The Effect of Divorce on Women's Employment: An Application for Turkey with Regional Data

Boşanmanın Kadın İstihdamına Etkisi: Türkiye İçin Bölgesel Verilere Dayalı Bir Uygulama

Demet EROĞLU SEVİNÇ*

* Dr. Res. Assist. Iğdır University, Faculty of Economics and Administrative Sciences, Department of Economics, Iğdır /Türkiye.

Dr. Arş. Gör. Iğdır Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, İktisat Bölümü, Iğdır /Türkiye.

demet-102@hotmail.com
ORCID: 0000-0003-3510-8970

Abstract

The issue of employability is an important macroeconomic matter for today's economies. Especially, some policies aimed at increasing women's employment are being applied by many countries and various policy instruments are trying to eliminate the factors affecting women's employment. This study investigated the impact of divorce on women's employment, which is expressed as one of the important socio-economic and cultural factors affecting women's labor force. For this purpose, the relationships between divorce rates and female labor force participation rates were analyzed for Turkey within the content of 26 sub-regions. The findings of the study based on panel data analysis covering the period 2008-2021 presented the existence of positive and significant relationships between divorce rates and female labor force participation rates. This situation supports many studies in the literature between increasing divorce rates and women's employment. It besides proves that the changes in the traditional social structure also support divorces and that increasing divorces force women to take more place in the labor market.

Keywords: Divorce, women employment, sub-region, panel data analysis.

Öz

İstihdam edilebilirlik konusu günümüz ekonomileri için önemli bir makroekonomik meseledir. Özellikle kadın istihdamının arttırılmasına yönelik bazı politikalar birçok ülke tarafından uygulanmakta ve çeşitli politika enstrümanları ile kadın istihdamına etki eden faktörler giderilmeye çalışılmaktadır. Bu çalışmada kadınların işgününe katılımına etki eden önemli sosyo-ekonomik ve kültürel faktörler arasında ifade edilen boşanmanın, kadın istihdamındaki etkisi ve önemi araştırılmaktadır. Bu amaç doğrultusunda boşanma oranları ile kadın işgücüne katılım oranları arasındaki ilişkiler Türkiye için 26 alt bölge kapsamında analiz edilmiştir. 2008-2021 dönemini ele alan panel veri analizine dayalı çalışma bulguları, boşanma oranları ile kadın işgücüne katılım oranları arasında pozitif ve anlamlı ilişkilerin varlığını ortaya koymuştur. Bu durum artan boşanma oranlarıyla kadınların iş hayatına atılmaları arasında literatürde yapılan birçok çalışmayı destekleyici niteliktedir. Ayrıca geleneksel toplum yapısındaki değişimlerin de boşanmaları desteklediğini ve artan boşanmaların da kadınların işgücü piyasasında daha fazla yer almasını zorladığını da kanıtlar niteliktedir.

Anahtar Kelimeler: Boşanma, kadın istihdamı, alt bölge, panel veri analizi.

Introduction

The problem of participation in employment or labor force has become a gradually more important problem for developed, developed, and least developed countries. The phenomenon of employability is an important concept that is paid significant importance, especially in order to ensure or improve economic growth. From this aspect, in addition to the general unemployment policies, many countries implement employment policies addressing specific groups such as women, elderly people, young people, sentenced people, and university students/graduates. In this parallel, the employment policies called women employment policies aiming to involve especially the women having relatively lower income in the economic system, and improving their employability are implemented in all countries and they became an employment policy, which is frequently used especially in developing countries.

Together with these policies aiming to increase women employment, the policies aiming to determine the factors negatively affecting women employment and eliminate these factors are among the employment policies implemented by the authorities in various countries. Even though significant effort is made in order to increase women employment by making use of various methods such as occupational training, courses, and awareness training programs, women employment cannot reach the desired level due to different socioeconomic reasons including traditional social structure, women's role in the family, and pressure from the spouse. Moreover, although various support policies aiming to increase and encourage the women's effective role in the labor force, women employment couldn't reach the desired level due to the aforementioned factors.

