisinde, Nudge (dürtü) teorisi, bireylerin daha olumlu sonuçlara yönlendirilmesi için gerçekleştirilen minör ve genellikle maliyetsiz müdahaleleri tanımlamaktadır. Kamu maliyesi alanında, davranışsal yaklaşımların ve dürtücü müdahalelerin uygulanması, toplumsal faydanın artırılmasının yanı sıra devlet gelirlerinin ve harcamalarının optimize edilmesinde de kritik bir rol oynamaktadır. Vergi uyumu, sosyal yardım programlarına katılım oranları ve kamu hizmetlerinin kullanımı gibi alanlarda, bireylerin istenen davranışlara yönlendirilmesi kamu maliyesi üzerinde olumlu etkiler yaratmaktadır. Türkiye bağlamında, bu tür davranışsal müdahalelerin kamu maliyesi stratejilerine nasıl entegre edilebileceği ve bu entegrasyonun maliye politikalarının etkinliğine olası katkıları, akademik ve politika yapıcı çevrelerde önemli bir tartışma konusu oluşturmaktadır. Bu çalışma, davranışsal ekonominin ve nudge teorisinin Türkiye'deki kamu maliyesi politikaları ve uygulamalarıyla nasıl daha uyumlu hale getirilebileceğini ele almaktadır. Çalışmada, bu teorik temeller ve uygulamalar derinlemesine incelenerek, Türkiye'nin maliye politikalarında nasıl daha etkili ve verimli stratejiler geliştirebileceğine dair öneriler sunulması hedeflenmektedir.

Anahtar Kelimeler: Davranışsal ekonomi, Nudge teorisi, Kamu maliyesi, Davranışsal kamu maliyesi, Türkiye.

Behavioral Public Finance: Nudge Theory and Its Role in Public Policies

Abstract: Behavioral economics posits that individuals' economic decisions are not solely based on rational information but are also influenced by social, cognitive, and emotional factors. Within this conceptual framework, the Nudge theory describes minor and typically costless interventions aimed at steering individuals towards more favorable outcomes. In the realm of public finance, the application of behavioral approaches and nudging interventions plays a pivotal role not only in enhancing societal welfare but also in optimizing government revenues and expenditures. In areas such as tax compliance, participation rates in social assistance programs, and the use of public services, directing individuals towards desired behaviors yields positive impacts on public finance. In the context of Turkey, discussions on how such behavioral interventions can be integrated into public finance strategies and the potential contributions of this integration to the efficacy of fiscal policies are of significant importance among both academic and policy-making circles. This study addresses how behavioral economics and the Nudge theory can be better aligned with Turkey's public finance policies and practices. Through an in-depth examination of these theoretical foundations and practices, the study aims to provide suggestions for crafting more effective and efficient strategies in Turkey's fiscal policies.

Keywords: Behavioral economics, Nudge theory, Public finance, Behavioral public finance, Türkiye.

Türkiye'nin Yaş Meyve Ürünlerindeki Rekabet Gücünün İncelenmesi

Zir. Müh. Bora AKAY¹

Dr. Özlem YILDIZ²

Zir. Müh. H. Baran YAVUZ³

Doç. Dr. Berna TÜRKEKUL⁴

¹Ege Üniversitesi Ziraat Fakültesi Tarım Ekonomisi Bölümü

² Ege Üniversitesi Ziraat Fak. Tarım Ekonomisi Böl., ozlem.yildiz@ege.edu.tr, ORCID: 0000-0002-5581-0102

³ Ege Üniversitesi Ziraat Fakültesi Tarım Ekonomisi Bölümü

⁴ Ege Üniversitesi Ziraat Fak. Tarım Ekonomisi Böl., berna.turkekul@ege.edu.tr, ORCID: 0000-0003-2445-3285

Özet: Özet, 150-300 kelime arasında olacaktır. Anahtar kelimeler 3 ile 5 kelime arasında olacaktır. Özet Calibri 9 punto olarak ve tek satır aralığı, iki yana yaslı olarak yazılacaktır.

Türkiye'nin bulunduğu iklim kuşağı ile topraklarının elverişliliği, çok çeşitte yaş meyve ve sebzenin yetiştirilmesine imkân vermektedir. Türkiye, üretimde Avrupa'da birinci, dünyada ise dördüncü sırada yer almaktadır. Yaş meyve sebze sektörü için 2023 yılı için 60 milyon ton üretim ve 5,5 milyar doların üzerinde ihracat hedeflenmektedir. Böylelikle küresel pazardan alınan %2'ler seviyesindeki payın %5'ler seviyesine çıkarması beklenmektedir. Bu sektör sadece ihracat değeri ile değil, yarattığı istihdamdan, ortaya çıkardığı katma değere kadar pek çok konuda Türk ekonomisine katkıda bulunan stratejik önemi olan bir sektördür. Ayrıca, taze meyve ve sebzenin insan sağlığı üzerindeki olumlu etkileri olduğu da bilinmektedir. Bu durum gerek yurtiçinde gerekse yurt dışında yaş meyve ve sebzeye olan talebi arttırmaktadır. Fakat Türkiye'nin üretim ve pazarlama potansiyeli olan yaş meyve ve sebze sektöründe istenen ihracat seviyesine ulaştığını söylemek güçtür. Hatta artan pazar imkânlarından yeterince yararlanamadığı ve son yıllarda pazar kayıpları yaşadığı görülmektedir. Bundan dolayı yaş meyve ve sebze alt sektöründe hâlihazırda avantajlı olduğu rekabet gücünü sürdürülebilir kılması son derece önemlidir. Yüksek ve sürdürülebilir rekabet gücü tüm tarım sektörü için olumlu bir etki yaratmaktadır. Bu nedenle bu araştırmada Türkiye'de önemli ihracat avantajına sahip olan yaş meyve ürünlerinin, avantaj ve dezavantaj açısından rekabet gücünü analiz etmek amaçlanmıştır. Öncelikle Türkiye'nin ihracatındaki payına göre yaş meyve ürünleri seçilmiştir. Bu ürünlerde rekabet gücünü ortaya koymak için son 20 yıllık verilere dayalı olarak Açıklanmış Simetrik Karşılaştırmalı Üstünlük (RSCA) ve Ticaret Dengesi Endeksi (TBI) hesaplanmıştır. Bu endekslere göre yaş meyve ürünleri dört farklı kategoriye ayrılmıştır. Son olarak ITC tarafından geliştirilen İhracat Potansiyeli Göstergesi (EPI) aracılığıyla kullanılmayan potansiyel incelenmiştir.

