Ömer Halisdemir Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi
Yıl: 2021 Cilt-Sayı: 14(3) ss: 1051–1061

Academic Review of Economics and Administrative Sciences
Year: 2021 Vol-Issue: 14(3) pp: 1051–1061

https://dergipark.org/tr/pub/ohuiibf/

Araştırma Makalesi
Research Article

ISSN: 2564-6931
DOI: 10.25287/ohuiibf.823479
Geliş Tarihi / Received: 09.11.2020
Kabul Tarihi / Accepted: 18.01.2021
Yayın Tarihi / Published: 31.07.2021

FACTORS AFFECTING GENDER WAGE GAP: EMPRICAL EVIDENCES FROM SELECTED OECD COUNTRIES

Melek AKDOĞAN GEDİK [1]
Tuğay GÜNEL [2]

Abstract

Nowadays, poverty has become a multi-dimensional problem, including social factors, rather than just an economic problem. Especially recently, poverty has been addressed in terms of gender focused on women and men. Gender-oriented approach to the problem of poverty has been gradually increasing. In the gender-based poverty approach, inequalities between men and women are addressed and it is emphasized that women are poorer than men. According to this approach, poverty is increasingly feminized, and women are a part of poverty to a greater extent than men in terms of gender. The increasing impoverishment of women is also expressed as the feminization of poverty One of the most important reasons of women's impoverishment is the wage inequality between men and women. In this context, this study aims to analyze the effects of factors playing an important role in women's impoverishment on wage inequality are analyzed in the sample of selected OECD countries for the period of 1996-2016. According to the results, women's participation in the labor force, life expectancy at birth, higher level of education have a decreasing effect on gender wage gap. In addition, the increase in the employment rates of women in the industry sector also has a decreasing effect on wage inequality. On the other hand, the low education level of women and the increase in the female population over 65age increase the gender wage gap.

Keywords ***:*** *Labour market, Wages, Wage discrimination, Panel data analysis.*

Jel Classification ***:*** *F66, J31, J71, C23.*

[1] Doç. Dr., Çukurova Üniversitesi İktisadi ve İdari Bilimler Fakültesi Maliye Bölümü Mali İktisat Ana Bilim Dalı, makdogan@cu.edu.tr, ORCID: 0000-0001-6470-5796.
[2] Arş. Gör., Çukurova Üniversitesi İktisadi ve İdari Bilimler Fakültesi Maliye Bölümü Mali İktisat Ana Bilim Dalı, tugaygunel@gmail.com, ORCID: 0000-0001-7980-1764.

***Atıf / Citation (APA 6)*:**
Akdoğan-Gedik, M., & Günel, T. (2021). Factors effecting gender wage gap: Evidence from selected OECD countries. *Ömer Halis Demir Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 14*(3), 1051–1061. http://doi.org/10.25287/ohuiibf.823479.

Akdoğan-Gedik, M., & Günel, T. (2021). Factors effecting gender wage gap: Evidence from selected OECD countries. *Ömer Halis Demir Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 14*(3), 1051–1061.

CİNSİYET ÜCRET EŞİTSİZLİĞİNİ ETKİLEYEN FAKTÖRLER: BAZI OECD ÜLKELERİNDEN AMPİRİK BULGULAR

Öz

Günümüzde yoksulluk salt ekonomik bir sorun olmaktan çıkıp sosyal faktörleri de kapsayan çok boyutlu bir sorun haline gelmiştir. Özellikle son zamanlarda yoksulluk sorununa cinsiyet odaklı yaklaşım giderek artmaktadır. Cinsiyete dayalı yoksulluk yaklaşımında kadın ve erkek arasındaki eşitsizlikler ele alınmakta ve kadınların erkeklere oranla daha yoksul olduğu ve bu yoksulluğun nedenleri üzerinde durulmaktadır. Bu yaklaşımda yoksulluğun giderek kadınlaştığı ve cinsiyet açısından bakıldığında kadınların erkeklere nazaran daha büyük oranda yoksulluğun bir parçası olduğu ifade edilmektedir. Kadınların giderek yoksullaşması durumu yoksunluğun kadınlaşması olarak da ifade edilmektedir. Kadınların yoksullaşmasının en önemli nedenlerinden biri kadınlar ve erkekler arasındaki ücret eşitsizliğidir. Bu bağlamda, çalışmamız, 1996-2016 yılları aralığında seçilmiş OECD ülkeleri örnekleminde kadınların yoksullaşmasında ücret eşitsizliğinin etkilerini incelemeyi amaçlamaktadır. Çalışmamızın bulgularına göre kadınların işgücüne katılımı, doğumda beklenen yaşam süresi, daha yüksek eğitim düzeyi, cinsiyete dayalı ücret eşitsizliğini azaltıcı etkiye sahiptir. Ayrıca sanayi sektöründe kadın istihdam oranlarının artması da ücret eşitsizliğini azaltıcı etkiye sahiptir. Diğer yandan, kadınların düşük eğitim düzeyi ve 65 yaşın üzerindeki kadın nüfus oranının artması cinsiyetler arası ücret farkını artıran unsurlardır.