From this aspect, with sociocultural factors playing an important role in preventing women employment, there are various studies emphasizing that women might be affected or drawn out of the labor force for a short or long term due to marriage or divorce (Becker, 1977-1981; Greene and Quester, 1982; Sander, 1985; Johnson and Skinner, 1986; Montalto, 1994; Bremmer and Kesselring, 2004; Kesselring and Bremmer, 2006; Ging and Kim, 2011; Kutlar et al., 2012; Çatalbaş, 2015; Telatar, 2020) in literature. Besides that, it is known that parenthood and women's role in family life make it hard for them to return to business life and women generally give up their working life. Thus, because of all these reasons, it becomes inevitable for women to fall behind in the labor markets and it negatively affects the women employment.

Considering the importance of policies aiming to increase the employability of women in business life in Türkiye, the present study aims to reveal the relationship between divorce of women from their husbands and their re-entry or entry (for the first time) into business life in 26 sub-regions in Türkiye. For this purpose, the relationships between divorce cases and women employment in 26 sub-regions in Level-2 regions of Türkiye by making use of NUTS (Statistical Region Unit Classification). In the present study using the data for the period 2008-2021, the introduction section will be followed by the theoretical frame and literature review. Then, the analysis-based dataset and analysis results will be presented, followed by the conclusion section. Since it discusses the relationships between divorce and women's participation in the labor force at a regional level, the present study is thought to significantly contribute to both national and international literature.

2. Theoretical Frame and Literature Review

The employment is an important macroeconomic phenomenon that is managed within the economic policy in all the countries. The labor force participation rate, which is calculated as the ratio of employed individuals to the total labor force in many countries, is an important indicator for revealing the development level of countries. Moreover, there also are various labor force participation assessment criteria developed by customizing in a way incorporating some variables such as age and gender. Within this context, the ratio of the workable portion of the total women population to the active women population is called the women labor force participation rate.

Women's labor force participation rate is proportionally significantly high in developed countries. In developing countries such as Türkiye, it is at a relatively lower level. Although it has various reasons such as economic, social, political, and psychological ones, especially the factors related to the sociocultural factors are among the most important reasons for women participating in

business life or continuing working (Sevinç et al., 2016, s. 58). Despite the more elastic traditional social structure of developed countries, the strict traditional social structure of developing and least developed countries is considered as one of the main social problems influencing women's participation in the labor force. Women's participation in the labor force and/or continuity of their employment are remarkably prevented or delayed particularly because of the family institution and women's role in families in traditional social structure.

In societies dominated by the traditional structure, the family institution has a very important role. Since father and mother figures have separate roles, in countries having a traditional social structure such as Türkiye, the father is the figure working and earning the family's living, whereas the mother is the figure dealing with the housework and childcare. Despite the long history of this situation, it started gradually changing particularly in the last 25 years. Women's role in the family became more flexible and women's participation in the labor force gradually increases. Besides that, with the effects of globalization, economic difficulties, and improvements in women's rights, the familial role assigned to women by society has changed and improved and women's participation in the labor force has increased in this parallel. On the other hand, it was reported that divorce rates statistically increased because of the aforementioned factors. Thus, rather than the non-working mother role in the traditional family model, most of the divorced women become individuals both raising their children and fulfilling other responsibilities in the family and economically supporting the family by working in the professional world. All these factors make it difficult for women to enter business life or entering into business life might become easier for women. On the other hand, public sector and private sector administrations implement encouragement policies to involve women in business life and positive discrimination policies are developed for women employment. All these factors increase the women's participation in labor force and it is clearly presented using the statistical data. Moreover, previous studies and researches showed that women employment and consequently the women labor force participation rate.

On the other hand, although there are various studies in literature examining the divorce that is one of the sociocultural factors influencing the women employment, most of those studies focused on a single country or a group of countries.