Anahtar Kelimeler: Yaş Meyve, Ürün Haritalama, Sürdürülebilir Rekabet,

Finansal Gelişme-Ekonomik Büyüme İlişkisi: Yapısal Kırılmalar Altında Türkiye Analizi

Arş. Gör. Dr. Burhan DURGUN¹

¹Dicle Üniversitesi, İİBF, İktisat Bölümü, burhan.durgun@dicle.edu.tr ORCID: <https://orcid.org/0000-0001-7742-6059>

Özet: Finansal gelişmenin ekonomik büyümeyle ilişkisi literatürde teorik ve ampirik olarak uzun yıllardır araştırılan bir konudur. Konu üzerinde bir fikir birliğinin sağlandığını söylemek güç olsa da genel olarak finansal gelişmenin ekonomik büyümeyi teşvik ettiğini ima eden bulgular ön plana çıkmaktadır. Bu çalışmada da kompozit bir finansal gelişme göstergesi olan finansal gelişme endeksinin finansal kurumlar ve finansal piyasalar şeklinde bileşenlerine ayrılarak ekonomik büyüme üzerindeki etkisi araştırılmıştır. Türkiye özelindeki analiz 1980-2020 dönemini kapsamaktadır. Sert (Gregory-Hansen) ve yumuşak (Kesirli Frekanslı FADL) kırılmaları dikkate alan test sonuçlarına göre değişkenler arasında uzun dönemli ilişki bulunmaktadır. Uzun dönem esneklikleri sert kırılmalı modelde büyüme üzerinde finansal kurumların finansal piyasalara göre daha etkili olduğunu ortaya koymuştur. Yumuşak kırılmalı modelde ise benzer etkiler tespit edilmiş ancak finansal piyasaların etkisi anlamsız bulunmuştur. Frekans alanı nedensellik testi sonuçlarına göre finansal kurumlar ve finansal piyasalardan ekonomik büyümeye ve finansal piyasalardan kurumlara doğru tek yönlü nedensellik ilişkisi tespit edilmiştir. Arz öncüllü hipotezin doğrulandığı bu sonuçlar finansal piyasalar ve kurumlarda daha fazla ilerlemelerin ekonomik büyümeyi teşvik edebileceğini ima etmektedir. Elde edilen bu sonuçlar ekonomik büyüme için finansal alanda bazı politikaların uygulanmasını gerektirmektedir. Finansal ürün ve hizmet yelpazesi artırılarak finansal kurumlar arasında rekabetin artırılmalıdır. Finansal piyasalarda dijitalleşme ve teknolojik gelişmelerle finansal kurumların verimliliği yükseltilmelidir. Fon maliyetlerinin düşmesi için faiz oranlarının uygun seviyelere çekilmesi gerekmektedir.

Anahtar Kelimeler: Finansal Gelişme, Ekonomik Büyüme, Kesirli Frekanslı Fourier ADL, Frekans Alanı Nedensellik Testi

The Relationship between Financial Development and Economic Growth: The Case of Türkiye under Structural Breaks

Abstract: The relationship between financial development and economic growth has been theoretically and empirically investigated in the literature for many years. Although it is difficult to reach a consensus on the issue, the findings implying that financial development promotes economic growth are generally prominent. In this study, the impact of the financial development index, which is a composite financial development indicator, on economic growth is investigated by dividing it into its components as financial institutions and financial markets. The analysis of the Türkiye covers the period 1980-2020. According to the test results, a long-run relationship exists between the variables, taking into account sharp (Gregory-Hansen) and soft (Fractional Frequency FADL) breaks. Long-run elasticities indicate that financial institutions have a greater impact on growth than financial markets in the sharp break model. In the soft-break model, similar effects are observed, but the effect of financial markets is insignificant. Based on the results of the frequency-domain causality test, there is a one-way causal relationship from financial institutions and financial markets to economic growth, as well as from financial markets to institutions. These findings support the supply-leading hypothesis and suggest that enhancing financial markets and institutions can foster economic growth. These findings necessitate the implementation of certain policies in the financial sector to promote economic growth. Expanding the range of financial products and services can increase competition among financial institutions. The efficiency of financial institutions should be increased through digitalization and technological developments in financial markets. In order to reduce the cost of funds, interest rates need to be lowered to appropriate levels.

Keywords: Financial Development, Economic Growth, Fractional Frequency Fourier ADL, Frequency Domain Causality Test

Kümeleme Analizi İle Türkiye ve AB Ülkelerine Gelen Doğrudan Yabancı Sermaye Yatırımlarının Karşılaştırılması

Prof. Dr. Dilek Altaş Karaca ¹ Prof. Dr. Özlem Taşseven ² Dr. Öğr. Üyesi Turgut Ün ³

¹Marmara Üniversitesi / İktisat Fakültesi, Ekonometri Bölümü, dilekaltas@marmara.edu.tr, ORCID: 0000-0001-5103-9018

² Marmara Üniversitesi / İktisat Fakültesi, Ekonometri Bölümü, ozlem.tasseven@marmara.edu.tr, ORCID: 0000-0002-3759-5074

³ Marmara Üniversitesi / İktisat Fakültesi, Ekonometri Bölümü, turgutun@marmara.edu.tr, ORCID: 0000-0002-7660-1510

Özet: Çalışmanın amacı, doğrudan yabancı sermaye yatırımları açısından Türkiye ve AB ülkelerinin benzerlik ve farklılıklarının incelenmesidir. Verilerin analizinde çok değişkenli istatistiksel tekniklerden Kümeleme Analizi kullanılmış, 2010 ve 2022 yılları karşılaştırılmıştır. Karşılaştırmada sadece ekonomik değişkenler ele alınmıştır. Analizde kullanılan değişkenler GSYİH, ekonomik büyüme, ülkelere gelen doğrudan yabancı sermaye miktarı, işsizlik, enflasyon oranları, ticari açıklık, lojistik performans indeksi, beşeri sermaye ve finansal gelişmişliktir.