Anahtar Kelimeler ***:*** *İşgücü piyasası, Ücret, Ücret farklılaşması***,** *Panel veri analizi.*

Jel Sınıflandırması ***:*** *F66, J31, J71, C23.*

INTRODUCTION

Inequality between men and women was noted in the 1970s and it was mentioned that development programs affect men and women differently. While creating various strategies regarding the role of women in development, disregarding gender differences have caused problems such as increasing the workload of women, further widening the social and economic difference between men and women, and deepening inequalities for women. Therefore, in order to reduce inequalities between men and women, it is important to approach the poverty problem with gender-oriented approach.

Especially recently, gender-oriented approach to the problem of poverty has been gradually increasing. In the gender-based poverty approach, inequalities between men and women are addressed and it is emphasized that women are poorer than men. According to this approach, poverty is increasingly feminized, and women are a part of poverty to a greater extent than men in terms of gender. The increasing impoverishment of women is also expressed as the feminization of poverty. Therefore, many countries has been applied fiscal policy such as tax policy to reduce gender wage gap recently. As a result of that policy, gender wage gap has decreased in OECD countries during the period 1996-2019. It has decreased dramatically in many countries. For example, it decreased from 43.3 to 32.5 in Korea, from 36.8 to 23.5 in Japan, and from 20.4 to 6.5 in New Zealand. Similarly, this percentage has decreased in Europe too. For example, it decreased from 20.6 to 15.3 in Germany and from 18.3 to 15.1 in Czechia. The most dramatically decrease has been seen in Hungary by decreasing from 17.8 to 5.1.

Chant (2007) explained the reasons for the feminization of poverty in three ways. Firstly, women's poverty is deeper and harder than men. Secondly, it is easier for women to remain poor than men. Finally, women face more obstacles in the fight against poverty than men. In another study, Moghadam (2005) also attributed the feminization of poverty to three factors in the study of *feminization of poverty and women's human rights*. According to this, firstly, women's rights are insufficient in many countries and women's abilities are lower than men. Secondly, although women work longer than men, they receive less wages than men. Last but not least, the capacity and efforts of women to get rid of poverty are restricted by cultural, legal and labor market conditions.

Goldberg and Kremen (1990) have explained the reasons for the feminization of poverty as outlined: Firstly, as social welfare system and the low social costs play an important role in the feminization of poverty. Because, in the case of a social welfare system, women's activities such as child care can be subsidized, thereby increasing women's participation in the labor force. Secondly, the position of women in the labor market is another important factor. As a result of the long-standing tradition of professional discrimination and discrimination at work, women receive low wages. In addition, women's low wages play an important role in the feminization of poverty due to reasons such as working in unpaid household chores and interrupting their careers for reasons such as childcare and interrupting their promotions. Finally, demographic factors such as divorce, separation and single motherhood are also effective in the feminization of poverty. Because as single motherhood becomes widespread, mothers have to support their families with a low wage.

This study differs from previous studies in two ways. First, the study uses most recent and comprehensive data. Data refer to full-time employees on the one hand and to self-employed on the other. Therefore, we do not only analysis the full-time employees but also self-employed. Second, the study does not only examine factors in a particular area. The study focuses on demographic, social, and economic factors affecting gender wage gap in multi-national level.

This study is organized as follow: Literature review is given in Section 2. Measuring wage gap is analyzed in Section 3. Section 4 gives a brief explanation of data and econometrics method. Empirical results are discussed in Section 5.