In a study carried out by Ressler and Waters (2000), the relationship between divorce and women labor revenue and employment for the USA economy for the period 1960-1990 in decade interval. In an analysis based on the simultaneous equation model, women's income was the dependent variable, and the variables such as divorce, unemployment, fertility, education, and rural population were independent variables. In the model, in which the divorce was the dependent variable, the independent variables were income, fertility, unemployment, education, and rural population. Analysis results suggested that there was a bidirectional relationship between women's income and employment.

In a study carried out by Austen (2004) on 2231 individuals (aged between 18 and 54 years) in the Austrian economy for the year 1997, the relationships between divorce and women employment were investigated. Moreover, given the result of the analysis based on the model incorporating variables such as income per capita, demographic characteristics, religion, education, and house ownership, it was revealed that divorce had positive and strong effects on women employment and full-time working. Also in a study carried out by Bremmer and Kesselring (2004) on the USA economy for the period 1960-2001, the relationships between divorce cases and women employment were analyzed using the time series analysis method. Given the study results, it was determined that the divorce rates increasing in the last 40 years of the study period positively and significantly affected the women's participation in employment. Furthermore, it was also shown that women's increasing income caused divorces and there was a bidirectional causality.

Considering the importance of women employment in the recent economic growth in Singapore economy, Ging and Kim (2011) investigated the women employment and divorces for the period 1984-2004. Given the results of the time series analysis based on the relationship between women employment and income, it was reported that, although divorce positively affected the women employment, it wasn't valid for the short-term.

Using the time series analysis and the data for the period 1988-2009 for the Turkish economy, Kutlar et al. (2012) tested the relationships between women's labor force participation rate and fertility, divorce, and wages. Although the analysis results suggested a long-term cointegration relationship between women's labor force participation rate and divorce, causality analysis results showed no relationship between divorce and women's labor force participation rate.

The study carried out by Hassani-Nezhad and Sjögren (2014) investigated the effect of Khul Reform, which provided women with the right to divorce from an Islamic perspective, on the women's labor force participation rate in 18 Middle East and Northern African countries, which are called MENA region, for the period 1980-2008. It aimed to explain if the Khul Reform contributed to the women's employment rate, which significantly increased in the recent period. In the panel data analysis in which two groups aged 25-34 and 35-54 years were involved, it was determined that there was a positive and highly significant relationship between divorce rates and women's employment rate. The level of this relationship was higher for women aged between 25 and 34 years, who are called young women, in comparison to the elder women aged between 35 and 54 years.

Using the panel data analysis method, Alptekin and Luo (2015) examined the relationship between women's employment rate and divorce rates for the OECD countries for the period 1990-2012. The marriage rates decreased and divorce rates increased in OECD countries in general; it was examined if women's participation in the labor force caused this increase. Given the cointegration analysis results aiming to reveal the long-term relationships, it was determined that there was a cointegration between the variables. Moreover, the fixed-effect panel data analysis yielded results corroborating the relationship between divorce and women's participation in the labor force.

In the study carried out by Yazıcı (2018) for Türkiye for the period 1988-2016, the factors affecting the women's participation in the labor force were analyzed. In that study, in which the women's employment participation rate and women employment were the dependent variables, the independent variables were number of marriage, number of divorces, unemployment rate, female labor force, and education. The relationships between these variables were examined using the quantitative research methods. The analysis results suggested a positive and strong relationship between divorce rates and women's employment participation rate. On the other hand, although there was a positive relationship between divorce and women employment, the level of this relationship was lower than the other one.

A study carried out by Aksoy et al. (2019) aimed to determine the factors affecting the women employment in Türkiye for the period 1988-2018. In the study utilizing the time series analysis method, the dependent variable was women employment, whereas independent variables were income per capita, women population, change rate of minimum wage, unemployment, and married women's labor force participation rate. In the analysis performed using the ARDL method, the results suggested positive and significant relationships between income, population, unemployment, and labor force participation rates. Also in a study carried out by Telatar (2020) investigating the relationship between women employment and divorces in Türkiye for the period 1988-2013, it was determined that there was a positive relationship between women employment and increase in divorces. Moreover, given the results achieved from the time series analysis, the long-term relationships were more clearly shown.