Kümeleme analizi birimlerin ya da değişkenlerin birbirlerine benzerliklerine göre gruplara veya kümelere ayrılmasında kullanılan bir yöntemdir. Analizde n gözlemin (birim) ve p değişkenin olduğu bir veri setinde benzerliklerine göre bazen birimler, bazen değişkenler, bazen de her ikisi birlikte gruplandırılmaktadır. Analiz sonucunda oluşturulacak kümeler bakıldığında aynı kümede yer alan birimler belirlenen kritere göre birbirlerine daha fazla benzerken, farklı kümelerdeki birimler daha az benzerlik göstereceklerdir. Yapılan analiz sonucunda oluşturulacak kümeler içinde homojenlik artırılırken, kümeler arasında azaltılmaktadır.

Çalışmada 2010 ve 2022 yılına ait verilerle uygulanan kümeleme analizi sonucunda elde edilen bulgular değerlendirilerek ülkeler arasındaki benzerlik ve farklılıklar ortaya konmuştur.

Anahtar Kelimeler: Doğrudan Yabancı Sermaye Yatırımları, AB ve Türkiye için Temel Ekonomik Büyüklükler, Kümeleme Analizi.

Marka Güveninin, Halkla İlişkiler Faaliyetlerine Yönelik Müşteri Algısı İle Müşteri Sadakati Arasındaki İlişkideki Düzenleyici Rolünün İncelenmesi: Bankacılık Sektöründe Bir Uygulama

Dr. Ecehan Turgut¹

¹Serbest Araştırmacı, ecehanturgut@hotmail.com, ORCID: 0000-0002-2087-0367

Özet: Bankalar kamuoyunun güvenini kazanarak faaliyetlerini gerçekleştirmeyi amaçlamaktadırlar. Bunun için bankalar halkla ilişkiler faaliyetlerine önem vermektedirler. Bankalar, halkla ilişkiler faaliyetleri sayesinde müşteri talep ve beklentilerini anlayabilmekte ve karşılayabilmektedirler. Bu sayede kamuoyunun güvenini kazanmaktadırlar. Bu bağlamda bankacılık sektöründe, halkla ilişkiler faaliyetleri ile müşteri sadakati ve müşteri güveni sağlamaya çalışılmaktadır. Bu çalışma bankacılık sektöründe, halkla ilişkiler algısı ve müşteri sadakati arasındaki ilişkide marka güveninin moderatör (düzenleyici) etkisinin olup olmadığının tespit edilmesi amacıyla yürütülmüştür. Bildiride bankacılık sektöründeki halkla ilişkiler algısı için gelecek araştırmalara rehberlik edecek teorik bir çerçeve önerilmiştir. Çalışma verileri banka müşterilerine çevrimiçi anket soruları yöneltilerek elde edilmiştir. Veriler çevrimiçi olarak Google dokümanlar aracılığı ile toplanmıştır. Araştırma verilerinin analizi için regresyon analizi kullanılmıştır. Çalışma kapsamında bankalarda kullanılan, halkla ilişkiler algısının müşteri sadakati üzerindeki etkisinin önemi ortaya konmaya çalışılacaktır. Ayrıca çalışmada müşteri sadakatinin bankacılık sektörü için önemli olduğunun, bunun için halkla ilişkiler departmanlarının ve marka güveni yaratmanın önemi üzerinde durulacaktır.

Anahtar Kelime: Halkla İlişkiler, Marka Güveni, Müşteri Sadakati, Bankacılık

Abstract: Banks aim to realize their activities by gaining the trust of the public. For this purpose, banks attach importance to public relations activities. Banks are able to understand and meet customer demands and expectations through public relations activities. In this way, they gain the trust of the public. In this context, customer loyalty and customer trust are tried to be ensured through public relations activities in the banking sector. This study was conducted to determine whether brand trust has a moderating effect on the relationship between public relations perception and customer loyalty in the banking sector. The paper proposes a theoretical framework to guide future research on the perception of public relations in the banking sector. The study data were obtained by asking online survey questions to bank customers. Data were collected online through Google documents. Regression analysis was used to analyze the research data. Within the scope of the study, the importance of the impact of the perception of public relations used in banks on customer loyalty will be tried to be revealed. In addition, the study will emphasize the importance of customer loyalty for the banking sector and the importance of public relations departments and creating brand trust.

Key Words: Public Relations, Brand Trust, Customer Loyalty, Banking

Türkiye’de Çam Balının Ürün İhtisas Borsasında İşlem Görmesine İlişkin Tutum ve Değerlendirmeler

Dr. Emre GÖKSU¹

Prof. Dr. Gamze SANER²

¹ Ege Ormancılık Araştırma Enstitüsü Müdürlüğü, goksuemre@hotmail.com, ORCID: 0000-0002-1205-5872

² Ege Üniversitesi, Ziraat Fakültesi, Tarım Ekonomisi Bölümü, gamzesaner@gmail.com, ORCID: 0000-0002-2897-9543

Özet: Bu çalışmada dünyanın en büyük çam balı üreticileri arasında yer alan Türkiye’de çam balının ürün ihtisas borsasında işlem görmesi ve sürdürülebilir bir işleyiş modeli için gerekli koşulların analiz edilmesi amaçlanmıştır. Çalışma kapsamında Türkiye’deki bal sektörü paydaşlarının çam balı piyasası ve çam balının ürün ihtisas borsasında işlem görmesine yönelik tutumları belirlenen değişkenlere göre ortaya konulmuştur. Birincil veriler çam balı üretiminin en yoğun olduğu Muğla, Aydın ve İzmir illerinde sektörün ana paydaşlarını oluşturan arı yetiştiricileri birlikleri, ticaret borsası ve firma yetkilileri olmak üzere toplamda 73 kişi ile yüz yüze yapılan anketlerden elde edilmiştir. Tutumların belirlenmesinde beşli Likert tipi ölçek kullanılmış ve saha çalışmasından elde edilen özgün veriler temel istatistiki yöntemler ile analiz edilmiştir. Sektör paydaşlarının çam balı piyasası ile ilgili en çok katıldığı önermeler pazar yapısının derinleşmesine ihtiyaç olduğu, kayıt dışı gerçekleşen ticaret, piyasanın sağlıklı bir şekilde işleyişini sağlayan bir sistemin olmayışı ve çam balının teminat gösterilerek bankalardan kredi çekilebilmesine olanak tanınması olarak belirlenmiştir. Ürün ihtisas borsasına ilişkin değerlendirmelerde ise borsa işleyiş ile ilgili mevzuatın yeterli düzeyde bilinmemesi ayrıca birbirinden habersiz ve küçük ölçekli çok sayıda arıcılık işletmesinin bulunması ilk sıralarda yer alan sorunlardır. Çam balının ürün ihtisas borsasına dâhil edilmesi büyük ölçüde bu borsanın uygulayacağı politikalara ve düzenlemelere bağlı olmaktadır. Bununla birlikte yapılan değerlendirmeler Türkiye’nin çam balı üretimindeki liderliği, arz ve talepteki belirsizliklerin neden olduğu fiyat istikrarsızlığı, ürünü standartlaştırmanın mümkün olması, saklanabilir ve kolay teslim edilebilme özellikleri dikkate alındığında çam balının ürün ihtisas borsasında işlem görebileceği yönünde olmuştur.