I. LITERATURE REVIEW

Oaxaca (1973) study is a methodological basic study in wage inequality studies. In his study, Oaxaca (1973) stated that although the wages of women and men are paid considering the same criteria, wage inequality will arise if the men's wages are relatively more than women's wages. In addition, the study emphasizes that the concentration of women in low-wage sectors plays an important role in the emergence of wage inequality between women and men.There are many studies that investigated factors that effect wage inequality in the literature. For example, Tansel (2005) examined the factors that explain wage differentials in public and private wage sector in Turkey in 1994. The study concluded that wages in public administration are higher than private sector for women , and men’s and women’s wages are parity in public sector. That means women faces discrimination in the private sector. In another study Kaya (2017) explore the gender wage gap in Turkey in terms of glass ceiling in Turkish Labor market . The study found that the glass ceiling effect exists because of unequal treatment between women and men. This increase labor market discrimination toward women. Duman (2020) by using quantile regression approach, aims to effect of non-standart employment on wages in Turkey. According to result, while non-standart employment reduces wages for women, it does not reduce wages for men. Another result from the study is that women with standart jobs earn more than men.

Education is seen as one of the important reasons for the gender wage gap between men and women. In this context, for some studies education is the most important determinant of differentials in earnings and labour market participation. In this sense, it is stated that women's participation in the labor force is lower compared to men and this leads to wage inequality (Groshem ,1991:459). For example, Prisco (2000: 207) studies the wage gap relationship in Italy and finds that the gender wage gap is narrowing as the level of education increases. It was also found that the gender differential among those who have completed the same type of secondary education is greater than among those who have graduated with the same university major.

Addressing the gender wage gap between men and women from a sectoral perspective, Glick and Sahn (1997: 797) analyzed wage inequality in these sectors based on self-employment, public and private sectors. They concluded that education plays an important role in cross-sectoral wage inequality and employment in these sectors. According to Gammage (2015: 317), although wage inequality is not

common in the public sector and large enterprises, it is observed that women working in the agricultural sector receive lower wages.

Polachek and Xiang (2009: 7) investigated the gender wage gap in terms of demographic factors. They found that the gender pay gap is positively associated with the fertility rate, the husband-wife age gap at first marriage, and the top marginal tax rate. In another study, Harkness (2005: 97) emphasized that the wage inequality gap decreases at young ages and it increases as the age increases.

On the other hand, Jajri and Ismail (2010: 489) dealt with wage inequality in the Malaysian labor market in terms of training and work experience. According to the results of the survey study consisting of a total of 4535 people, 2759 men and 1776 women, it was emphasized that training and work experience were the most important factors leading to wage inequality as well as factors such as race and region.

In their analysis, Gornick and Boeri (2016: 237) investigated women's poverty in 40 high-income and middle-income countries. In the study, they concluded that women face the risk of poverty more than men due to many economic and social factors and that single mothers are poorer than married women due to the change in the family structure. There are studies showing that the cultural structure of the society in the wage inequality also plays a role. For example, Kopycinska and Krynska (2016: 224) stated in their study for Poland that main reasons of wage inequality are caused by the shared values, cultural norms and traditional roles of the Christian-catholic tradition which is dominant in Poland.

Coverman (1983: 627) explores the relationship between domestic labor and wage labor by estimating the relative influence of hours spent in domestic labor such as housework and child care on women’s and men’s wages. It is stated that involment in domestic activities negatively affects wages and it is likely to be an important factor in explaining women’s lower wages relative to men.

Tansel et al. (2014) investigated wage inequality and wage mobility in Turkey by using surveys on income and living conditions for over the 2005-2011 period. The study concluded that wage inequality exhibits a slight increase and wage mobility in Turkey is lower than European Union countries.

Ilkkaracan and Selim (2007) investigated the source of the gender wage gap in Turkey by using standart wage regression method. They found that the gender wage gap inequality stems from women’s low work experience women’s lower concentration in jobs covered by collective labor bargaining and job tenure.

II. MEASURING WAGE GAP

Women's poverty is measured by using various methods. In the literature, it is generally based on traditional measures of household income and consumption, or quantitative and qualitative measurement of entitlements and capabilities in measuring women's poverty. Economic and social factors such as life expectancy, primary and secondary school enrollments, access to health services, maternal mortality, labor force participation, wage differential and fertility rate are used in the measurement of entitlements and capabilities (Moghadam, 2005:8). Since the wage inequality between women and men, which is one of the factors that play an important role in the economic poverty of women, is considered as an indicator of women's poverty in this study. Therefore, the following section focuses on wage inequality in more detail.