Koç and Kutlar (2021) examined the relationships between economic uncertainties and divorce for the Turkish economy for the period 1990-2017. The results achieved from time series analysis using the variables women's labor force participation rate, unemployment, income per capita, and economic crisis showed that women's labor force participation rate, income per capita, unemployment, and crises had positive effects on divorce. On the other hand, the asymmetric test results showed that there was no time-delay relationship between women employment and divorces.

Moreover, there also are studies revealing the relationship between women employment and divorces at regional or local levels. The study carried out by Özer and Biçerli (2003) using panel data analysis regarding the determinants of women's labor force participation rate in urban and rural areas in Türkiye used the data covering the period 1988-2001. In their study, the dependent variable was women employment, whereas the independent variables were unemployment, inflation, wages, and

divorce rates. The analysis results showed no relationship between women's labor force participation rate and other variables.

The panel data analysis carried out by Çatalbaş (2015) for 26 sub-regions in Türkiye analyzed the period 2008-2013. Given the analysis results, it was found that the factors such as divorce, education, fertility rates, and economic uncertainties were the factors influencing the women's labor force participation rate.

Caarls and Valk (2017) analyzed 12 regions of Türkiye for the period 1973-2008 and examined the factors playing role in the regional spread of divorce. In this study aiming to reveal the main reasons for divorce rates increasing specifically in certain regions, the variables such as education, number of children, population, income per capita, and urbanization were utilized. Analysis results showed that urbanization and income per capita were the main factors influencing divorces.

The study carried out by Levent et al. (2018) to determine the factors determining the women's labor force participation rates was based on the Probit model estimation. Given the results achieved from the analysis carried out on 400 married and single women aged between 18 and 64 years in Van province, the most important parameters influencing the labor force participation rate were estimated to be education, income, and marital status. Moreover, as a policy suggestion, it was also emphasized that women employment could be increased by improving the educational and social supports.

The study carried out by Özer and Özgenç (2018) analyzed the factors determining the women's labor force participation rate in the TRA1 region of Türkiye for the period 2005-2015. The Independent variable was women employment, whereas the independent variables were marital status, education, age, and year. The results achieved from the study based on the logit model analysis showed that the labor force participation rate was found to be at the highest level in divorced women in comparison to all other groups in the TRA1 region. Hence, it was emphasized that divorce positively affected the women's labor force participation.

Using the survey-based qualitative research methods, Thielemans and Mortelmans (2021) examined the relationships between divorces and women employment in the Flander region of Belgium. The results obtained from a survey conducted with 884 divorced women revealed that the employability of women, who have divorced or might divorce, increased by 3 to 5 times. Thus, the results showed that the divorce process of the women waiting for a divorce increased their labor force participation rate and they tended to eliminate their financial and emotional emptiness.

3. Practical Dataset, Methodology and Implementation Results

In the present study aiming to reveal the relationships between women's labor force participation rates and divorce in 26 Level-2 sub-regions in Türkiye, this section will present the dataset consisting of all the variables used, as well as the main characteristics of these variables. The dependent variable was women's labor force participation rate, whereas the main explanatory variable. Besides that, in addition to the main explanatory variable, it was aimed to strengthen the analysis by adding several additional explanatory variables such as income per capita and educational level. Within this context, all the data constituting the panel data system were obtained from the regional statistics database of the Turkish Statistical Institute (TUİK) and prepared for analyses. Within this context, the main characteristics of all the variables used here are summarized below.

