

# Gender gap and the labour market structure: A neoclassical approach for the case of Turkiye

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### Abstract

In recent years, Turkiye has been among the lowest in the Global Gender Gap index announced. This study is intended to analyze the main determinants of the labour market and the role of women in this market by shedding light on Turkiye's economic and government policies in the last 20 years. For this, the basic human capital model has been applied using the Household Labour Force Survey of 2021 published by TURKSTAT (Turkish Statistical Institute). The wage increases with the increased level of education and experience that supports the basic model. At the same time, the extended models that we have applied have shown that women, despite having a high level of education, take a lower wage than men. At the same time, single and married women are less likely to participate in the labour force. Moreover, the wage taken decreases with the employment in the private sector and working part-time. Considering the differences between the sectors, the workers in the industrial sector have been determined to be paid a higher wage than those in the sectors of service and agriculture. An analysis of women's participation in labour force has also shown that their marital status as married and the increase in their educational level has a negative effect. Finally, we have discussed the disadvantages of being a woman in the labour market where the neoliberal policies implemented in Turkiye have deepened the gap.

Keywords Gender Gap · Human capital model · Wage differantials

## 1 Introduction

The world has witnessed a striking increase in women's participation in the workforce since the twentieth century. During this period, women managed to carve out a place for themselves in occupations traditionally held by men, achieving significant gains in wages

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and incomes. In the United States, at the beginning of the twentieth century, only one out of every five working-age women could be employed for wages, whereas a century later, this ratio sharply rose to two out of every three (Goldin 2006). In the European Union (EU), the gender gap has now declined to a slightly lower level, around 5%. However, Turkiye has failed to catch up with this global trend in this regard. It can be said that Turkiye has been unsuccessful in addressing gender inequality. For instance, in 2021, the female labor force participation rate was nearly half that of males. Such that, there is a striking 30-point difference between Turkiye and EU averages (Eurostat 2022).

Turkiye's labor force participation rate, as of 2022, is one of the lowest among the OECD countries, standing at 53.1%. This situation arises from the very low female labor force participation rate, which was 35.1% in 2022, as the male participation rate is 71.4%, exceeding the OECD average of 68.9% (OECD 2024).

One of the characteristic features of the labor market in Turkiye is the high rate of informal employment. Approximately 28% of total employment (agricultural and non-agricultural) is in the informal sector. Specifically, 24.2% of men and 36.3% of women work in the informal sector. Informal employment is primarily concentrated in the agricultural sector, where approximately 97% of women are informally employed. The informal employment rate for women in non-agricultural sectors is 20.6%. In both sectors, women are more likely than men to work informally (without social security, insurance, regularity, or being registered). While the gender gap in informal employment rates is approximately 22% points higher for women in the agricultural sector compared to men, this difference decreases in non-agricultural sectors (about 4% points). The most significant reason for this is that the construction sector holds the largest share of informal employment rates are 30.6% for men and 9.8% for women (ILO 2024).

Due to the significant presence of an informal sector in total non-agricultural wage employment, the wage-setting structure tends to be quite centralized. Setting aside the informal sector, wage determination in the formal sector typically follows a decentralized structure, where wage negotiations largely occur at the firm level and to some extent at the sub-sector level. Unionization rates are low.

As for the unemployment rate, although it hovered around 8% for much of the 1980–90 period, it has risen above 10% in the past few years. There is a significant difference between male and female unemployment rates, with the female unemployment rate being 13.4% in 2022, while the male unemployment rate is 8.9% (TURKSTAT 2024).

The gender-based gap that Turkiye finds itself in necessitates further examination of the country. The literature on gender wage gap is shaped around two main questions. The first concerns the magnitude of the gap, while the second is related to the underlying reasons for gender disparities.

Within this framework, a series of approaches shaped by neoclassical understanding have developed discussions through human capital variables such as education and experience. With the use of more comprehensive workplace data since the 1990s, the current discourse has expanded to include topics such as occupation, industry, sector, collective bargaining, and firm size. However, it is evident that the issue of gender-based wage equality can be better understood through broader discussions that encompass both political and socio-cultural variables. After all, the inequalities faced by women can be multifaceted. Therefore, country-specific extended models are of utmost importance.

