Does More Inflation Mean More Female Labor Force Participation?: The Case of Turkey

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Abstract: This study evaluates the long-run association between inflation and female labor force participation rate in Turkey by using ARDL approach for a sample covering years from 1990 to 2019. Long-run analyses are conducted for two distinct measures of female labor force participation rate. As a result the decreasing effect of inflation on household's purchasing power, females may incline to participate more to labor force in order to make contribution to family budget. Therefore this study hypothesizes that inflation causes to higher female participations to labor force in the long-run in Turkey. Co-integration test results show that inflation and female labor force participation rate have a co-integration relationship and hence they move together in the long-run in Turkey. According to the long-run coefficient estimations, inflation possesses a positive statistically significant impact on female labor force participation rate in the long-run in Turkey and this finding confirms the validity of our hypothesis. Moreover, as can be deducted from diagnostic test results, our two distinct models do not suffer from any problem in terms of autocorrelation, heteroscedasticity, and model misspecification.

Key Words: Inflation, Female Labor Force Participation, ARDL.

Daha Fazla Enflasyon, Kadınların İşgücüne Daha Fazla Katılımı Anlamına Gelir mi?: Türkiye Örneği

Özet: Bu çalışma, 1990'dan 2019'a kadar olan yılları kapsayan bir örneklem için ARDL yaklaşımı kullanılarak Türkiye'de enflasyon ve kadınların işgücüne katılım oranı arasındaki uzun vadeli ilişkiyi değerlendirmektedir. Kadınların işgücüne katılım oranının iki farklı ölçümü için uzun vadeli analizler yapılmaktadır. Enflasyonun hanehalkının satın alma gücü üzerindeki azaltıcı etkisinin bir sonucu olarak, kadınlar aile bütçesine katkı sağlamak için işgücüne daha fazla katılma eğilimi gösterebilmektedir. Bu nedenle bu çalışma, enflasyonun Türkiye'de uzun vadede kadınların işgücüne katılımının artmasına neden olduğunu varsaymaktadır. Eşbütünleşme testi sonuçları Türkiye'de enflasyon ve kadın işgücüne katılım oranının eşbütünleşme ilişkisine sahip olduğunu ve dolayısıyla uzun dönemde birlikte hareket ettiklerini göstermektedir. Uzun dönem katsayı tahminlerine göre, Türkiye'de uzun dönemde enflasyonun kadınların işgücüne katılım oranı üzerinde istatistiksel olarak anlamlı pozitif bir etkisi vardır ve bu bulgu hipotezimizin geçerliliğini doğrulamaktadır. Ayrıca, tanısal test sonuçlarından da anlaşılacağı gibi, iki farklı modelimiz otokorelasyon, değişen varyans ve model yanlış belirleme açısından herhangi bir sorun yaşamamaktadır.

Anahtar Kelimeler: Enflasyon, Kadınların İşgücüne Katılımı, ARDL.

1. INTRODUCTION

In the current situation, the population consisting of the unemployed and the employed is defined as the labor force. The ratio of the labor factor, which is one of the production factors, to the working age population is expressed as the labor force participation rate. If this ratio is made over the female population, then the labor force participation rate of women will occur. Women's labor force participation rate is critical for developing countries to be among the developed countries, which is a higher category. One of the driving forces of concepts such as economic development and economic growth is the participation of women in the workforce. Lenchman and Kaur (2015), who examined the relationship between women's employment and economic development in 162 countries between 1990 and 2012, using panel data analysis; reveals that there is a significant relationship between economic development and women's employment. Kilinc (2015) examined women's employment and states that Turkey ranks at the bottom of the comparative studies of women's employment in the comparative studies of EU countries as well as international institutions such as ILO, United Nations, OECD and World Economic Forum. It draws attention to the need to increase women's employment, which is one of the economic indicators, for economic development. Yılmaz Şahin (2020), in his research, revealed that women's participation in the workforce has positive results in terms of economic development. Women's labor force participation in developing countries such as Turkey; It is highly affected by factors such as socio-cultural dynamics, demographic structure, education level of women

and the situation in the labor market. Women's participation in the labor market represents a much more valuable situation economically for themselves, their families and society.