Table 1. Main Characteristics of Dependent and Independent Variables

Data Definition	Abbrev.	Data Context	Type	Unit	Year	Source
Labor Force Participation	EPR	Women's labor force participation rates in regions	Dependent Variable	Number	2008-2021	TUİK
Divorce Rate	DWR	Gross number of divorces in regions	Independent Variable	Number	2008-2021	TUİK
Income per Capita	GDPP	Income per Capita in regions	Independent Variable	Thousand Turkish Lira	2008-2021	TUİK
Educational Level	EDC	Number of literate women in regions	Independent Variable	Number	2008-2021	TUİK

Within this context, the labor force participation rate of women (EPR) was as follows:

EPR = f (DWR, GDPP, EDC)

Because of the variables used, the equation to analyze the effects of divorce on women's labor force participation for 26 sub-regions is presented below.

$$EPR_{it} = \alpha_0 + \alpha_1 DWR_{it} + \alpha_2 GDPP_{it} + \alpha_3 EDC_{it} + \varepsilon_{it}$$

(1)

The results achieved by analyzing the form yielded by Equation 1 are as follows. First, it was analyzed if the panel data analysis series were stationary. For this purpose, it is necessary to analyze if the series include unit root. However, an important phase that should be completed before the unit root tests is to check the cross-sectional dependence of the model. Thus, the cross-sectional dependence test results of the model are presented in Table 2.

Table 2. Cross-sectional Dependence Test Results

Model-Based Cross-sectional Dependence		
Test	**Statistic**	**Probability**
BP*LM*	116.007*	0.089
P*LM*	76.189	0.263
P*CD*	10.009	0.474
F*LM*	9.953	0.489
Frees *Q*	1.674***	0.005
Asymptotic Critical Values		
1%: 0.344	**5%:** 0.210	**10%:** 0.107

Note: BPLM refers to Bresusch-Pagan Chi-Square, PLM to Pearson's LM, PCD to Pearson CD, and FLM to the Friedman Chi-Square tests. Asymptotic critical values are provided only for Frees Q Statistics. *, **, and *** symbols refer to the significance of the statistical value at the confidence level of 10%, 5%, and 1%.

The results of cross-sectional dependence based on Table 2 revealed that there were no correlation relationships between the cross-sectional units in three tests other than BPLM and FressQ tests. For this reason, since there was no cross-sectional dependence, it can be stated that a shock in a region in the model would not or likely not affect the other regions. Thus, the first decree unit root test would be valid for the cases with no cross-sectional dependence. Within this context, Table 3 represents three-unit root test results.

Table 3. Unit Root Test Results

	ADF Test Statistics				LLC Test Statistics			
Variable	Level	First Difference	Number of Cross-sections	Number of Observations	Level	First Difference	Number of Cross-sections	Number of Observations
EPR	119.153***	167.706***	26	416	-7.57789***	-7.39341***	26	416
DWR	14.3628	220.607***	26	494	7.02853	-4.89764***	26	494
EDC	257.265***	94.9980***	26	312	-24.9766	2.3429***	26	312
GDPP	2.64062	148.872***	26	414	2.92883	-3.81849***	26	414
	IPS Test Statistics				PP Test Statistics			
Variable	Level	First Difference	Number of Cross-sections	Number of Observations	Level	First Difference	Number of Cross-sections	Number of Observations
EPR	-457744***	-8.40619***	26	416	108.346***	535.993***	26	442
DWR	6.9550	-11.1234***	26	494	14.1275	579.520***	26	520
EDC	-13.5163***	-3.84021***	26	312	278.306***	525.144***	26	338
GDPP	9.19666	-7.47682***	26	414	6.92661	305.091***	26	440

Note: The test statistics calculated using the relative tests were found by using the asymptotic normality assumption. $*$, $**$, and $***$ symbols refers to the stationarity levels of relevant variables at the significance levels of 10%, 5%, and 1%. While calculating the statistics, SIC criteria were used in determining the optimum lag length. Moreover, ADF-Fisher statistics were calculated using both Barlett Kernel and Newey-West bandwidth criteria.