Two basic approaches are used in the literature to measure the wage inequality: Oaxaca (1973) and Neuman and Oaxaca (2004) methods. In the Oaxaca (1973) approach, the measurement of wage inequality is measured by equality (1).

$$\boldsymbol{D = \frac{W_m/W_f - (W_m/W_f)^0}{(W_m/W_f)^0}} \quad \textbf{(1)}$$

Where D coefficient shows the wage split, (W_m/W_f)shows the observed female to male wage ratio, and $(W_m/W_f)^0$ shows the female to male wage ratio in the absence of wage difference. Equality (2) is achieved by logarithmic transformation in Equality (1).

$$\boldsymbol{ln(D+1) = ln(\,(W_m/W_f) - ln\,(W_m/W_f)^0} \quad \textbf{(2)}$$

Since $(W_m/W_f)^0$ is unknown, estimating the D coefficient also means estimating the expression $(W_m/W_f)^0$. The gender wage gap is estimated by using the model shown in equality (3).

$$\boldsymbol{ln(W_i) = Z_i'\beta + \mu_i} \quad \textbf{(3)}$$

where W_i shows the hourly rate, Z_i' individual effects, β shows the coefficients vector, and μ_i the error term.

The second method for measuring wage inequality is based on Neuman and Oaxaca (2004). In this method, in addition to the Oaxaca (1973) method, Selectivity Bias Effect is added to the model, making the model more complicated and becoming in equality (4).

$$\boldsymbol{ln\overline{W}_m - ln\overline{W}_f = \overline{X}_m\widehat{B}_m - \overline{X}_f\widehat{B}_f + \overline{X}_f\widehat{B}_m - \overline{X}_f\widehat{B}_m} \quad \textbf{(4)}$$

By using the equality (4), the separation of the wage gap between men and women is made through the equation expressed as equality (5).

$$\boldsymbol{\Delta\, ln\overline{W}_m - \, ln\overline{W}_f = \left(\overline{X}_m - \overline{X}_f\right)\widehat{B}_m + (\widehat{B}_m - \widehat{B}_f)\,\overline{X}_f} \quad \textbf{(5)}$$

Where $\left(\bar{X}_m - \bar{X}_f\right)\hat{B}_m$ shows the characteristic feature between men and women, while $(\hat{B}_m - \hat{B}_f)\,\bar{X}_f$ shows the difference effect. Neumark and Oaxaca (2004) expanded the model as in equality (6) by adding Selectivity bias effect to the model shown in equality (5).

$$\boldsymbol{\Delta\, ln\overline{W}_m - \, ln\overline{W}_f = \left(\overline{X}_m - \overline{X}_f\right)\widehat{B}_m + \left(\widehat{B}_m - \widehat{B}_f\right)\overline{X}_f + (\widehat{\theta}_m\,\hat{\lambda}_m - \widehat{\theta}_f\,\hat{\lambda}_f)} \quad \textbf{(6)}$$

$(\hat{\theta}_m\,\hat{\lambda}_m - \hat{\theta}_f\,\hat{\lambda}_f)$ shows the selectivity bias effect in the model.

In this study, gender wage gap is taken as an indicator of wage inequality according to OECD . The gender wage gap is defined as the ratio of the differences in the median of female and male wages to the male wages in median as shown in equality (7).

$$Gender\ wage\ gap\ = \frac{(MedianW_m - MedianW_f)}{MedianW_m} \quad (7)$$

W_m indicates male median wage earnings, W_f indicates female median wage earnings. The high ratio shown in Equality (7) means that the wage gap between men and women is high, while the low rate means that the wage gap between men and women is low.

III. DATA SET AND ECONOMETRIC METHODS

III.I. Data Set

Detailed information about the data used in the study and descriptive statistics are shown in Table 1 and Table 2, respectively. Gender wage gap was taken from the OECD database, while all other variables were obtained from the World Bank. The sample of the study consists of 15[3] countries.