The concept of inflation, which expresses the continuous increase in the general level of prices in an economy in a certain period; It stands before us as a much more chronic problem for developing countries. In developing countries such as Turkey, where the inflation problem has become chronic, it has become almost a necessity for women to enter the working life, that is, to be included in the workforce, especially for families living in big cities, where real wages decline and purchasing power weakens. Apart from the aforementioned economic reason, social, religious, etc., which increase or decrease the participation of women in the working day. There are other factors based on justifications. To make a rough classification of the factors affecting women's participation in the workforce; It can be classified as demographic factors such as education level, marital status, and macro and micro economic variables such as growth in the country's economy, inflation, problems in the labor market.

There have been significant social, political and economic changes around the world in the last few decades. Such changes have made the world population more aware of the challenges of the modern age. In this modern age, lifestyle and inflation have made the 'economic' situation a dominant factor in our lives. In addition, countries are in a race for economic growth and are taking advantage of all their resources. The workforce is a resource that directly contributes to economic growth. There has been a compositional change in the workforce, in the form of an increase in FLFP (Mehmood et al.,2015).

Contrary to this study, there are also studies stating that the inflation rate has no effect on women's employment (Demirtaş and Yayla, 2017), and that public expenditures do not have an effect on women's unemployment and inflation (Baskurt, 2020). In another study (Korkmaz and Alacahan, 2013), in the decision to participate in the labor market of women in Turkey; It has been concluded that factors such as wages, inflation, growth rate, unemployment rate are not directly effective and that the female workforce cannot be sufficiently integrated with the labor markets.

Koyuncu and Özen (2017) reveal in their empirical study that the diversity of religion, ethnicity and language in a country significantly and positively affects the level of FLFP in that country. Similarly, investigating the driving forces behind the labor flow (Mehmood et al., 2015), they draw attention to the fact that inflation is one of the important parameters affecting women's labor force participation.

Another result obtained within the scope of the study is that increases in the inflation rate have a positive effect on women's labor force participation. Although inflation is a phenomenon that economic policy struggles with, women who want to contribute to the family budget in cities where the cost of living is felt more intensely prefer to work than leisure time. This preference encourages the participation of female labor in the labor market. Wang (2019) discovers a positive relationship between inflation and women's participation in the labor market. He also cites the increased cost of living caused by inflation as a reason for women to put financial pressure on women and push them to bring more income to their households. Awan and Sadia (2018) point out that there is a positive relationship between economic growth, female labor force participation and consumer inflation, which attracts them to the labor market to meet their increasing needs. In the study of Sertçelik (2021); 1% unit increase in inflation rate, female population rate and growth rate reaches the conclusion that women's labor force participation rate increased by 0.06%, 40.18% and 0.23%, respectively.

Özer and Biçerli (2004) used panel data analysis in their study in which they revealed the reasons affecting women's employment in Turkey between 1877 and 2001. According to the results of this study, they showed that there is no significant relationship between women's labor force participation and variables such as inflation, growth rate and wages.

Özkök and Polat (2020) revealed the relationship between female labor force participation, GDP rate and inflation rate by examining the period between 1990 and 2018. In this analysis, whether there is a co-integration relationship between the variables was investigated with the Johansen co-integration test. According to the estimations at the end of the research, increases in economic growth and inflation rates lead to an increase in women's labor force participation. In addition, according to the empirical findings of the study, it is necessary to increase women's employment in order to sustain economic development in Turkey. Niemi and Lloyd (1981) argued in their study that the increase in female labor force participation is neither misleading nor temporary. They also revealed that inflation has an independent positive effect on women's labor force participation.

There are many empirical studies examining the effects of female labor force participation, namely female employment, on economic growth and inflation. Examples of some recent studies on women's employment and its effects on the economy are: Baliamoune-lutz (2007), Lahoti and Swaminathan (2013).

Koyuncu and Özen (2017) examines the relationship between religious, ethnic, linguistic and cultural diversity and women's labor force participation. Koyuncu et al., (2016) draws attention to the labor force participation of women from the perspective of labor productivity with an empirical study. Koyuncu and Özen (2018) discusses the female workforce with the parameters of civil freedom and freedom of the press. Yalçınkaya Koyuncu and Özen (2018) analyze poverty and women's labor force participation in Africa in their regional studies.