Anahtar Kelimeler: Çam balı piyasası, fiyat istikrarsızlığı, sermaye yetersizliği, ürün ihtisas borsası, Türkiye

Yenilenebilir Enerji, Beşeri Sermaye, Enerji Verimliliği ve CO2 Emisyonu İlişkisi: Türkiye Örneği

Öğr. Gör. Dr. Funda DURGUN¹

¹Dicle Üniversitesi, İİBF, İktisat Bölümü, funda.uncu@dicle.edu.tr ORCID: <https://orcid.org/0000-0001-7254-227X>

Özet: Antropojenik faaliyetlerle artan sera gazı salınımı iklim değişikliğine neden olup çevre sorunlarını kritik seviyeye taşımıştır. Bu nedenle çevresel bozulmanın ekonomik büyüme başta olmak üzere çevresel bozulmaya neden olabilecek faktörlerle ilişkisinin anlaşılması önemli ve zorunlu hale gelmiştir. Bu çalışmada beşeri sermaye, yenilenebilir enerji tüketimi, ekonomik büyüme ve birincil enerji yoğunluğuyla ifade edilen enerji verimliliğinin çevresel bozulmaya etkisi incelenmiştir. Analiz dönemi Türkiye'nin 1965-2019 yılları arasını kapsamaktadır. Açıklayıcı değişkenlerden sadece enerji yoğunluğunun asimetrik etkisi anlamlı bulunduğu için NARDL modelinde diğer değişkenler simetrik olarak dahil edilmiştir. Sınır testi sonuçlarına göre değişkenler arasında eşbütünleşme ilişkisi bulunmaktadır. Yenilenebilir enerji ve beşeri sermaye çevre kalitesini arttırırken, büyüme azaltmaktadır. Ancak beşeri sermayenin etkisi anlamsızdır. Birincil enerji yoğunluğunda ise pozitif şokların çevre kirleticisi etkisi negatif şoklardan yüksektir. Değişkenler arasındaki nedensel bağlantılar VECM'e dayalı Granger nedensellik testi ile incelenmiştir. Kısa ve uzun dönemde tüm değişkenlerden beşeri sermayeye doğru ve uzun dönemde tüm değişkenlerden karbon emisyonuna doğru nedensellik ilişkisi bulunmaktadır. Kısa dönemde yenilenebilir enerji ve beşeri sermaye ilişkisi çift yönlüdür. Bu sonuçlara göre, çevre kalitesinin yükselmesi için yenilenebilir enerjilere ağırlık verilmesi ve enerji kullanımında verimliliğin sağlanması gerekmektedir. Enerji yoğunluğundaki negatif şokların karbon emisyonunu düşürmemesi birincil enerji tüketiminde fosil yakıtların oranının yüksek olmasından kaynaklanmaktadır. Ayrıca beşeri sermaye yatırımları temiz enerji tüketimini arttırırken temiz enerji kullanımındaki artış da beşeri sermaye birikimini arttırmaktadır.

Anahtar Kelimeler: Yenilenebilir Enerji, Beşeri Sermaye, Enerji Verimliliği, CO2 Emisyonu, NARDL

The Relationship Between Renewable Energy, Human Capital, Energy Efficiency and CO2 Emissions: Evidence from Türkiye

Abstract: Increasing greenhouse gas emissions due to anthropogenic activities have caused climate change and brought environmental problems to a critical level. Therefore, it has become important and imperative to understand the relationship between environmental degradation and factors that may cause environmental degradation, especially economic growth. This study examines the impact of human capital, renewable energy consumption, economic growth and energy efficiency (primary energy intensity) on environmental degradation. The study period covers the period from 1965 to 2019 in Türkiye. Since only the asymmetric effect of energy intensity was found to be significant, other variables were included symmetrically in the NARDL model. According to the bounds test results, there is a cointegration relationship between the variables. Renewable energy and human capital improve environmental quality, while economic growth reduces it. However, the impact of human capital is not significant. Positive shocks to primary energy intensity are more polluting than negative shocks. The causal links between the variables are analyzed with the Granger causality test based on VECM. There is a causal relationship from all variables to human capital in the short and long run while there is a causal relationship from all variables to carbon emission in the long run. In the short run, the causal link between renewable energy and human capital is bidirectional. According to these results, in order to improve environmental quality, renewable energies should be prioritized and efficiency in energy use should be ensured. The fact that negative shocks to energy intensity do not reduce carbon emissions is due to the high proportion of fossil fuels in primary energy consumption. Moreover, while human capital investments increase clean energy consumption, the increase in clean energy use increases human capital accumulation.

Keywords: Renewable Energy, Human Capital, Energy Efficiency, CO2 Emissions, NARDL

Almanya Litvanya İlişkilerinin Yeni Boyutu: Askeri İşbirliğinden Güvenlik Ortaklığına Uzanan Yol

Dr. Öğr. Üye. Oktay Hekimler¹

¹Tekirdağ Namık Kemal Üniversitesi Üniversite / Sosyal Bilimler MYO, ohekimler@nku.edu.tr, ORCID: 0000-0002-1498-6283

Özet: Almanya ve Litvanya son yıllarda özellikle güvenlik ve askeri alanlarda giderek daha sıkı bir işbirliği içinde olduklarını ortaya koymuşlardır. Litvanya günümüzde hem Baltıkların hem de NATO Kuzey Kanadının kilit aktörlerinden biridir. Ülke son derece hassas bir jeo stratejik konuma sahip olup bir tarafta Kalingrad, diğer tarafta Beyaz Rusya ile sınırdaş olup Rusya'nın batı askeri sahası ile doğrudan temas halindedir. Aynı zamanda Ukrayna'nın AB ve NATO üyelik sürecine sahip çıkan Litvanya Rusya'ya karşı taviz vermez politikaların temsilcilerinden biridir. Yaşadığı geleneksel Rusya tehdidi, AB üyesi ortakları ve Almanya ile işbirliğine etki ederken, Litvanya'ya göre Ukrayna savaşı Rusya'nın saldırgan potansiyelini yalnızca geçici bir süre için kısıtlamış ancak Moskova bölge güvenliğini tehdit etmeye devam edecektir. Bu çerçevede Litvanya dış ve güvenlik politikasında öne çıkan üç faktör: Ukrayna'yı desteklemek, Rusya'nın saldırgan tutumunu engellemek, Litvanya'nın direnç ve gücünü değişen jeopolitik çevrede artırmak olmuştur. Bölgede ciddi bir askeri varlık sergileyen Almanya ile işbirliğini artırmak da bu nedenle Litvanya için önem arz etmektedir.