With this perspective, this paper aims to analyze why Turkiye still has an unsuccessful and unfavourable level of women's employment despite the reforms that it has achieved over the past two decades. The first part of the study, therefore, contains an analysis of the labour market based on supply and demand in Turkiye. The second part is the empirical analysis of our study. In this section, socioeconomic variables of the wages in Turkiye will be determined through the models extended from the neoclassical perspective. At the same time, light will be shed on the dynamics of women's participation in labour force. In the last part, a broad perspective will be presented on the current situation and future of Turkiye within the context of basic dynamics. Finally, the economic and political policies of the dominant ideology and understanding of the past twenty years will be elabourated and additionally, a variety of solution recommendations will be discussed.

#### 2 Literature

Neoclassical economics is a basic approach that attempts to explain the problem of optimal allocation and pricing of the resources. According to this approach, the determination of the unit price of labour and the level of employment is similar to that of the consumer goods. Just as the goods is determined by supply and demand under the circumstances of perfect competition, so the wages are determined in the same way. The main difference is that the roles of the economic agents are reversed. Companies are demanders and households are suppliers in the labour market.

In the neoclassical model, which is based on extreme abstraction and simplistic assumptions, the choice of the economic units between their wage and leisure time is a determining factor in determining the labour supply. The choice between wage and leisure time depends on individual preference. Individuals first choose to work. Then they decide on the working time and free time (Schneider 1995, 277). Accordingly, as wages increase, so does individual income; as income increases, so does the opportunity cost of leisure. As a result, leisure time is used less in the same way that the more expensive goods is used less. In other words, working time and leisure time are considered substitute goods. According to these explanations, the labour supply is an increasing function of real wages. In addition, the model assumes that traditional, cultural and political factors, that is, all institutional and sociological effects, are external (Ardıç and Aydın 2011, 35–38).

Upon the examination of the labour supply, it seems striking that the annual average rate of women's participation in labour force in Turkiye is 2.4 times lower than that of men within the last 20 years. While the labour force participation rates of women tended to decrease in this period, the labour force participation rates of men remained at the same levels, and therefore, the gender gap in labour force participation narrowed. However, the labour force participation rate among women is still quite high as compared to the rate in EU countries (see Fig. 1).

In 2021, men's labour force participation rate in Turkiye is twice that of women's labour force participation rate. In this period, there is a difference of approximately 30 points between the average rates of Turkiye and the EU in terms of women's labour force participation rate. Women's participation rate in Turkiye is lower than in any EU country, while men's participation rate is higher than in many countries such as Belgium, France, Italy and Greece (see Fig. 2).

As of the end of 2021, the female population of working age (over 15 years old) in Turkiye is 32.1 million. Of these, approximately 21.6 million do not find a place for themselves in the workforce. Considering the reasons for their failure to participate in the labour force, "domestic work" comes first. 9.9 million of the unemployed women fall into the category of "house-wives". This is followed by 3.4 million "disabled" and 2.6 million "education" categories. On

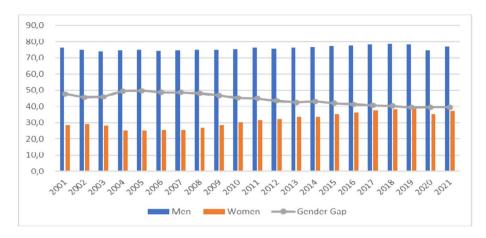


Fig. 1 Gender differences in the labour force participation rate in Turkiye, (%), 2001–2021, 15 to 64 years of age. (Source: OECD (2022); Eurostat (2022))

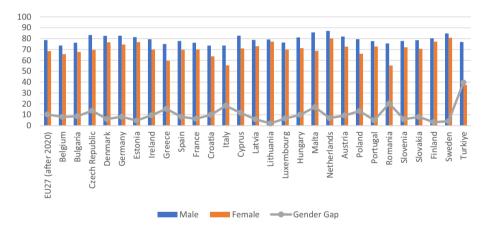


Fig. 2 Labour force participation rate in Turkiye and selected EU vountries, (%), 2021, 15 to 64 years of age. (Source: OECD (2022); Eurostat (2022))

the other hand, when men who do not participate in the labour force are ranked, "retired" (3.7 million) comes first, "education and training" (2.2 million) comes in the second place, while the figure is recorded as zero in the category of "doing housework" (TURKSTAT 2021, 108). According to the data, the most important factor affecting women's labour supply is the opportunity cost of working. In this sense, education level is among the most important factors affecting women's participation in the labour market. Urban women, especially married with children, are supposed to choose between paid work and childcare. Since the high cost of kindergarten increases the opportunity cost of paid work, it can be considered as a rational behaviour for low-paid women to do housework and childcare. In this case, opportunity costs are covered only for educated women who can earn more income.

