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TURKISH-GERMAN UNIVERSITY

INSTITUTE OF SOCIAL SCIENCES

INTERNATIONAL FINANCE DEPARTMENT

GENDER GAP IN LABOR FORCE PARTICIPATION RATE

MASTER'S DEGREE THESIS

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ISTANBUL, February 2021

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ABSTRACT

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In today's societies where gender inequality is observed, women's employment is important in terms of increasing the welfare level and sustaining development. However, women's participation in employment is very limited in Turkey. Crises in many countries since the mid-1980s have deeply affected women's participation in the labor force. Women have become low-wage workers of the labor market to compensate for declining household incomes. In the capitalist system order, formal economic activities are gradually narrowing and informalization is spreading over a wide area regardless of the level of development. Women workers make up the majority of the informal economy. Thus, it is important for a country to increase the participation of females to workforce. In this study, gender gap occurring in the workforce was examined. In this context, the relationship between female labor force participation rate and male labor force participation rate, female divorce rate, GDP and inflation rate were analyzed. Granger causality analysis and VAR analysis were applied for the research. As a result of the research, a reciprocal relationship between female labor force participation and GDP has been determined. In addition, it has been determined that the male labor force participation rate has an effect on the female labor force participation rate.

Key Words, Labor Force Participation**,** Female Labor Force Participation, Female Unemployent, Gender Gap, Turkey.

ÖZET

İŞGÜCÜNE KATILIM ORANINDA CİNSİYET FARKI

Cinsiyet eşitsizliğinin görüldüğü günümüz toplumlarında kadın istihdamı, refah düzeyinin yükseltilmesi ve kalkınmanın sürdürülmesi açısından önemlidir. Ancak Türkiye'de kadınların istihdama katılımı çok sınırlıdır. 1980'lerin ortasından bu yana birçok ülkede yaşanan krizler, kadınların işgücüne katılımını derinden etkiledi. Hanehalkı gelirlerindeki düşüşü telafi etmek için kadınlar işgücü piyasasının düşük ücretli çalışanları haline geldi. Kapitalist sistem düzeninde, formel ekonomik faaliyetler giderek daralmakta ve enformelleşme, gelişmişlik düzeyine bakılmaksızın geniş bir alana yayılmaktadır. Kayıt dışı ekonominin çoğunluğunu kadın işçiler oluşturmaktadır. Dolayısıyla kadınların işgücüne katılımını artırmak bir ülke için önemlidir. Bu çalışmada, işgücünde meydana gelen cinsiyet farkı incelenmiştir. Bu bağlamda, kadın işgücüne katılma oranı ile erkek işgücüne katılma oranı, kadın boşanma oranı, GSYİH ve enflasyon oranı arasındaki ilişki incelenmiştir. Araştırma için Granger nedensellik analizi ve VAR analizi uygulanmıştır. Araştırma sonucunda kadınların işgücüne katılımı ile GSYİH arasında karşılıklı bir ilişki tespit edilmiştir. Ayrıca erkeklerin işgücüne katılma oranının kadınların işgücüne katılma oranı üzerinde etkisi olduğu belirlenmiştir.

Anahtar Kelimeler: İşgücüne katılım, Kadın İşgücüne katılım, Kadın İşsizliği, Cinsiyet Farkı, Türkiye.

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1. INTRODUCTION

In primitive societies, mostly women who participated in agricultural activities as unpaid family workers in rural areas have been involved in economic activities in various positions until today. As a result of the rapidly developing technological progress with the Industrial Revolution, women started to participate in wage labor, with the replacement of agriculture-based activities by mass production-oriented industries.

The event that affected female labor force participation more than industrialization was the Second World War, and it was observed that female labor force participation rose drastically during the war. This increase has reasons related to both labor supply and labor demand. In terms of labor supply, the main motive for some female labor force to enter the market was patriotism, for others, the decrease in the income of families and the decrease in women's work at home. In terms of labor demand, males participation in wars rose the demand for labor and wages in the economy, which boosted women's entry into the labor market (Özer & Biçerli 2003, p. 58).