Buna karşılık Litvanya ile ilişkilerin geliştirilmesi Almanya'ya da çok yönlü fayda sunmaktadır. Alman Federal ordusunun buradaki askeri varlığı, bölgenin güvenli yönünde verilen destek kadar Almanya'ya güvenilir ve ittifakın gerektirdiği sorumlulukları almaya hazır bir güvenlik ortağı olduğunu göstermek imkanını sunmaktadır. Benzer şekilde Litvanya ile geliştirilen işbirliği Alman dış politikasının bölgede daha fazla kabul görmesine, Almanya'nın geçmişte izlediği Doğu ve Rusya Politikasına kuşku ile bakan Polonya ve Baltık ülkelerinin olumsuz Almanya algısının kırılmasına imkan sağlamaktadır. Nihayetinde Almanya bu şekilde Rusya'ya bölge ülkelerinin egemenliği ve toprak bütünlüğü söz konusu olduğunda üzerine düşen sorumluluğu yerin getirmeye hazır olduğunu gösterebilmektedir. Ancak Almanya ve Litvanya arasındaki bu işbirliği savunma ve güvenlik politikası dışında sıkı bir politik diyalog ve işbirliği gerektirmektedir. Bu çerçevede Almanya ile Baltık ülkelerini hatta Polonya'yı bir araya getirecek yeni işbirliği arayışlarının hem bölge hem Avrupa güvenliği ve geleceği için önemli bir katkı sağlayabilecektir.

Almanya ve Litvanya arası işbirliğinin nasıl şekillendiği, bunun ikili ve çok taraflı ilişkilere nasıl yansıdığını ortaya koymaya çalışan bu çalışma, Rusya'nın 2014 sonrası artan saldırgan tutumu sonrasında Avrupa güvenlik ve dış politikasındaki yeni arayışları görmek, bu yönde üye ülke ve ortaklarının geliştirdikleri alternatifler değerlendirmek imkanı da sunmaktadır.

Anahtar Kelimeler: Almanya, Litvanya, Avrupa Birliği, Baltıklar, Güvenlik Politikası.

The New Dimension of Germany-Lithuania Relations: From Military Cooperation to Security Partnership

Abstract: In recent years, Germany and Lithuania have demonstrated an increasingly close co-operation, especially in the security and military fields. Lithuania is nowadays one of the key actors both in the Baltics and in the NATO North Wing. The country occupies a highly sensitive geo-strategic position, bordering Kalingrad on one side and Belarus on the other and in direct contact with Russia's western military space. At the same time, Lithuania, which supports Ukraine's EU and NATO accession process, is one of the representatives of uncompromising policies towards Russia. While the traditional Russian threat affects its co-operation with its EU partners and Germany, Lithuania believes that the Ukrainian war has only temporarily limited Russia's aggressive potential, but Moscow will continue to threaten regional security. In this framework, the three factors that stand out in Lithuania's foreign and security policy are: supporting Ukraine, preventing Russia's aggressive behaviour, and increasing Lithuania's resilience and power in a changing geopolitical environment. Therefore, it is important for Lithuania to increase cooperation with Germany, which has a serious military presence in the region.

On the other hand, the development of relations with Lithuania also offers multifaceted benefits for Germany. The military presence of the German Bundeswehr there, as well as the support for the security of the region, allows Germany to show that it is a reliable security partner, ready to take the responsibilities required by the alliance. Similarly, the cooperation with Lithuania helps to increase the acceptance of German foreign policy in the region and to overcome the negative perception of Germany in Poland and the Baltic states, which have been sceptical of Germany's Eastern and Russian policy in the past. Ultimately, in this way, Germany can show Russia that it is ready to fulfil its responsibilities when it comes to the sovereignty and territorial integrity of the countries in the region. However, this cooperation between Germany and Lithuania requires a close political dialogue and cooperation beyond defence and security policy. In this framework, the search for new co-operation that would bring Germany and the Baltic states and even Poland together could make a significant contribution to the security and future of both the region and Europe.

This study, which tries to reveal how the cooperation between Germany and Lithuania is shaped and how this is reflected in bilateral and multilateral relations, also offers the opportunity to see the new searches in European security and foreign

policy after Russia's increasingly aggressive attitude after 2014 and to evaluate the alternatives developed by member states and partners in this direction.

Keywords: Germany, Lithuania, European Union, Baltics, Security Policy,

Son Düzenlemeler Işığında Türk Vergi Hukukunda Enflasyon Düzeltmesinin Uygulanabilirliği Üzerine Bir Çalışma

Dr. Öğr. Üyesi Selçuk TEKİN¹

Dr. Öğr. Üyesi Aykut TAVŞANCI²

¹Trakya Üniversitesi / İktisadi ve İdari Bilimler Fakültesi, Maliye Bölümü, selcuktekin@trakya.edu.tr, ORCID: 0000-0003-2725-0651

²Trakya Üniversitesi / İktisadi ve İdari Bilimler Fakültesi, Maliye Bölümü, aykuttavsanci@trakya.edu.tr, ORCID: 0000-0002-5796-5888