Table 1. Definition and Source of Variables

Symbol	***Definition***	***Source***
Wage Gap	Gender Wage Gap (%)	OECD
Femlabforce	Labor force, female (% of total labor force)	World Bank
Ind/Agri	Employment in industry, female (% of Female employment)/ Employment in agriculture, female (% of Female employment)/	World Bank
Lıfexp	Life expectancy at birth, female (years)	World Bank
Urban/Rural	Urban population (% of total population)/ Rural population (% of total population)	World Bank
Primeduc	School enrollment, primary, female (%gross)	World Bank
Secondaryeduc	School enrollment, secondary, female (%gross)	World Bank
Top2029	Population of Female (20-29)	World Bank
Age65	Population of Female (65 and over)	World Bank

As seen from the Table 2, mean and median values of the variables are quite close to each other, indicating that the variables are normally distributed.

Table 2. Descriptive statistics for variables

Variables	Wagegap	FEMLAB FORCE	URBAN_ RURAL	SECOND ARY EDUC	PRIM EDUC	LIFEXFEM ALE	TOP2029	_65FEM	IND/AGRI
Mean	18.502	45.288	6.776	108.743	101.581	81.976	12.969	17.584	7.445
Median	18.429	45.747	4.247	102.049	101.076	82.200	12.763	18.111	7.403
Maximum	42.215	48.452	46.080	163.930	123.981	86.990	18.429	28.895	18.993
Minimum	0.384	39.358	1.331	82.960	84.469	75.186	9.604	8.096	1.291
Std. Deviation	8.841	2.111	8.825	17.284	3.407	2.098	1.393	3.673	4.255
Observation	269	269	269	269	269	269	269	269	269

Note: Authors Calculation

[3] Austria, Belgium, Canada, Czechia, Finland, Germany, Hungary, Japan, South Korea, New Zealand, Norway, Sweden, United Kingdom, United States, and Israel.

Since the study consists of an unbalanced panel, the Fisher test, which gives effective and consistent results in unbalanced panels, was preferred for stationarity analysis.The result of PP Fisher test is shown in Table 3. According to the P- value of PP Fisher test, the null hypothesis that the variables are not stationary is rejected. This means that all variables are stationary and integrated of order zero.

Table 3. PP Fisher Unit Root Test Results

Variables	Test Statistic	Probability
Wagegap	50.6396	0.0106
Femlabforce	46.9761	0.0250
Ind/Agri	313.406	0.0000
Lifexp	44.4008	0.0438
Urban/Rural	277.128	0.0000
Primeduc	129.842	0.0000
Secondaryeduc	66.9857	0.0001
Top2029	58.3961	0.0014
Age65	101.643	0.0000

Note: Authors Calculation

III.II. Econometric Methods

Following Oaxaca (1973), the model in Equation (8) is estimated by panel ordinary least Square (OLS), panel fixed effect(FE), and panel random effect (RE).

$$lnwagegap_{it} = \beta_0 + \beta_1 Femlabforce_{it} + \beta_2 Urban/Rural_{it} + \beta_3 IndFem/AgriFem_{it} + \beta_4 Seceduc_{it} + \beta_5 Primeduc_{it} + \beta_6 lifex_{it} + \beta_7 Age2029_{it} + \beta_8 Fem65_{it} + \varepsilon_{it} \quad (8)$$

Where $lnwagegap$ is the logarithm of the gender wage gap, $Femlabforce$ is the ratio of the female labor force to the total labor force, $Urban/Rural$ is the ratio of the urban population to the rural population, and $IndFem/AgriFem$ is the ratio of the female labor force in the industrial sector to the female labor force in agriculture. $Seceduc$ denotes the ratio of women's enrollment in secondary education. $Primeduc$ stands for the ratio of women's enrollment in primary education, and $lifex$ is women life expectancy at birth. $Age2029$ is young women population, $Fem65$ is women over 65 years of age, and ε_{it} is the error term of the model.