In the neoclassical model, labour demand, like labour supply, is explained by the marginal approach. According to the law of diminishing returns, the marginal productivity of labour decreases as employment increases. A company operating on the

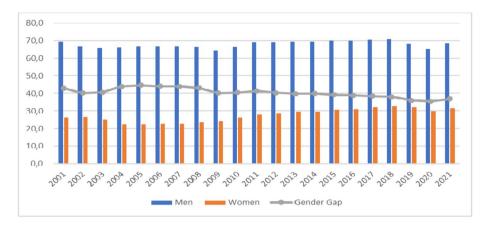


Fig.3 Gender gap and employment rate, (%), 2001–2021, 15 to 64 years of age. (Source: OECD (2022); Eurostat (2022))

principle of profit maximization maximizes its profits when marginal cost equals marginal revenue. This means that the additional cost of the additional worker is equal to the additional income that the worker brings to the company. In equilibrium, the wage is equal to the marginal return. In such a case, expansion of firm employment is only possible with a decrease in real wages (Ardıç and Aydın 2011, 44–45).

Under perfect competition the firm is a price taker; that is, real wages are data. Under these assumptions, when real wages increase, the firm's demand for labour decreases and vice versa. Firms that take productivity into account when demanding labour maximize their profits with current real wages. According to the assumptions of the model, the reason for the increase in unemployment is the increase in real wages. In other words, a real wage higher than the marginal return on labour, that is, an increase in real wages, increases the labour supply and decreases the demand for labour, leading to excess supply in the labour market. However, this situation is called "voluntary unemployment". Because it is assumed that workers demand a wage above their marginal earnings. All institutions that regulate the labour market as a social system and thus make labour more expensive are seen as the cause of the deteriorated price mechanism (solid wages) and thus unemployment (Sesselmeier et al. 2010, 79–83).

On the labour demand side, the female employment rate in Turkiye has averaged 27.5% per year in the last 20 years. During the same period, the average employment rate for women in the EU was 58%. In this period, while the men's employment rate in Turkiye remained the same, the women's employment rate increased by approximately 6 points, narrowing the gender inequality at the same rate. However, despite this decrease, the difference between men and women in Turkiye is still 37 points, indicating that gender discrimination in the labour market is significant (see Fig. 3).

In 2021, the female employment rate in the EU-27 is twice as much as that in Turkiye. In countries such as Italy and Greece, which have the lowest female employment rates among EU countries, these rates are approximately 20 points higher than in Turkiye. On the other hand, male employment rates in these countries are lower than in Turkiye. While the employment rate for men in Turkiye was 68.6% in 2021, this rate was only 31.7% for women. Although the employment rates of men and women differ between EU countries, the difference is only 10 points (see Fig. 4).

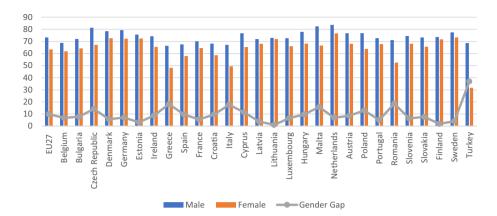


Fig. 4 Employment Rate in Turkiye and Selected EU Countries, (%), 2001–2021, 15 to 64 years. (Source: OECD (2022); Eurostat (2022))

The neoclassical approach attempts to explain gender-based wage gaps through the human capital theory, considering variables such as education and experience. However, since the 1990s, gender studies have become more comprehensive. Particularly, the statistical measurement of workplace data and inclusion in analyses, enabling the identification of variables such as occupation, firm size, job-cell, sector and coverage of collective bargaining agreements, has added another dimension to studies (Gupta and Rothstein 2005).

In this context, in their studies examining the United States, Blau and Kahn (1997) report that individuals' human capital explains 80.5% of the gender wage gap, but when variables such as occupation, industry, and coverage of collective bargaining covarage are added, this rate increases to 88.2%. They found that in the U.S. during the 1980s, critical factors in reducing the gender wage gap included increasing levels of experience among women, improvements in occupational choice, and decreasing unionization among male workers.