This study focuses on whether there is a link between inflation, which is one of the macroeconomic variables, and women's labor force participation. Therefore, this study assumes that inflation causes an increase in female labor force participation in Turkey in the long run. The test results show that inflation and female labor force participation rate in Turkey have a co-integration relationship and therefore they act together in the long run. In this study, inflation has a statistically significant positive effect on female labor force participation rate in Turkey in the long run, and this finding confirms the validity of our hypothesis.

2. DATA AND METHODOLOGY

This study evaluates the long-run nexus between inflation and female labor force participation (FLFP) rate in Turkey by using ARDL estimation framework for a sample covering years from 1990 to 2019. Females may tend to participate more to labor force due the fact that purchasing power of households sharply decreases under the condition of heavy inflation. In addition to that participating to labor force can be inevitable for females living in urban areas where living cost is quite higher than rural areas. We may observe this situation in Turkey since Turkey usually experiences two-digit numbers in inflation for a long period of time. Therefore this study hypothesizes that inflation leads to higher female participations to labor force in the long-run in Turkey. Two different FLFP rate measures are employed in our analyses, namely female labor force participation rate (FLFPR1) as of percentage of female population ages 15+ (modeled ILO estimate) and female labor force participation rate (FLFPR2) as of percentage of female population ages 15-64 (modeled ILO estimate). As of inflation indicator, we use GDP deflator (INFLATION). All series were compiled from WDI database of the World Bank. In our long-run analyses, we firstly conduct co-integration tests by employing ARDL boundary test to see if INFLATION, FLFPR1, and FLFPR2 variables move together in the long-run. For this purpose we estimated the ARDL models given below:

$$\Delta \text{FLFPR1}_t = \alpha_0 + \sum_{i=1}^{p} \gamma_i \Delta \text{FLFPR1}_{t-i} + \sum_{i=0}^{q} \beta_i \Delta \text{INFLATION}_{t-i} + \vartheta_0 \text{FLFPR1}_{t-1} + \vartheta_1 \text{INFLATION}_{t-1} + \varepsilon_t \quad (1)$$

$$\Delta \text{FLFPR2}_t = \alpha_0 + \sum_{i=1}^{p} \gamma_i \Delta \text{FLFPR2}_{t-i} + \sum_{i=0}^{q} \beta_i \Delta \text{INFLATION}_{t-i} + \vartheta_0 \text{FLFPR2}_{t-1} + \vartheta_1 \text{INFLATION}_{t-1} + \varepsilon_t \quad (2)$$

In the both equation above, long-run coefficients are represented by and ; short-run coefficients are given by and ; stands for first degree difference operator; shows the constant term of the model, and is white noise error term of the model.

After the implementation of co-integration analysis via ARDL boundary test, the following error correction models are estimated to get the estimated values of short-run and long-run coefficients:

$$\text{FLFPR1}_t = \lambda_0 + \sum_{i=1}^{p} \delta_i \Delta \text{FLFPR1}_{t-i} + \sum_{i=0}^{q} \theta_i \Delta \text{INFLATION}_{t-i} + \phi ECM_{t-1} + \varepsilon_t \quad (3)$$

$$\text{FLFPR2}_t = \lambda_0 + \sum_{i=1}^{p} \delta_i \Delta \text{FLFPR2}_{t-i} + \sum_{i=0}^{q} \theta_i \Delta \text{INFLATION}_{t-i} + \phi ECM_{t-1} + \varepsilon_t \quad (4)$$

As seen from Equation 3 and 4, and are the dynamic coefficients returning the model back to the balance in the long-run; represents error correction term in the model; shows adjustment speed bringing the series back to the long-run path in response to a shock occurred in the short-run. Also a statistically significant negative sign for the coefficient of adjustment speed must be obtained

3. EMPIRICAL RESULTS

In order to be able to apply ARDL boundary test for co-integration analysis, series must be stationary at no more than second differences. In other words series possessing integration order more than two cannot be used in ARDL boundary test. In that sense stationarity levels of series are checked by performing Augmented Dickey-Fuller (ADF) unit root test for three different models, (i.e., none, constant, and constant and trend models) where the null hypothesis claims the non-stationarity of series against to the alternative hypothesis asserts the stationarity of series. Unit root test results are reported in Table 1.