Özet: Kovit-19 sonrası enerji fiyatlarındaki gevşemeler, tüketici hassasiyetleri ve farkındalık düzeyinin artışı ile Çin'in yeniden ticarete açılmasıyla bir nebze rahat nefes alan dünya ekonomisi bu kez barındırdığı yeni riskler sebebiyle küresel ölçekte bir enflasyonist ortamla karşı karşıya kalmıştır. Bu kapsamda üretim-tüketim dengesizliği, iklimsel değişikliğin tarımsal çıktılara olumsuz etkisi ile özellikle Rusya ve Ukrayna arasında yaşanan çatışmaların önemli risk unsurları olduğu görülmektedir. Küresel enflasyon oranlarındaki artış eğiliminin Türkiye'ye de etkisi olduğuna kuşku bulunmamaktadır. Bu kapsamda Ağustos 2023 ayı itibarıyla yıllık %58,94 oranıyla Türkiye, G20 ülkeleri arasında Arjantin'den (%124) sonra en yüksek enflasyon oranına sahip ikinci ülke olmuştur. Dünya genelinde ise Türkiye; Venezuela (%398), Lübnan (%252), Suriye (%139), Arjantin (%124), Zimbabve (%77,2) ve Sudan'ın (%63,3) ardından en yüksek enflasyon oranına sahip yedinci ülke konumundadır. OECD'nin Ekonomik Görünüm Raporu'na göre yüksek enflasyonun orta vadede devam edeceği öngörülmektedir. Bununla birlikte Orta Vadeli Planla da Türkiye'de yılsonu enflasyonun %65'ler düzeyinde gerçekleşebileceği belirtilmektedir. Bu durumda ülkemizde yüksek enflasyon gerçeğinden hareketle işletmelerin mali tablolarının yeniden düzenlenmesi gereği doğmaktadır. Nitekim 2022 yılı sonu itibarıyla 213 sayılı Vergi Usul Kanunu'nun mükerrer 298'inci maddesinde yer alan enflasyon düzeltmesi koşulları, yaşanan enflasyon sebebiyle yeniden oluşmuştur. Ancak yeniden oluşan enflasyon düzeltme hükümlerinin karmaşıklığı ile işletmelerin bu duruma hazırlıksız olmaları sebebiyle bu uygulama çeşitli yasal düzenlemelerle 2023 yılı sonuna ertelenmiş ve geçiş hükümleri ihdas edilerek mali tabloların kısmen de olsa gerçek duruma irca edilebilmeleri seçenekleri oluşturulmuştur. Bu defa 2023 yılı sonuna yaklaşılrken artık bilanço esasına göre defter tutan tüm mükellefler mali tablolarını yüksek enflasyondan arındırarak yeniden belirleyeceklerdir. Yeni bir yasal düzenleme olmaması durumunda 2023 yılı sonunda yapılacak enflasyon düzeltmesi işlemlerinin vergisel sonuçları 2024 ve takip eden yıllarda ortaya çıkabilecektir.

Çalışmamızda enflasyon düzeltmesi hükümlerinin mevcut düzenlemeler çerçevesinde uygulanabilirliği tartışılmıştır.

Anahtar Kelimeler: Vergi Usul Kanunu, Enflasyon Düzeltmesi, Değerleme

Kosova'nın Yeniden Yapılandırılması ve Devletleşme Sürecinde Kurumsallaşma Aşamaları

Doç. Dr. Sibel Akgün¹

¹Sakarya Üniversitesi, SBF, Uluslararası İlişkiler, sgulcan@sakarya.edu.tr, ORCID: 0000-0002-8290-4227

Özet: Kosova 2008 yılında uluslararası sisteme bağımsız aktör olarak katılmış bir devlettir. Bağımsızlık öncesi uluslararası himaye yönetimi altında bulunan Kosova, 2008 yılından sonra da devlet olmanın gerekliliklerini sağlama noktasında yetersiz kalmıştır. Devlet olmak için gerekli olan kurucu şartları yerine getiren Kosova devleti uygulamada sorunlar yaşamaktadır. Bu nedenle ülkenin yeniden inşası ve merkezi kamu otoritesinin oluşturulması ile kurumsallaşması noktasında destek almaya devam etmektedir. Tanınma sorunu da yaşayan Kosova devleti bu noktada uzun vadede gerçekleşecek bir devlet yapılanması içindedir. Devletin sınırları içinde yaşanmaya devam eden lokal çatışmalar ve kamu kurum ile kuruluşlarının teşekkülü (eğitim, sağlık, güvenlik, adalet, yerel yönetimler gibi) noktasında tecrübesizlikler yeniden yapılandırmanın devam etmesine neden olmuştur. Özellikle kamusal kurumsallaşma konusunda yaşanan sorunlar bugün de devam etmektedir. Çalışmada Kosova'nın 2008 sonrası kamu otoritesinin ve yapısının oluşumu ve geldiği aşama kurumsallaşma teorilerinden Philip Selznick'in doğal sistem modeli ile ele alınacaktır. Bu amaçla nitel araştırma yöntemlerinden vaka analizi kullanılacaktır. Çalışmada sonuçlar yorumsamacı yöntem ile değerlendirilecektir.

Anahtar Kelimeler: Kosova, devlet inşası, yönetim ve kurumsallaşma.

Afetle Mücadele Unsuru Olarak Sosyal Girişimcilik

Dr. Öğr. Üyesi Yasin AKKUŞ¹

¹Trakya Üniversitesi, Uzunköprü Meslek Yüksekokulu, Yönetim ve Organizasyon Bölüm,
yasinakkus@trakya.edu.tr, ORCID: 0000-0003-3225-4251

Özet: Sosyal faydanın sadece üst yapıların görevi olduğuna dair algı 1980’lerden sonra bir paradigma değişimine uğramıştır. Özellikle uluslararası kuruluşlar ya da hükümetler tarafından yeterince ilgilenilmeyen alanlarda, sosyal faydanın tabandan üretilmesi gerektiği fikri giderek artmaya başlamıştır. Bu kapsamda sosyal faydanın sağlanması için kaynağını kendi üreten yenilikçi iş modelleri sunan sosyal girişimler öne çıkmaya başlamıştır. Sosyal girişimciler, kamu kurum ve kuruluşlarının el atmadığı ya da yetersiz kaldığı sosyal konulara eğilmekte ve bunun maddi kaynağını da kendisi sağlamaktadır. Sosyal girişimcilerin sosyal faydayı önceleyen bakış açıları ekonomik kazanç odaklı girişimleri ve işletmeleri de etkilemiş kurumsal sosyal sorumluluk kavramının gelişiminde hızlandırıcı görevi görmüştür. Artık sosyal girişimlerin hükümetlerin başa çıkamadığı büyüklükteki olaylarda söz sahibi olmaya başladığı göze çarpmaktadır. Sosyal girişimlerin afetlerde oynadığı etkili roller nedeniyle afet odaklı sosyal girişimcilik kavramından bahsetmek mümkün hale gelmiştir. Bu çalışmada afet odaklı sosyal girişimlerin dünyada ve ülkemizdeki geçmişi ele alınacaktır. Ayrıca sosyal girişimcilerin afetlerle mücadelede oynadığı roller incelenecek ve afet odaklı sosyal girişimciliğin geleceğine dair bir perspektif ortaya konulmaya çalışılacaktır.