Capellari et al. (2004), in their studies on Italy, found that women have significantly high human capital, but the returns to education and experience favor men. They also noted that firm characteristics such as size, sector, and the percentage of female employees play a less determinative role in wage inequality. Gupta and Rothstein (2005), on the other hand, stated that workplace variables, in addition to human capital variables, are significant determinants of wage inequality in Denmark.

Studies examining wage inequality in developing countries such as Ethiopia, Egypt, South Korea, and the Cote D'Ivoire are also increasing (Appleton et al. 1999; Christofides and Pashardes 2000; Seguino 2000; Assaad and Arntz 2005). For Cyprus, Christofides and Pashardes (2000) found that industry and occupation effects explain a significant portion of gender wage inequality. Regarding variables of collective bargaining agreements and unionization, international comparisons often emphasize that more centralized wage structures generally lead to lower gender wage gaps, as they tend to encompass smaller wage differentials among sectors, industries, occupations, and firms (Kidd and Shannon 1996, 2002). Generally, broader collective bargaining agreements and unionization tend to reduce gender wage inequality when other factors are equal.

In recent years international studies conducted also examine women receiving lower pay compared to men by taking into account socio-cultural influences alongside human capital or firm characteristics (Acheampong et al. 2023; Cuberes et al. 2023; Fatima 2023; Lietzmann and Frodermann 2023; Khan 2023). Lietzmann and Frodermann's (2023) for

Germany study addresses gender differences in women's employment as a result of societal gender roles and attitudes. Malul (2023) suggests that perceived differences in the competence of women in the workplace result in women receiving lower pay. Similarly, Khan (2023) for Pakistan states that societal gender norms and cultural factors contribute to women receiving lower pay in the workplace and in society. He emphasizes that despite the astonishing expansion of technology, women are still disproportionately underrepresented. Although women make up more than half of the population, they hold less than one-quarter of tech jobs. Various factors contribute to this trend, such as shifts in economic focus from manufacturing to services and changing cultural norms regarding women's moral responsibilities. Additionally, Cuberes et al. (2023) for Malesia indicate that the underrepresentation of women in certain sectors and positions compared to men could contribute to wage inequality.

In this study focusing on Turkiye, firstly, the human capital model will be tested, and then analyses will be conducted at the company and sector levels with expanded models. In the conclusion section, the effects of social and cultural factors on wage inequality will be comprehensively discussed.

#### 3 The human capital model

Wage inequality, which affects women's labour supply, is also one of the most important indicators of gender discrimination in the labour market. However, since the neoclassical standard model assumes that the labour force is homogeneous, it does not explain the gender discrimination in the labour market and thus the wage inequality between men and women. For this reason, the human capital model has been developed by expanding the assumptions of the standard neoclassical model (Sesselmeier et al. 2010, 145).

Discussions on women's participation in the labour market began with the work of Jacob Mincer. In this supply-oriented approach, women's employment behavior is derived from a rational choice perspective. In this developed approach, the decisions regarding the participation of women in the labour market are explained by the common decision of the households and supported by economic arguments. Accordingly, family members maximize a shared household utility under budget and time constraints. In a way, the utility function of the altruistic host is defined. Family members decide not only between work and leisure, as in traditional microeconomics, but also between housework and market work. Since women have a comparative advantage in household production, it makes sense for family members to specialize entirely in the market (men) or housework (women). This also applies to equal market conditions for women and men, i.e. non-discrimination in the labour market. In particular, wage discrimination against women increases their comparative advantage in housework, thus strengthening specialization (Kreimer 2009, 58–59).

The human capital model developed on the basis of the main assumptions of neoclassical economics is one of the most widely used models in econometric analyzes to explain the wage gap. The basic premise of the model is that individuals' investments in their education and on-the-job training will increase individuals' productive capacity and affect their income for years to come. Accordingly, education and experience are identified as the main income variables (Becker, 1964; Chiswick 1974; Mincer 1974)

$$\ln \mathbf{E}_{t} = \ln \mathbf{E}_{0} + \mathbf{rs} + \beta_{1} \mathbf{t} - \beta_{2} \mathbf{t}^{2} \tag{1}$$

t = (A-s-b).

A = Current age.

b = Years of Schooling.