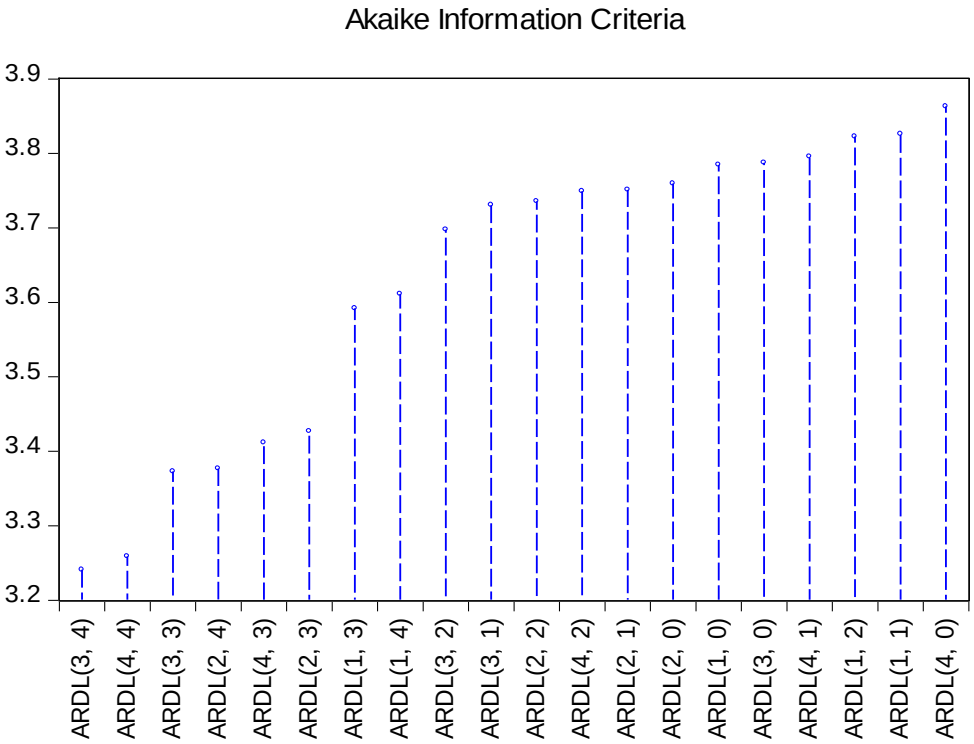
Table 1: ADF Unit Root Test Results

Variable	Model	Test Statistic (P-value)
INFLATION	None	1.744047*(0.9777)*
	Constant	1.608446 *(0.9992)*
	Constant&Trend	0.462143 *(0.9986)*
1. Difference of INFLATION	None	1.657149 *(0.9735)*
	Constant	0.591034 *(0.9870)*
	Constant&Trend	-0.793238 *(0.9551)*
2. Difference of INFLATION	None	-4.553639 *(0.0000)*
	Constant	-4.865268 *(0.0005)*
	Constant&Trend	-5.120142 *(0.0014)*
FLFPR1	None	-0.140153 *(0.6267)*
	Constant	-1.661898 *(0.4357)*
	Constant&Trend	-1.357760 *(0.8520)*
1. Difference of FLFPR1	None	-5.734817 *(0.0000)*
	Constant	-5.627755 *(0.0001)*
	Constant&Trend	-6.633310 *(0.0000)*
FLFPR2	None	0.104445 *(0.7080)*
	Constant	-1.559687 *(0.4855)*
	Constant&Trend	-1.245264 *(0.8814)*
1. Difference of FLFPR2	None	-5.482473 *(0.0000)*
	Constant	-5.390214 *(0.0001)*
	Constant&Trend	-6.621293 *(0.0000)*

ADF unit root test results in Table 1 point out that INFLATION variable is stationary at second difference and FLFPR1 and FLFPR2 variables are stationary at first difference. In other words, FLFPR1 and FLFPR2 variables are integrated order one (i.e., I(1)) and INFLATION variable is integrated order two (i.e., I(2)). Since our variables comply with the integration order requirement of ARDL boundary test of being integrated order of no more than two, we can now implement ARDL boundary test to investigate the co-integration relationship between INFLATION, FLFPR1, and FLFPR2 variables.

We decided on the optimal lag lengths for the models given in Equation 1 and 2 by utilizing AIC selection criterion and displayed the results of optimal lag selection in Graph 1 and 2. As implied by Graph 1 and 2, out of twenty models, ARDL(3,4) model is the optimal model and thus we perform our analyses via ARDL(3,4) model in both cases.