Anahtar Kelimeler: Afet, Sosyal Girişimcilik, Afet Yönetimi, Stratejik Yönetim

Abstract: The perception that social benefit is only in the role of superstructures has undergone a paradigm change after the 1980s. Especially in areas that are not sufficiently addressed by international organizations or governments, the idea of grassroots use of social benefit has begun to increase. In order to sustain the social benefit of this potential, social enterprises that offer self-developed advanced business models have begun to come to the fore. Social entrepreneurs engage in social work that public institutions and organizations do not undertake or are insufficient, and they provide the financial products of this work themselves. Social entrepreneurs' perspectives prioritizing social benefit have influenced economic gain-oriented initiatives and businesses, and corporate social responsibility processes have acted as accelerators. It is noticeable that social formations have begun to have a say in events of a magnitude that the government cannot cope with. Due to the impressive roles social enterprises play in disasters, it has become possible to talk about the concept of disaster-focused social entrepreneurship. The history of these effective focused social enterprises in the world and today can be discussed. Additionally, the roles played by social entrepreneurs in combating disasters will be examined and a perspective on the future of disaster-focused social entrepreneurship will be tried to be put forward.

Keywords: Disaster, Social Entrepreneurship, Disaster Management, Strategic Management

Kontrol Odağı, Şans Faktörü ve Girişimcilik Eğitiminin Üniversite Öğrencilerinin Girişimcilik Eğilimindeki Rolü

Dr. Öğretim Üyesi Buket AKDÖL¹

¹İstanbul Üniversitesi, İktisat Fakültesi, İşletme Bölümü, Yönetim ve Organizasyon Anabilim Dalı,
bakdol@istanbul.edu.tr

Özet: Kişilik özelliklerinin girişimcilik eğilimindeki rolü üzerine yapılan çalışmalar, girişimcilik eğilimi yüksek bireylerde iç kontrol odağının, dış kontrol odağına görece daha yüksek olduğunu ileri sürmektedir. Bir diğer deyişle girişimcilik eğilimi yüksek bireylerin kendi kaderlerini belirlemede kendi güç ve potansiyellerine inanma eğilimlerinin, kendileri dışındaki güçleri (kader ya da şans gibi) dikkate alma eğilimlerinden daha yüksek olduğu ileri sürülmektedir. Ancak özellikle çıkış stratejisi ile iş kuran seri girişimcilerin, uygun koşullar altında girişimlerini büyütmek ve çıkış stratejisinden yararlanmak için şans faktörünü de dikkate aldıkları, girişimcilik ekosistemindeki pek çok rol modelin açıklamaları ve hayat hikayelerinde dikkat çekmektedir. Şans faktörüne inanma düzeyi arttıkça bireyin dış kontrol odağının daha yüksek olduğu bilinmekte ve bu durum şans faktörüne inanma düzeyinin girişimcilik eğilimi üzerindeki rolünün ne olduğu araştırma sorusunu ortaya çıkarmaktadır.

Girişimcilik eğitimi almak, iş kurma ve geliştirme, çeşitli stratejilerle rekabet avantajı elde gibi konularda, öğrencilerin en azından kavramsal düzeyde yetkinlikler elde etmelerine sebep olmaktadır. Öğrenciler etkili bir girişimci olmak için sahip olmaları gereken özellikler konusunda bilgilenmektedirler. Bu nedenle öğrencilerin girişimcilik eğitimi almaları, bireysel hayatlarında şans faktörüne inanma düzeyleri ile girişimcilik eğilimleri göstermeleri arasındaki ilişkide bir düzenleyici rol oynayabilmektedir.

Bu çalışmanın amacı üniversite öğrencilerinin şans faktörüne inanma düzeyleri ve girişimcilik eğilimleri arasındaki ilişkiyi irdelemektir. Çalışmada ayrıca öğrencilerin girişimcilik eğitimi görmelerinin ve bazı demografik özelliklerin (yaş, cinsiyet, ailede daha önce girişimcilik deneyiminin olması), şans faktörüne inanma ve girişimcilik eğilimi arasındaki ilişkide düzenleyici rolünü saptamak da istenmektedir. Çalışmada 'şans faktörü' alt değişkeni üzerinden girişimcilerin bireysel özelliklerinde içsel ve dışsal kontrol odakları yeniden tartışmaya açılmaktadır. Bu amaçla İstanbul'daki üniversitelerinin İktisat ve İşletme bölümleri son sınıf öğrencilerinden çevrimiçi yöntemle veri toplanmaktadır. GRrRşRmcRIRk eğRIRmRnR ölçmek RçRn Yılmaz ve Sünbül tarafından gelRştRrRlen "ÜnRversRte ÖğrencRlerRne YönelRk GRrRşRmcRIRk ÖlçeğR" kullanılmaktadır. Şans faktörüne inanma değişkenini ölçmek için Rotter (1966) tarafından geliştirilen ve Dağ (1991) tarafından uyarlanan 'İç ve Dış Kontrol Odağı Ölçeği'nin 'Şans Kontrolü' ile 'Şans ve Kişilerarası Dış Kontrol' alt boyutlarındaki ifadeler kullanılmaktadır.

Bu çalışmayla girişimcilik literatüründe yaygın bir kabule dönüşmüş, belirli kişilik özellikleri ile girişimcilik eğilimi arasındaki ilişki tartışmaya açılmaktadır. Literatürdeki genel kanı girişimcilik eğilimi ile iç kontrol odağı arasındaki pozitif ilişkidir. Ancak pek çok örnekte şans faktörü (bir dış kontrol odağı alt boyutu olarak) girişimcilik üzerinde etkili bir değişken olarak dikkat çekmektedir. İş modellerinin, sektörel çevrenin ve girişimcilerin demografik özelliklerinin hızla değiştiği günümüz iş dünyası bağlamında bu tartışmayı gündeme getirmek, ileri çalışmalar için yeni araştırma sorularının geliştirilmesine de zemin hazırlamaktadır.