In Mincer's model, the dependent variable  $E_t$  represents an individuals earnings, 's' years of education, and 't' the experience. In the equation, "r" denotes return on education and " $\beta$ 1" denotes return on experience. The direction of the signs of the coefficients is r > 0,  $\beta$ 1 > 0 ve  $\beta$ 2 < 0.<sup>1</sup>

According to Mincer, when the working life reaches a certain age, the wage reaches its highest peak, and then follows a flat course or decreases as the years pass (Mincer 1974, 84–85). The first assumption here is that individuals have the same abilities and equal opportunities in any job entry. Others are assumptions that individuals make rational choices, that personal productivity determines earnings, that there is perfect competition in the labour market, and that there is a developed capital market in which individuals can borrow and lend provided that the interest rate is constant (Mincer 1974, 7–8).

When the functional income distribution in Turkiye is analyzed according to the results of the 2021 income living conditions survey, it has 47.1% in wage, salary and daily income. This result causes us to think that inequality in wages will affect income inequality more than other income items. For this reason, the determinants of wage inequality in Turkiye were tried to be determined by using the human capital model in this study. It is aimed to expand the limits of the analysis with some variables developed in addition to the main model.

#### 4 Data and methodology

Our data set is obtained from the Microdataset of the Household Labour Force Survey 2021 which is conducted annually by the Turkish Statistical Institute (TURKSTAT). The questionnaire was applied to 234.240 households and a total of 635.159 participants answered the questions. 127.594 of them were paid-salary and daily wage workers. The average monthly wage of them was 4071.28 TL (Turkish Lira). 31% of them were female, 70% were married and around 60% had high school or higher education. The average age of the respondents was 37.

Table 1 shows the descriptive statistics of wage earners. Our dependent variable wage was handled numerically. This question was asked to the respondents as an open-ended one. As in Mincer's model, the logarithm of the wage variable was taken and designed as the dependent variable. Again, Mincer used the work experience of the employee in his study. However, since there is no data on experience in our data set, attempt has been made to solve this problem with the age variable. For this purpose, the square of age (age<sup>2</sup>) has been taken, and attempts have been made to determine at what age employees experience changes in their wages. The education variable was included in the analysis as an independent variable as in the basic model. This question (0. Uneducated 1. Primary school, 2. Primary and Secondary School, 3. High School, 4. University, 5. Master and PhD) is designed categorically. On the other hand, taking into account the criticisms brought to Mincer's model, variables such as working style, gender, marital status and the sector in which they

<sup>&</sup>lt;sup>1</sup> The variable 'experience' t in the model is calculated by subtracting the person's age when they started school from their current age (usually this is 6 or 7 years) (Mincer 1974, 84). It is assumed that those who are gainfully employed start working immediately after school. The dependent variable is the logarithmic expression of the wages earned by the worker.

Table 1 Descriptive statistics	Variables	Obs	Mean	S.D	Min	Max
	Female	127.594	0.31	0.46	0	1
	Education	127.594	2.76	1.28	0	5
	Inwage	127.594	8.16	0.57	0	11.95
	Age	127.594	37.72	11.02	15	95
	Age2	127.594	1544.43	877.14	225	9025
	Private Sector	127.594	0.70	0.46	0	1
	Married	127.594	0.70	0.46	0	1
	Part Time	127.594	0.04	0.20	0	1
	Employee	127.594	2.87	1.46	1	5
	Industry	127.594	0.45	0.50	0	1

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work were also included in the analysis. Employment in the private sector, being married, working part-time and working in the industrial sector are dummy variables given the value one if the respondent belongs to the specified group. The number of employees in the workplace has been included in the model as a categorical variable. The question, designed with five options, encompasses increasing numbers of employees from the first option to the fifth option (1. 1–9, 2. 10–19, 3. 20–49, 4. 50–249, 5. 250 and more).

In addition to the established linear regression model, a logit model will be used to determine the probabilities of women's labor force participation. The equation for the logit model is as follows:

$$\log \operatorname{it}(p) = \ln(\frac{p}{1-p}) = \beta 0 + \beta 1 X 1 + \beta 2 X 2 + \dots + \beta n * X n + \varepsilon$$
(2)

Here, *p* represents the probability of the event occurring (in this case, women's labor force participation), and  $X_1, X_2, ..., X_n$  are the independent variables. The coefficients  $\beta_0, \beta_1, \beta_2, ..., \beta_n$  represent the effects of these independent variables on the log-odds of the event (Hosmer et al. 2013).