Graph 1: Lag Selection for the Model in Equation 1



Graph 2: Lag Selection for the Model in Equation 2

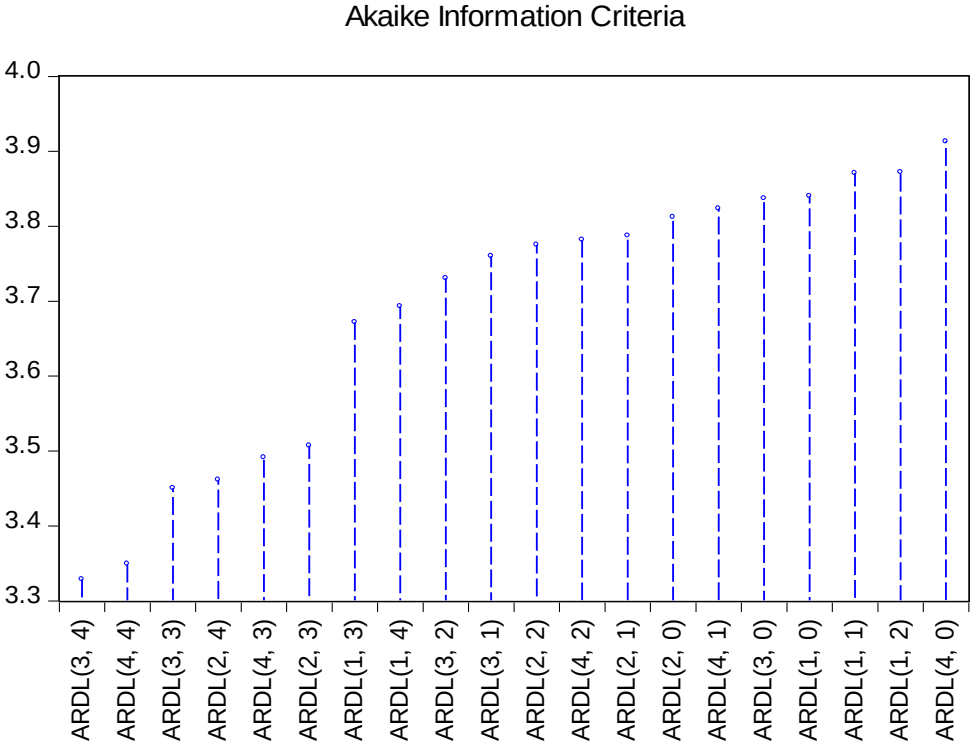


Table 2 shows the co-integration test results of ARDL boundary test. Panel A reporting the co-integration test result of the model given in Equation 1 reveals that INFLATION and FLFPR1 variables are co-integrated at 5% significance level. Meantime, Panel B reporting the co-integration test result of the model given in Equation 2 unveils that INFLATION and FLFPR2 variables are co-integrated at 5% significance level. As a result of co-integration tests, inflation and female labor force participation rate act together in the long-run in Turkey.

Table 2: Co-integration Test Results

Panel A: Co-integration Test Results for Model in Equation 1		
F-statistic: *5.279010*	**Critical Values**	
Significance	***Lower Bound***	***Upper Bound***
10%	3.02	3.51
5%	3.62	4.16
2.5%	4.18	4.79
1%	4.94	5.58
Panel B: Co-integration Test Results for Model in Equation 2		
F-statistic: *5.451991*	**Critical Values**	
Significance	***Lower Bound***	***Upper Bound***
10%	3.02	3.51
5%	3.62	4.16
2.5%	4.18	4.79
1%	4.94	5.58

We displayed long-run coefficient estimations in Table 3 where Panel A and B report the long-run coefficient estimations for the models given in Equation 3 and 4 respectively. Panel A hints that inflation has a statistically significant positive effect on female labor force participation rate at 5% significance for the model given in Equation 3 in the long-run in Turkey. In parallel to the findings of Panel A, Panel B indicates that inflation possesses a statistically significant positive impact on female labor force participation rate at 5% significance for the model given in Equation 4 in the long-run in Turkey.