Presented in Table 3, ADF, LLC, IPS, and PP test results showed that not all the variables used in the analysis were stationary at the same level at the same time, but all the variables were stationary at the first difference. It means that they did not include unit root. Thus, including all the variables found to be stationary at the first difference in the analysis, Pedroni and Kao cointegration tests were used in order to reveal the potential long-term relation(s) between the variables. Table 4 represents the results of these cointegration tests.

Table 4. Cointegration Test Results

Model-Based Pedroni Cointegration Test		
Test	Statistic	Probability
Intradimensional Tests		
Panel *v*	-1.5642	0.9411
Panel *rho*	2.2295	0.9871
Panel *PP*	-2.3004***	0.0100
Panel *ADF*	-4.6773***	0.0000
Interdimensional Test		
Group *rho*	4.4556	1.0000
Group *PP*	--3.0680***	0.0011
Group *ADF*	-4.9355***	0.0000
Model-Based Kao Cointegration Test		
Test	Statistic	Probability
Kao *ADF*	-4.9700***	0.0000

Note: Barlett Kerneli and Newey-West bandwidth criteria were taken as basis in both tests used in order to reveal the cointegration relationships. $*$, $**$, and $***$ symbols refers to the stationarity levels of relevant variables at the significance levels of 10%, 5%, and 1%. While calculating the statistics, SIC criteria were used in determining the optimum lag length.

Given Table 4 representing the Pedroni and Kao cointegration test results considering multiple relationships, there was a long-term relationship between all the variables used in the analyses (even not for all the types of tests). Hence, it was proven that there were long-term relationships between the variables employed in analyses. In conclusion, it can be stated that labor force participation, divorce, education, and income per capita variables tended to course in parallel in the long term. The long-term simultaneous movement tendency of variables and their cointegration suggest that there might be a causality relationship, even if unidirectional. For this reason, the panel causality tests aiming to reveal the causal relationship between the variables was performed and the results are presented in Table 5.

Table 5. Causality Analysis Results

Causality Analysis Results for the Model			
Variable Pair	**Direction of Causality**	**_F_ Statistics (Probability)**	**_EC_ₜ₋₁**
ΔDWR-ΔEPR[2]	→	3.7342** (0.0247)	0.897**
ΔEPR-ΔDWR[2]	→	2.7472* (0.0653)	0.303*
ΔEDC-ΔEPR[2]	-	0.3251 (0.7260)	0.111
ΔEPRΔEDC[2]	-	36.7487 (1.0000)	0.293
ΔGDPP-ΔEPR[2]	→	4.1134** (0.0170)	-0.745**
ΔEPR-ΔGDPP[2]	→	2.4080* (0.0913)	-0.271*
ΔEDC-ΔDWR[2]	→	3.2431** (0.0404)	-0.652**
ΔDWR-ΔEDC[2]	→	2.7405* (0.0661)	0.253*
ΔGDPP-ΔDWR[2]	→	9.3416*** (0.0001)	-0.911*
ΔDWR-ΔGDPP[2]	-	12.9977 (1.000)	0.221
ΔGDPP-ΔEDC[2]	-	82.9148 (1.0000)	-0.391
ΔEDC-ΔGDPP[2]	-	12.1537 (1.000)	-0.220

Note: The values presented in square brackets refer to the optimum lag length calculated using SIC criteria. *, **, and *** symbols refers to the stationarity levels of relevant variables at the significance levels of 10%, 5%, and 1%. The term *EC* refers to the error correction mechanism obtained from the cointegration equations. Δ is the difference operator for the relevant variable.