Expected signs of the variables are as follows: Femlabforce is expected to be negative. In other words, as the participation rate to female labor force increases, the wage gap decreases as well $\left[\frac{\partial lnwagegap}{\partial Femlabforce} < 0 \; or \; \beta_1 < 0\right]$. (Urban / Rural) is expected to be negative. This means that the wage gap decreases as the ratio of urban population to rural population increases $\left[\frac{\partial lnwagegap}{\partial Urban/Rural} < 0 \; or \; \beta_2 < 0\right]$. The $IndFem/AgriFem$ is expected to be negative. In other words, when the female labor force in the industrial sector increases proportionally compared to the agricultural sector, the wage gap is expected to decrease $\left[\frac{\partial lnwagegap}{\partial IndFem/AgriFem} < 0 \; or \; \beta_3 < 0\right]$ .The primary education level of women is

expected to be positive and the secondary education level is expected to be negative. This is shown as $\left[\frac{\partial lnwagegap}{\partial Primeduc} > 0 \; or \; \beta_5 > 0\right]$ and $\left[\frac{\partial lnwagegap}{\partial Seceduc} < 0 \; or \; \beta_4 < 0\right]$, respectively. Life expectancy (lifex) sign of women is expected to be negative $\left[\frac{\partial lnwagegap}{\partial lifex} < 0 \; or \; \beta_6 < 0\right]$. Likewise, the sign of the young female population is expected to be negative $\left[\frac{\partial lnwagegap}{\partial Age2029} < 0 \; or \; \beta_7 < 0\right]$. Finally, the effect of the population over 65 years of age on the dependent variable is expected to be positive $\left[\frac{\partial lnwagegap}{\partial Fem65} > 0 \; or \; \beta_8 > 0\right]$.

III.III. Emprical Findings

Table 4 presents the results from the OLS, FE, and RE estimation. OLS estimation results are given in column one of Table 4. The coefficient of femlabforce, urban/rural, Age2029 and seceduc are negative and primeduc is positive as expected, whereas the signs of other variables are different than expected. In column two and three of Table 4, FE and RE estimation results are presented. Results are almost similar in both estimation methods. However, Breusch-Pagan LM, Levene-Brown and Modified Wald tests show cross-section dependence and heteroscedascity problems in FE and RE estimation. Therefore, to obtain more consistent results, FE and RE were re-estimated according to the panel corrected standard error method (PCSE), which takes into account heteroscedasticity and cross-section dependence. Results are presented in columns (4) and (5), respectively.

Table 4. Regression Results

Dependent Variable: Wage Gap	***1***	***2***	***3***	***4***	***5***
Independent Variables	***OLS***	***FE***	***RE***	***Panel Corrected Standard Errors***	
				FE	***RE***
$Femlabforce$	-0.1319**	-0.0757*	-0.1260***	-0.0320***	-0.1260***
	(0.0177)	(0.0396)	(0.0298)	(0.0089)	(0.0238)
$Urban/Rural$	-0.0248***	-0.0617***	-0.0313***	-0.0696***	-0.0313***
	(0.0058)	0.0163	(0.0100)	(0.0050)	(0.0071)
$Seceduc$	-0.0008	-0.0014	-0.0005	-0.0014***	-0.0005
	(0.0031)	(0.0023)	(0.0022)	(0.0005)	(0.0012)
$Primeduc$	0.0282***	0.0055	0.0051	0.0025**	0.0051
	(0.0092)	(0.0064)	(0.0063)	(0.0011)	(0.0044)
$Lifex$	0.1228***	-0.0907***	-0.0472**	-0.0893***	-0.0472*
	(0.0148)	(0.0263)	(0.0227)	(0.0053)	(0.0254)
$Age2029$	-0.0233	-0.0564**	-0.0452*	-0.0545***	-0.0452
	(0.0345)	(0.0239)	(0.0232)	(0.0047)	(0.0285)
$Fem65$	-0.0368***	0.0474**	0.0184	0.0321***	0.0184
	(0.0122)	(0.0206)	(0.0180)	(0.0048)	(0.0172)
$IndFem/AgriFem$	0.0222***	-0.0267**	-0.0193*	-0.0876***	-0.0193**
	(0.0082)	(0.0123)	(0.0112)	(0.0026)	(0.0081)
Constant	-3.1430	13.7607***	12.535	12.1303***	12.5356***
	(1.9213)	(1.9527)	(1.8287)	(0.3961)	(1.7264)
Adj.R^2	0.45	0.81	0.20	0.98	0.20
F-statistic	28.4980(0.0000)	54.6028(0.0000)	9.7200(0.0000)	706.5521(0.0000)	9.7200(0.0000)
Pesaran Test	28.6639(0.0000)	3.5829(0.003)	6.6143(0.0000)	1.8670(0.0619)	6.6143(0.0000)
Mod.Wald Test		1703.97(0.0000)			
Levene-Brown Test			16.3207(0.0000)		

Note: *, **, and *** shows 10%, 5%, and 1% significant levels, respectively. Standart errors are given in the parenthesis.