Anahtar Kelimeler: Girişimcilik eğilimi, girişimcilik eğitimi, kontrol odağı

Keywords: Entrepreneurship, locus of control

Döngüsel Ekonomi ve COVID-19 Pandemisinin Etkileri*

Nijat HUSEYNOV¹

Doç. Dr. Meltem OKUR DİNÇSOY²

¹Trakya Üniversitesi / Sosyal Bilimler Enstitüsü, İktisat A.B.D., nijathuseynov1@gmail.com,

ORCID: 0009-0006-6694-5968

²Trakya Üniversitesi / İktisadi ve İdari Bilimler Fakültesi, İktisat Bölümü, meltemokurdincsoy@trakya.edu.tr,

ORCID: 0000-0002-8990-5409

Özet: Günümüzde, üstünde durulan en önemli konulardan birisi de kaynakların kıt olmasıdır. Ülkeler, bu kıt kaynakların daha verimli ve uzun vadede kullanılması için onları atık hâline getirmeden önce geri dönüştürüp yeni kaynak olarak kazandırmaya odaklanmaktadır. Söz konusu, kaynakların verimsiz kullanılması ve ömrünün kısa tutulması daha fazla atığın oluşmasına sebep olmaktadır. Bu sorunun akabinde çözüm önerisi olarak Döngüsel Ekonomi Modeli doğmaktadır. Döngüsel Ekonomi Modeli, bir ürünü sadece bir aşamada değil, birden fazla aşamada farklı yöntemlerle geri dönüştürerek yeni bir kaynak olarak sunmaktadır. Geri dönüşümü gereken ürünün, geri dönüşümü sağlanamaz durumda ise en son aşama olan atık olarak değerlendirilmektedir. Ülkeleri ve ulusları daha da zor yaşam koşullarına sokan salgın hastalıklarının oluşturduğu epidemiler ve pandemilerdir. COVID-19 Pandemisi, 2019 yılı Aralık ayında ortaya çıktığı gibi gündemde olmaktadır. Diğer salgınlarda olduğu gibi sağlık problemleri oluşturmakla kalmamakta, aynı zamanda tek kullanımlık eldiven, maske ve diğer plastik atıkların sayısının büyük artışına neden olmaktadır. Bu artışların var olması halinde ise salgının daha da fazla yayılmaması için atık yönetimi ve geri kazanımına birçok kısıtlama getirilmektedir. Bu çalışma, Döngüsel Ekonominin COVID-19 Pandemisi sürecinde etkilendiği tarafları açıklamakta ve esas olarak atık yönetimi üzerindeki etkilerini araştırmaktadır. Çalışmada, Döngüsel Ekonomi için oluşan etkileri geri dönüşüm aşamalarından yola çıkarak değerlendirmeyi ve veriler üzerinden açıklamayı amaçlamaktadır. Çalışmadaki veriler 2016-2020 yılları arası verileri kapsamaktadır. Bu veriler, Avrupa Birliği İstatistik Kurumu ve Türkiye İstatistik Kurumu'ndan temin edilmiştir. Çalışma, 2016-2020 yılları arası atık yönetimi aşamalarının verilerinden yola çıkarak, Döngüsel Ekonominin bu süreçte olan işleyişine etkilerini kapsadığı için önem taşımaktadır.

Anahtar Kelimeler: Döngüsel Ekonomi, COVID-19 Pandemisi, Atık Yönetimi

Circular Economy and The Impacts of COVID-19 Pandemic

Abstract: Today, one of the most pressing concerns it addresses is the scarcity of resources. Countries should prioritize recycling and resource recovery over waste in order to use finite resources more efficiently in the long term. This is due to the inefficient use of resources and the reduction of their lifespan, which generates more waste. A Circular Economy Model is presented as a solution to this problem. The Circular Economy Model shows a product as a fresh resource by recycling it in several stages, rather than simply one. The product that must be returned is termed the final stage of waste if it cannot be returned. Diseases may trigger epidemics and pandemics, placing governments and nations in even more terrible situations. The COVID-19 pandemic, which appeared in December 2019, is on the agenda. As with previous epidemics, it does not only cause health issues but also significantly increases the quantity of single-use gloves, masks, and other plastic garbage. If these increases occur, there are several restrictions on waste management and recovery to prevent the disease from spreading further. The study highlights the aspects of the circular economy impacted by the COVID-19 pandemic process, focusing on waste management. This study aims to evaluate and explain the effects of recycling stages on the circular economy covering the years 2016-2020 and the data is applied from the European Community Statistical Office and the Turkish Statistical Institute. The study is significant because it examines the influence of the circular economy on the operation of this process, which is based on data from the waste management stages between 2016 and 2020.

Keywords: Circular Economy, COVID-19 Pandemic, Waste Management

* *Bu çalışma Trakya Üniversitesi, Sosyal Bilimler Enstitüsü, İktisat Anabilim Dalı, Tezli Yüksek Lisans programında Doç. Dr. Meltem Okur Dinçsoy danışmanlığında Nijat Huseynov tarafından hazırlanan “Değişen Dünyada Döngüsel Ekonomi ve COVID-19 Pandemisinin Etkileri” başlıklı yüksek lisans tezinden hazırlanmıştır.

Türkiye Ekonomisinde Bazı Vergi Türlerinin, Finansal Gelişmişlik Ve Ekonomik Büyüme İlişkisi Üzerine Bir Araştırma

Dr. F. Dila TAŞDEMİR¹

¹Bağımsız Araştırmacı, e-posta: fdilatasdemir@gmail.com, ORCID: 0000-0001-8440-7200

Özet: İnsanlığın varoluşundan bu yana tüm dünya ülkeleri ekonomik büyüme, mevcut büyüme oranını koruyabilme ve finansal kalkınma hedefleri doğrultusunda faaliyetlerde bulunmaktadır. Bu hedefin gerçekleştirilmesi farklı yöntemlerle mümkün olmakla birlikte bu çalışmada finansal gelişmişlik ve vergi gelirlerinin ekonomi üzerindeki etkileri incelenmiştir. Bu hedef doğrultusunda vergi geliri içerisinde en yüksek paya sahip olan mal ve hizmetler vergisi geliri ile ekonomik büyüme ve finansal gelişmişlik arasındaki ilişki Toda-Yamamoto Granger nedensellik testi ile araştırılmıştır. Yapılan analizler neticesinde ekonomik büyümeden mal ve hizmetler vergisi gelirine doğru tek yönlü bir nedensellik ve mal ve hizmetler vergisi gelirinden finansal gelişmişlik endeksine doğru tek yönlü bir nedensellik saptanmıştır.

Anahtar Kelimeler: vergi geliri, finansal gelişmişme, ekonomik büyüme, Toda-Yamamoto