Table 3: Long-run Coefficients of ARDL (3,4) Models in Equation 3 and 4

Panel A: Results for Model in Equation 3

Variable	*Coefficient*	*t-statistic*	*Prob.*
INFLATION	0.108969	2.117031	0.0484
C	26.684489	14.206274	0.0000

Panel B: Results for Model in Equation 4

Variable	*Coefficient*	*t-statistic*	*Prob.*
INFLATION	0.138439	2.334233	0.0314
C	27.947062	13.126817	0.0000

Estimated values of short-run coefficients are displayed in Table 4 where Panel A and B show the short-run coefficient estimations for the models provided in Equation 3 and 4 respectively. Besides short-run coefficient estimation findings, Panel A and B obtain some diagnostic test results for the models given in Equation 3 and 4. As can be seen from Panel A, among the short-run coefficients only the first lag of FLFPR1 variable is statistically significant and takes a negative sign. Meanwhile As indicated by Panel B, among the short-run coefficient estimations only the first lag of FLFPR2

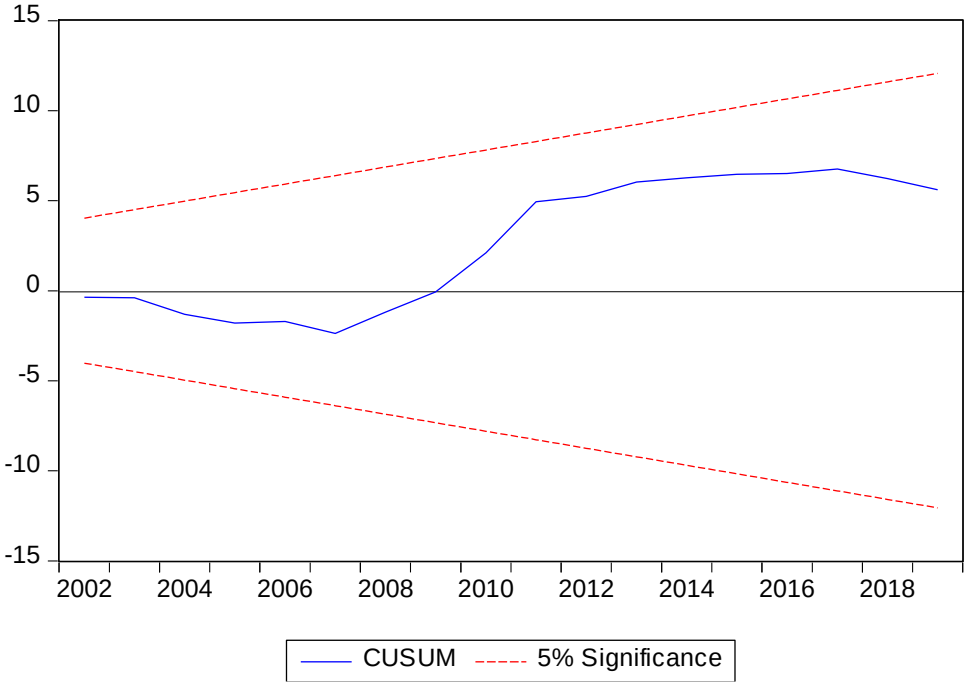
variable is statistically significant and takes a negative sign. The coefficients of error correction terms, in parallel to expectations, have statistically significant negative signs. As seen from diagnostic test results of Panel A and B, the models in Equation 3 and 4 do not suffer from any problem in terms of autocorrelation, heteroscedasticity, and model misspecification.