#### 5 Empirical results

Table 2 presents the results from the estimation. The estimate shows the socio-economic determinants of wages. In line with the existing literature, our results indicate that experience and education have a positive impact on wages. But after the age of 37.5, the wages decrease. At the same time, being married increases wages.

Our empirical findings highlight a striking difference across genders. In the light of the findings, women earn 13% less than men. Gender differences, parallel to previous studies, is revealed in our analysis (Christofides and Pashardes 2002; Selim and İlkkaracan 2002; Danh and Long 2006; Sanger 2011; Papapetrou 2006; Heitmueller 2006; Casero and Seshan 2006; Miaari 2009; Onuk 2017; Acun 2018).

As indicated in Table 2, our empirical findings also underline working part-time and working in the private sector negatively impact on wages.

Our results also suggest a positive relationship between working in the public sector and wages. According to the results, the wage of a private employee is 30% less than that of a paid employee in the public sector. This result emphasizes the strength of

Table 2Determinants of wageanalysis results	Dependent vari- able: lnwage	В	Robust Std. Error	Sig
	Constant	6.706	0.016	0.000
	Female	-0.134	0.002	0.000
	Age	0.046	0.0008	0.000
	Age2	-0.0004	9.890	0.000
	Education	0.170	0.001	0.000
	Married	0.053	0.003	0.000
	Employee	0.072	0.0008	0.000
	Industry	0.042	0.003	0.000
	Private Sector	-0.300	0.004	0.000
	Part Time	-0.668	0.011	0.000
	Ν	127.594		
	$\mathbb{R}^2$	0.51		
	F statistics	12,568.37		

secure employment and unionization in the public sector. The power of unions in the public sector leads to higher wage increases. On the other hand, wages remain much lower in the private sector.

In addition, it has a positive effect on the wages of the number of employees in the workplace. As the size of the business increases, the wage increases. The wages of those working in the industry sector are 4% higher than those working in the services and agriculture sectors.

In the study, the logit model was applied to determine the probability's of women's labour force participation. The fact that women are paid less than men and the low rates of female employment in Turkiye arouses great curiosity about the factors behind women's labour force participation. Table 3 shows the estimation results of the logit model.

Upon the examination of Table 3, it appears that other variables are significant except for the income variable. Although the direction of the coefficient of the income variable is in line with the expectations, the variable is not statistically significant. Another important finding is that married women are less likely to join the workforce. The probability of married women's labor force participation is 4% lower. Considering the educational stages, it is striking that the probability of women's participation in the labour force decreases regardless of their education level. An increase in education level by one level decreases the probability of women's labor force participation by 2%. On the other hand, one-year increase in age decreases the odds of reporting labour force participation by 97%.

Here, despite a significant increase in the education levels of women in recent years, we observe that this has led to a decrease in their likelihood of labor force participation. This can be explained by the preference of educated women, especially after having children, to stay at home. Factors contributing to this include the inadequacy of public childcare services and the cultural prominence of motherhood, especially as articulated in political discourse in recent years, often in a populist manner.

Dependent Variable: Women's Labour Force Participation Rate	dy/dx	β	Robust S. E	Z
Constant		4.491	0.246	18.25
Income	0.0051	-6.950	6.550	-1.06
Age	-0.0024	-0.023	0.012	-1.90*
Age2	0.0000	0.0002	0.0001	1.95*
Education	-0.219			
Primary school		-0.821	0.157	-5.23***
Primary and Secondary School		-1.393	0.161	-8.64***
High School		-1.163	0.158	-7.35***
University		-1.660	0.156	-10.63***
Master and PhD		-1.606	0.172	-9.32***
Married	-0.0436	-0.577	0.047	-12.35***
Ν		39.726		
Pseudo R <sup>2</sup>		0.027		
Wald chi2		566.25		
Prob>chi2		0.000		