Since the variables used in the model were stationary at the difference level and there were long-term relationships between them found in the cointegration tests, the error terms (EC) obtained from the cointegration equations were involved in the causality analysis. Given the results of the panel Granger causality test performed using the error terms, there was a bidirectional causality relationship between divorce rates and women's labor force participation rates. A positive value of the EC term proves that this relationship was positive. Thus, it can be stated that women's labor force participation rate increased with increasing divorce rates and divorce rates increased with increasing women's labor force participation rate. On the other hand, while it was proven that there was a bidirectional causality relationship between income per capita and women's labor force participation rate, no causality relationship could be found between educational levels and women's labor force participation rate. Moreover, a bidirectional causality relationship was found between divorce and educational level; it means that educational level increased with increasing divorce rates and divorce rates increased with increasing educational level. Again, a unidirectional causality relationship was found between income per capita and divorce and it was concluded that divorce rates would increase with increasing levels of income per capita.

General Discussion and Conclusion

One of the most important conditions for economic development and growth is the complete and effective use of production factors. Within this context, the labor having an important place among the production factors, and, consequently, the concept of employment became a macroeconomic subject that all the developed and least developed countries are closely interested in. Women employment, which has an important place in employment policies, has become a policy that especially the developing countries pay significant importance to and considered separately from the general employment policies.

Developing countries such as Türkiye have various employment incentive policies for specific groups, in addition to the general employment policies, and they also have various policy arguments and incentive instruments in order to increase the women employment. Despite all these supports, incentives, and encourages, women employment couldn't have reached the desired level because of

various reasons such as social, economic, cultural, and political ones. The women's labor force participation rate, which increases with increasing educational level, might reduce or be interrupted due to marriages. Besides that, it was also reported in various studies that women, who become economically complicated due to divorces or family union's deterioration or annihilation, entered in business life and increased their participation in the labor force.

Within this context, the present study aims to determine if there is a relationship between divorce and women's labor force participation for 26 Level-2 sub-regions of Türkiye according to the Statistical Region Unit Classification. For this reason, the unit root and cointegration test results examining the period 2008-2021 showed that there was a long-term relationship (were long-term relationships) between the variables and these results were confirmed using the panel Granger causality test. Given the causality analysis results, there was a bidirectional causality relationship between divorce rates and labor force participation rates. These results clearly show that increasing divorce rates increased the women's labor force participation rate. Moreover, in order to strengthen the analysis, it was proven that there was a bidirectional causality relationship between income per capita and women's labor force participation rate, whereas no causality was found between educational level and women's labor force participation.

Considering all the results of the present study together, deterioration of the family life based on the traditional social structure, which is one of the factors preventing the women's participation in labor force, and consequently increasing divorce rates cause women to participate gradually more in the labor force. Besides that, it should be noted that the increase in divorce rates is not only related to the deterioration in traditional social structure but also the degradation in economic structure and improvements in consciousness and legal regulations related to women's rights. Furthermore, as important factors, the temporal change in the social structure and also the changes in family structure due to the effects of globalization led women to have a word in society and a place in business life.

References

Aksoy, N., Felek, Ş., Yayla, N. ve Çeviş, İ. (2019). Türkiye'de kadın istihdamı ve etkileyen faktörler. *Yönetim ve Ekonomi Araştırmaları Dergisi, 7*(13), 146-163.

Alptekin, D. and Luo, Y. (2014). The relationship between female labor force participation and divorce: Panel data analysis on OECD Countrıes. *International Refereed Academic Social Sciences Journal, 18*(6).

Austen, S. (2004). Labour supply and the risk of divorce: An analysis of Australian data. *The Australian Economic Review, 37*(2), 153–65.

Becker, G. S., Landes, E. M. and Michael, R. T. (1977). An economic analysis of marital instability. *Journal of Political Economy, 85,* 1141–87.

Bremmer, D. and Kesselring, R. (2004). Divorce and female labour force participation: Evidence from times-series data and cointegration. *Atlantic Economic Journal, 32*, 174–89.

Caarls, K. and Valk, H. A. G. (2018). Regional diffusion of divorce in Turkey. *European Journal of Population, 34*, 609-636.

Çatalbaş, K. G. (2015). Kadınların işgücüne katılımını belirleyen faktörlerin belirlenmesi: Panel veri yaklaşımı. *Kafkas Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 6*(10), 249-280.