Table 4: Short-run Coefficients of ARDL (3,4) Models in Equation 3 and 4

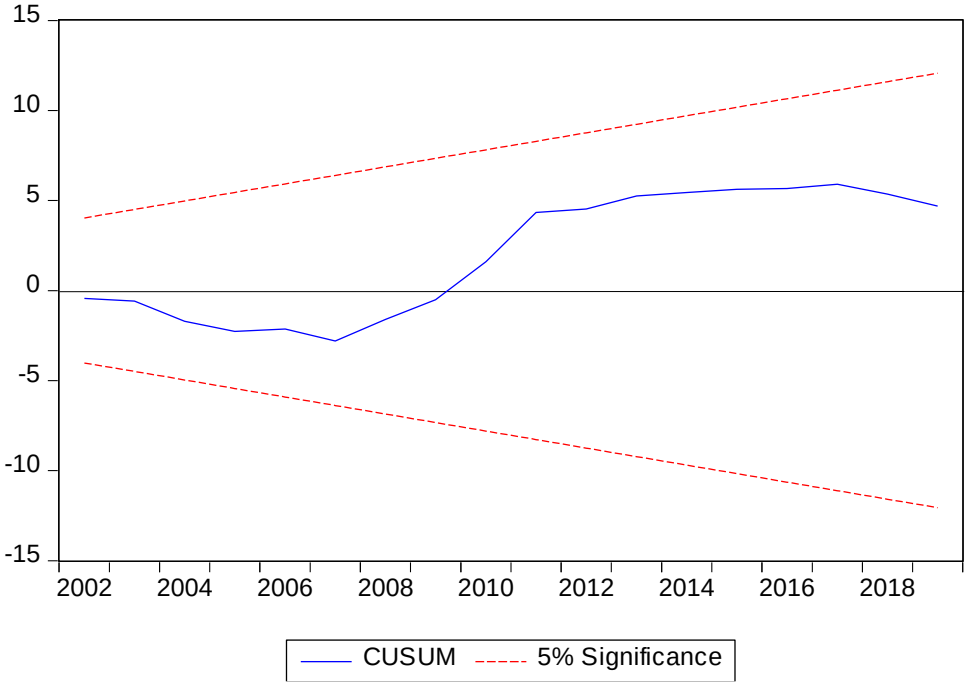
Panel A: Short-run coefficients for model given in Equation 3			
	Coefficient	*t-Statistic*	*Prob.*
$\Delta FLFPR1_{t-1}$	-0.313588	-1.880022	0.0764
$\Delta FLFPR1_{t-2}$	-0.224689	-1.364678	0.1892
ΔINFLATION	0.058416	0.658745	0.5184
$\Delta INFLATION_{t-1}$	0.025894	0.197269	0.8458
$\Delta INFLATION_{t-2}$	-0.187916	-1.139208	0.2696
$\Delta INFLATION_{t-3}$	-0.266512	-1.689029	0.1085
ECM_{t-1}	-0.338380	-4.194842	0.0005
ECM = FLFPR1 - (0.1090*INFLATION + 26.6845)			
Diagnostic Tests			
Tests		Test Value (Prob.)	
Breusch-Godfrey Serial Correlation LM Test		0.280345 *(*0.7592*)*	
Breusch-Pagan-Godfrey Heteroskedasticity Test		1.103925 *(*0.4051*)*	
Ramsey RESET Test		2.695214 *(*0.1190*)*	
Panel B: Short-run coefficients for model given in Equation 4			
	Coefficient	*t-Statistic*	*Prob.*
$\Delta FLFPR2_{t-1}$	-0.313214	-1.868509	0.0781
$\Delta FLFPR2_{t-2}$	-0.239708	-1.450191	0.1642
ΔINFLATION	0.056439	0.613545	0.5472
$\Delta INFLATION_{t-1}$	0.014640	0.107713	0.9154
$\Delta INFLATION_{t-2}$	-0.182886	-1.070671	0.2985
$\Delta INFLATION_{t-3}$	-0.272597	-1.678733	0.1105
ECM_{t-1}	-0.316730	-4.263016	0.0005
ECM = FLFPR2 - (0.1384*INFLATION + 27.9471)			
Diagnostic Tests			
Tests		Test Value (Prob.)	
Breusch-Godfrey Serial Correlation LM Test		0.368856 *(*0.6973*)*	
Breusch-Pagan-Godfrey Heteroskedasticity Test		1.174674 *(*0.3658*)*	
Ramsey RESET Test		1.680857 *(*0.2121*)*	

Graph 3 and 4 show the model stability test findings of Cusum test and as seen from the graphs none of our models experiences model instability problem.

Graph 3: Cusum Test for the Model in Equation 3



Graph 4: Cusum Test for the Model in Equation 4



5. CONCLUSION

In this study we investigate the long-run nexus between inflation and female labor force participation rate in Turkey by employing ARDL estimation method for a sample covering years from 1990 to 2019 and analyses are conducted for two distinct indicators of female labor force participation rate. Because of the reducing impact of inflation on household's purchasing power, females may prefer to participate more to labor force in order to make contribution to family budget. This situation may be observed in Turkey owing to the fact that Turkey is used to living with two-digit numbers in inflation for a long time period. Therefore in this study we hypothesize that inflation causes to higher female participations to labor force in the long-run in Turkey.