 Table 3
 Logit model estimation results for women's labour force participation

\* and \*\*\* denote significance at the p < 0.1 and p < 0.01 levels

## 6 Conclusion

There is a rapidly growing body of literature on the gender wage gap. This article contributes to the existing literature through an analysis of socioeconomic determinants of wage in Turkiye. Empirical findings in this article not only identify significant gender differences, but also facilitate cross-cultural comparisons with empirical evidence from other countries. The results of the analysis primarily underline the gender difference. Women are paid less than men. In this sense, Turkiye is strikingly different when compared to EU countries. This inequality is not related to the fact that women are less educated. Hence, Turkiye has achieved serious success in the education of women in the last 20 years. The main reason for this situation is the exclusion of women from business life, especially after marriage. Turkiye has implemented neoliberal policies since the 2000s. As a natural consequence of this situation, the private sector dominated the market instead of the public sector. As such, secure employment in the public sector gradually decreased and workers faced harsh market dynamics. As a matter of fact, our empirical findings reveal that working in the public sector increases the wages. When the disadvantage of only being a woman is added to this situation, it has been easier to be excluded in this competitive environment.

Another important factor is the opportunity cost of staying at home. In Turkiye, women are culturally imposed on the sanctity of being a mother and raising children as the most important work that continues throughout their lives. This understanding is an element that cannot be ignored, which binds women to the home after they have children. When an unfavorable work life is added to this situation, it is inevitable for women to withdraw from the labour market. In addition, since the wave of cheap labour brought by the Syrian civil war for more than 10 years has seriously reduced real wages, this has also been a determining factor in women's decision not to work.

Another important result of our study is that experience and education increase the wages in accordance with the previous literature. Higher education graduation rates for both men and women in Turkiye are above the EU average. This demonstrates the success of the education reform and equality reform implemented by the AKP. However, it is obvious that there is a serious problem in the transfer of this workforce to the labour market. In this respect, various practices and incentives can be implemented through government policies.

Turkiye still lags far behind the EU average in female participation in labour force. In another model we have made to determine the reasons for this, we find that the extent to which women participate in labour force is reduced by the fact that they are married and that their education level increases reduces. These results are similar to the reasons mentioned above that women are exposed to wage inequality in Turkiye. It is obvious that there is a need for state-based positive discrimination policies in the labour market.

The most crucial step here will be to alleviate the burden of care responsibilities on women. The lack of a nursery or kindergarten close to the workplace that will facilitate women's work in business life after they have children, and the inadequacy of public policies in this area are important reasons why women cannot continue their work life. Increasing the availability of affordable, high-quality childcare facilities will be the most effective way to raise women's employment levels. In recent years, there has been a focus on child care and early childhood education in Turkiye. However, public institutions have only approached the issue from the perspective of child development, so far limited to preschool classes and lacking a gender perspective. Therefore, more comprehensive plans for child education need to be created together with the issue of women's employment.

Policy makers have acknowledged the shortage of social care services, but a recurring element in recent discussions has been how to solve the problem with the lowest possible cost. Low-cost solutions such as limited-term and part-time access to community-based child development programs, locally operated centers run by women, part-time work from home for mothers, and extended childcare leave have proven to be highly inadequate in addressing women's wage and employment issues. Therefore, it is crucial to implement gender-based fiscal policies in collaboration with civil society organizations. Redistribution of income in favor of women can be expected to transform consumer spending patterns in favor of societal and household welfare. Recent research in the field of gender economics has shown that women tend to allocate a larger portion of their incomes towards health and education services, as well as towards better quality and more abundant food and housing, while men tend to spend more on personal consumption items such as automobiles, alcohol, and tobacco. Consequently, a gender-sensitive fiscal policy that prioritizes social care has the potential to generate additional positive externalities through changing consumption patterns.

Additionally, the significant gender gap in Turkiye is a consequence of a growth process where the majority of women are excluded from the labor market. Female voters, who are mostly homemakers, have contributed to the consolidation of the conservative populist political power (AKP). This facilitated a transformation from an emphasis on equality in gender policies to a focus on motherhood, cash transfers, and gender-specific employment practices such as part-time and home-based work. As a result of these policy transformations, it is likely that gender inequalities in the labor market will further deepen. Therefore, this situation in Turkiye is closely related to politics. Hence, there is an essential need for a change in political understanding here.

Finally, our study is limited to the data from the TURKSTAT's Household Labour Force Survey 2021. It is evident that there is a need for surveys and in-depth interviews that can observe both economic and socio-cultural effects on a regional basis. If future studies are shaped within this framework, more comprehensive conclusions can be drawn regarding the gender gap, and policy recommendations can be formulated.

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