Ging, L. C. and Kim, N. P. (2011). The dynamics of divorce, income, And female labor force participation in Singapore. *Economics Bulletin, 31*(4), 2757-2768.

Greene, W. H. and Quester, A. Q. (1982). Divorce risk and wives' labor supply behavior. *Social Science Quarterly*, *63*, 16–27.

Johnson, W. R. and Skinner, J. (1986). Labor supply and marital separation. *American Economic Review*, *76*, 455–69.

Hassani-Nezhad, L. and Sjögren, A. (2014). Unilateral divorce for women and labor supply in the Middle East and North Africa: The effect of Khul Reform. *Feminist Economics*, *20*(4), 113-137.

Kesselring, R. and Bremmer, D. (2006). Female income and the divorce decision: Evidence from micro data. *Applied Economics, 38*(14), 1605-1616.

Kutlar, A., Erdem, E. ve Aydın, F. F. (2012). Kadınların işgücüne katılması ile doğurganlık, boşanma ve ücret haddi arasındaki ilişki: Türkiye üzerine bir araştırma. *Bilgi Ekonomisi ve Yönetimi Dergisi, 7*(1), 149-168.

Levent, C., Arvas, M. A. ve İnce Yemilmez, M. (2018). Kadınların işgücüne katılımını belirleyen faktörlerin Probit Model ile tahmini: Van ili örneği. *Sosyal Bilimler Enstitüsü Dergisi, 42,* 245-270.

Koç, P. ve Kutlar, A. (2021). The effects of economic recessions on divorce rates: a research on Turkey. *Sosyoekonomi, 29*(49), 65-84.

Montalto, P. C. (1994). Married women's labor force participation as divorce insurance. *Financial Counseling and Planning, 5*, 191-206.

Özer, M. ve Biçerli, K. (2003). Türkiye'de kadın işgücünün panel veri analizi. *Anadolu Üniversitesi Sosyal Bilimler Dergisi, 3*(1), 55-85.

Özer, H. ve Özgenç, E. (2018). TRA1 bölgesinde kadının işgücüne katılımının belirleyicilerinin Logit Model ile analizi. *Uluslararası Emek ve Toplum Dergisi*, 18, 295-316.

Ressler, R. W. and Waters, M. S. (2000). Female earnings and the divorce rate: a simultaneous Equations Model. *Applied Economics*, *32*, 1889-1898.

Sander, W. (1985). Women, work, and divorce. *The American Economic Review, 75*(3), 519-523.

Sevinç, H., Bozkurt, E. ve Eroğlu Sevinç, D. (2016) Ekonomik büyümede kadın istihdamının rolü? Yakınsama temelli kanıtlar. *C.Ü. İktisadi ve İdari Bilimler Dergisi, 17(1),* 57-69.

Telatar, O. M. (2020). The Relationship between Women's Employment and Divorce: An Empirical Analysis on Turkey. *International Journal of Economics and Innovation, 6*(1), 143-155.

Thielemans, G. and Mortelmans, D. (2021). Divorce and Female Labor Force Participation: Do Women Who Expect an Upcoming Divorce Increase Their Employment? Evidence from Flanders. sagepub.com/journals-permissions. DOI: 10.1177/0001699321994189.

Yazıcı, A. M. (2018). Medeni durumun ve eğitimin kadınların işgücüne katılımına etkisi: TÜİK Verileri Üzerine Ampirik Bir Çalışma. *İktisat Politikası Araştırmaları Dergisi, 5*(2), 101-116.

Araştırma ve Yayın Etiği Beyanı

Araştırmacı verilerin toplanmasında, analizinde ve raporlaştırılmasında her türlü etik ilke ve kurala özen gösterdiğini beyan eder.

Yazarların Makaleye Katkı Oranları

Makale tek yazarlı olarak hazırlanmıştır.

Çıkar Beyanı

Makalenin hazırlanmasında herhangi bir çıkar çatışması bulunmamaktadır.