Since RE and FE estimation show different coefficients in both size and significance levels, we employed the Hausman test to decide which method is more appropriate. The result of Hausman test is given in Table 5. Based on the P- value of Hausman test, FE estimation is chosen as appropriate method. Therefore, we mainly focus on FE estimation results.

Table 5. Hausman Test Result

Chi-Sq Statistic	Prob.
21.924788	0.0051

Note: Authors Calculation

Since we estimated the log-lin model (growth model), the slope coefficients measures the constant proportional or relative change in the dependent variable for a given absolute change in the value of independent variables. In practice to compute the percentage change slope coefficients are multiplyed by 100 (Gujarati,_2011). In this contex, femlabforce, Urban/rural, seceduc, lifex, age2029, and ındfem/agrifem have decreasing impact on gender wage gap. Variables that have the most reducing effect are lifex, indfem/agrifem, and urban/rural, respectively. An 1% increase in these variables(lifex, indfem/agrifem, and urban/rural) reduce gender wage gap by 8.9%, 8.8%, and 7%, respectively. On the other hand, prime and fem65 increase wage gap 0.25% and 3.2 %, respectively. Other remarkable result is that prime education increase wage gap whereas secondary education reduces it.

CONCLUSION

Nowadays, poverty has become a multi-dimensional problem, including social factors, rather than just an economic problem. Especially recently, poverty has been addressed in terms of gender focused on women and men. In this context, the concept of poverty is identified especially with women and attention is drawn to the problem of poverty becoming feminized. When the concept of poverty is evaluated in this respect, it is seen that women are poorer than men. Although there are various causes of women's poverty such as economic and social factors, one of the most important factors is the wage inequality between men and women. Therefore, it is important to investigate the causes of wage inequality.

In this study, factors affecting gender wage gap are discussed in the context of selected OECD countries. In this context, factors affecting gender wage gap in selected OECD countries with data from 1997-2016 are analyzed using the panel data method. According to the results, the increase in the participation rate of women labor force reduces the gender wage gap by 3%. Considering the education of women, participation in the primary education level does not decrease the wage gap, while the increase in education level to secondary education decreases the wage gap. Namely, if the education level of women increases, wage gap decreases. This results is consistent with Prisco (2000: 207).

The increase in life expectancy of women, which is shown as an important indicator for women's health, also plays a reducing role on the wage gap. Accordingly, increasing life expectancy reduces wage gap by 9%. Considering the ages of women in terms of demographic terms, the high population of women at a young age reduces the wage gap by about 5%, while the increase in the population of women over 65 increases the difference in wage by having the opposite effect. This increase is around 3%. While the most important reason for this situation is the fact that the young population has more opportunity to participate in the workforce, the population of women over 65 years of age can enter the dependent age and the opportunities to work decrease.

Considering the labor sector, the increase in the ratio of the number of women working in the industrial sector to the population of women working in agriculture also has a decreasing effect on the wage gap. It can be said that the reason for this situation is that the wage level in the industrial sector is higher than the wages in the agricultural sector. This result is consistent with the study of Gammage (2015: 337).

When the results obtained in the study are evaluated, the fact that women's exposure to wage inequality causes women to be poorer than men in terms of economy. In order to prevent wage inequality, priority should be given to policies that increase the education level of women, increase the

female workforce by encouraging women's participation in the workforce, and enable women to work in higher-wage sectors such as the industry and the service sector. Thus, wage inequality between men and women can be reduced.

REFERENCES

Chant, S. H. (2007). *Gender, generation and poverty: exploring the feminisation of poverty in Africa, Asia and Latin America.* Cheltenham, UK: Edward Elgar Publishing.

Coverman, S. (1983). Gender, domestic labor time, and wage inequality. *American Sociological Review*, *48*(5), 623–637.

Duman, A. (2020). Non-standard employment and wage differences across gender: A quantile regression approach. *GLO Discussion Paper*, No. 664, Global Labor Organization (GLO), Essen.