According to the co-integration test results, inflation and female labor force participation rate

are co-integrated and thus they move together in the long-run in Turkey for both models. The long-run coefficient estimations disclose that, in both models, inflation has a positive statistically significant impact on female labor force participation rate in the long-run in Turkey. This finding confirms the validity of our hypothesis. Also as implied by diagnostic test findings none of our model contains any problem in the context of autocorrelation, heteroscedasticity, and model specification error.

6. REFERENCES

Awan, A. G., & Sadia, R. F. (2018). Female participation in labor force and its impact on household and national income: Evidence from Pakistan. Global Journal of Management, Social Sciences and Humanities, 4(4), 773-784.

Baliamoune-lutz, M. & McGilivray, M. (2007). Gender Inequality and Growth in SubSaharan Africa and Arab Countries, African Economic Conference, 15-17 November 2007, Ethiopia.

Başkurt, B. (2020). Türkiye'de Kamu Harcamaları, Kadın İşsizliği ve Enflasyon İlişkisi (2000-2019) (Doctoral dissertation).

Demirtaş, G., & Yayla, N. (2017). Küresel Entegrasyonun Kadın İstihdamı Üzerine Etkisi: Ampirik Bir İnceleme. Journal of Yaşar University, 12(48), 339-349.

Kılınç, N. Ş. (2015). Küresel Eğilimler Çerçevesinde Kadın İstihdamı, HAK-İŞ Uluslararası Emek ve Toplum Dergisi, 4(9), 121-135.

Korkmaz, M., & Alacahan, N. D. (2013). Türkiye'de Formel Piyasaya Yönelmede Kadın İşgücü Arzı ve GSYH Etkileri: Ampirik Bir Çalışma. Electronic Turkish Studies, 8(7).

Koyuncu, C., & Özen, E. (2017). Religious, Ethnic, Linguistic and Cultural Diversity and Female Labor Force Participation. Journal of Economics Bibliography, 4(1), 87-93.

Koyuncu, C., & Özen, E. (2018). Sivil Özgürlük, Basın Özgürlüğü ve Kadın İşgücü. Cataloging-In-Publication Data, 546.

Koyuncu, J. Y., Yılmaz, R., & Ünver, M. (2016). The Relationship Between Female Labor Force Participation and Labor Productivity: Panel Data Analysis. Eskişehir Osmangazi Üniversitesi İİBF Dergisi, 11(2), 237-249.

Lahoti, R. ve Swaminathan, H. (2013). Economic Development and Female Labor Force Participation in India, IIM Bangalore Research Paper No. 414: 1-42.

Lenchman, E. & Kaur, H. (2015). Economic Growth and Female Labor Force Participation-Verifying the U-Feminization Hypothesis. New Evidence For 162 Countires Over the Period 1990-2012, Economics and Sociology, 8(1): 246-257.

Mehmood, B., Ahmad, S., & Imran, M. (2015). What derives female labor force participation in Muslim countries? A generalized method of moments inference. Pakistan Journal of Commerce and Social Sciences (PJCSS), 9(1), 120-130.

Niemi, Beth T. & Cynthia B. Lloyd (1981). Female Labor Supply in the Context of Inflation, The American Economic Review, 71 (2): 70 –75.

Özer, Mustafa & Kemal Biçerli (2004). Türkiye'de Kadın İşgücünün Panel Veri Analizi, Sosyal Bilimler Dergisi, (2003-2004), 55-86.

Sertçelik, Ş. (2021). Kadınların İşgücüne Katılım Oranının Belirleyicileri: Türkiye İçin Yapısal Kırılmalı Zaman Serisi Analizi . R&S - Research Studies Anatolia Journal, 4 (2) , 91-102 . DOI: 10.33723/rs.835675

Wang, L. (2019). PPOL 670 Project Female Labor Force Participation.

Yalçınkaya Koyuncu, j., Özen, E. (2018). Afrika Ülkelerinde Yoksulluk ve Bayanların İşgücüne Katılımı: Panel Analiz", IX. IBANESS Congress Series, 29-30 Eylül, 2018, sayfa 1162-1165, Edirne/ Turkey.

Yılmaz Şahin, B. (2020). Kadınların işgücüne katılımının ekonomik büyüme üzerine etkisi: Türkiye Örneği. Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 17 (45), 184-202.