Gammage, S. (2015). Labour market instutions and gender inequality. In Berg, J. (Eds.), *Labour Market Institutions and Inequality Building Just Societies in the 21st Century* (pp. 315–340). Switzerland: ILO.

Glick, P., & Sahn, D. E. (1997). Gender and education impacts on employment and earnings in West Africa: Evidence from Guinea. *Economic Development and Cultural Change*, *45*(4), 793–823.

Goldberg, G. S., & Kremen, E. (1990). *The feminization of poverty: Only in Ameica?* Westport: Greenwood Press.

Gornick, J. C., & Boeri, N. (2016). Gender and poverty. In Brady, D. & Burton, L. (Eds.) *The Oxford Handbook of the Social Science of Poverty* (pp. 221–246). Oxford: Oxford University Press.

Groshen, E. L. (1991). The structure of the female/male wage differential: Is it who you are, what you do, or where you work? *Journal of Human Resources*, *26*(3), 457–472.

Gujarati, D. (2011). *Econometrics by example*. Newyork: Palgrave Macmillan.

Harkness, S. E. (2005). Pay inequality and gender. In Delorenzi, S., Reed, J. and Robinson, P. (eds.), *Maintaining Momentum: Promoting Social Mobility and Life Changes from Early Years to Adulthood* (pp. 93–103). London: Institute for Public Policy Research.

Ilkkaracan, I., & Selim, R. (2007). The gender wage gap in the Turkish labor market. *Labour*, *21*(3), 563–593.

Jajri, I., & Ismail, R. (2010). Impact of labour quality on labour productivity and economic growth. *African Journal of Business Management*, *4*(4), 486–495.

Kaya, E. (2010). Quantile regression and the gender wage gap: Is there a glass ceiling in the Turkish labor market? *Cardiff Economics Working Papers*, No. E2017/5, Cardiff University, Cardiff Business School, Cardiff.

Kopycinska, D., & Krynska, E. (2016). Wage inequalities between men and women in Poland - A justified differentiation or accepted wage discrimination of women? *Economics & Sociology*, *9*(4), 222–242.

Moghadam, V. M. (2005). The Feminization of Poverty and Women's Human Rights. *SHS Papers in Women's Studies/Gender Research, 2,* 1–38.

Neuman, S., & Oaxaca, R. L. (2004). Wage decompositions with selectivity-corrected wage equations: A methodological note. *The Journal of Economic Inequality*, *2*(1), 3–10.

Oaxaca, R. (1973). Male-female wage differentials in urban labor markets. *International economic review*, *14*(3), 693–709.

Polachek, S. W., & Xiang, J. (2009). The gender pay gap across countries: A human capital approach, *SOEPpapers on Multidisciplinary Panel Data Research*, No. 227, Deutsches Institut für Wirtschaftsforschung (DIW), Berlin.

Prisco, A. M. (2000). Trends in Wage Inequality in Italy During the 1990s: Why a University Degree Narrowed in the 1980s. Journal of Labor Economics, Now Matters. PhD. dissertation, Columbia University, 11(1), 205–228. United States-New York.

Tansel, A. (2005). Public-private employment choice, wage differentials, and gender in Turkey. *Economic development and cultural change*, *53*(2), 453–477.

Tansel, A., Dalgıç, B., & Güven, A. (2019). Wage inequality and wage mobility in Turkey. *Social Indicators Research, 142*(1), 107–129.

Etik Beyanı : *Bu çalışmanın tüm hazırlanma süreçlerinde etik kurallara uyulduğunu beyan ederiz. Aksi bir durumun tespiti halinde ÖHÜİİBF Dergisinin hiçbir sorumluluğu olmayıp, tüm sorumluluk çalışmanın yazarları olarak bize aittir.*

Yazar Katkıları : *1. yazarın katkı oranı: %50, 2. yazarın katkı oranı: %50'dir.*

Çıkar Beyanı : *Yazarlar arasında çıkar çatışması yoktur.*

Ethics Statement : *We declare that we act in accordance with ethical principles in all processes of this study. If an otherwise situation is detected, Journal of ÖHÜİİBF has no responsibility and all responsibility belongs to us as the authors of this study.*

Author Contributions : *Contribution rate of both authors is 50%.*

Conflict of Interest : *We have no conflict of interest to declare.*