In the last century, societies have changed profoundly. Not only has the economic role of women completely differentiated, but a new family model has also been developed. Individuals' expectations and preferences for marriage and gender roles have improved significantly. Technological factors were primarily the focus for the determinant of the economic role of women over time. Durable consumer goods decrease the time required to fulfill traditional duties within the household, measures necessary for women to control fertility emerge, and the transition to an economy where services and skills are intense, which increases the rate of suitable jobs for women (Fernandez et al. 2004, p.1294))

The participation of women in the workforce also supports the economic and social development of that country. It will contribute to the development potential of the country by contributing to the increase of economic efficiency as a part of production in

the economic field. On the other hand, with women taking active roles in various fields, behavior patterns towards women will gradually become moderate in society.

While women's participation in the workforce has increased over time, women's employment opportunities were still limited. There are many components that limit women's participation in the workforce and employment.

The starting point of this study reveals the effects on gender gap caused by the low participation of women in the labor force. In this context, the labor force participation rates of females and the labor force participation rates of males were analyzed with VAR analysis. In addition, GDP and inflation rates, which are thought to affect the workforce, are also included in the analysis. Although there are many factors affecting the workforce of females, only the data on divorce rates of females are included in the analysis due to the lack of data suitable for the VAR analysis. As a result of the research, it was seen that the participation of men and GDP have an effect on the female labor force participation rates. In addition, it is concluded that female labor force participation rates also have an effect on GDP.

In the first part of the study, theoretical information about the labor market and unemployment is provided, types of unemployment are explained, and unemployment data in Turkey and in the world are analyzed. In the second part of the study, a research has been made on the role of gender in labor force participation, the factors that prevent women's participation in the labor force and the laws that facilitate women's participation in the labor force are examined. In the third part of the study, the factors affecting the participation of women in the workforce were analyzed by VAR.

2. LABOR MARKET, LABOR FORCE PARTICIPATION AND UNEMPLOYMENT

2.1. LABOR MARKET CONCEPT

The structure of the labor markets of the countries is an indicator of their economic development. Economic development and growth in countries depend on the effective use of production factors. At this point, the effective use of labor, which is considered to be the most important factor of production, brings about economic development (Lobao 2019, 11).

Labor force participation rates are the leading variables that show the size of a country's economy and labor market. The important variables in taking the decision to participate in the labor force are the wage of labor in the market and the labor market conditions. Any change that may occur in an economy where market prices and wages for labor differ will have an impact on the labor force participation decisions of both individuals and households. These changes in wages occur in the form of income and substitution effects at the point of the labor force participation decision. Under the assumption that leisure time is a normal good, if the individual tends to increase working hours by reducing leisure time consumption as a result of the increase in wage, then the substitution effect is dominant. On the contrary, individuals increase their leisure time consumption and decrease their working hours. While there is a negative relationship between the income effect and labor force participation, there is a positive relationship between the substitution effect and labor force participation. Participation decisions of individuals and households are affected not only by the wages in the market, but also by the income and future wage expectations (Bălan 2014,, 66).

The act of work and the labor force that it brings with it is a concept that emerged as a result of meeting the needs of individuals and cultural interactions of people as

individuals living in societies. In the early days, before the Industrial Revolution, the underlying reason that pushed individuals to work was the motive to meet their own needs. People have had to produce their own food in order to meet their needs and continue their lives, and this has been an indication of their settled life. With the transition to settled life, the importance of the concept of labor spread rapidly and it is known that the cause of this radical change was the agricultural revolution in essence (David and Dorn 2013 1553).

With the onset of settled life, although the population of the world in arable land has increased rapidly, villages have started to be established in settlements that have increased in number. The existence of a political organization such as the establishment of villages has also led to the development and efficiency of production methods. Social and economic developments have made it necessary to create larger and more qualified settlements. With the development of agriculture in the transition to settled life, there is also a meaningful relationship between organizational structure and division of labor. Considering this relationship, it should be stated that as the next step in the creation of villages, city and / or urbanization are not yet valid. Livestock, hunting and shooting were the main occupations in non-industrialized societies before the Industrial Revolution. These societies in which the importance of arable land increased with the agricultural revolution; It is possible to group them as hunter and gatherer, rural and urban societies, having a garden culture and agricultural communities (Morozov and Morozova 2018 100).

Before the industrialization process, the last stage of the capitalist system was manufacturing. Although the word "manufacture", which is of Latin origin, means "made by hand", it lost its meaning and / or changed its meaning over time. The reason why it started to be used in a production system opposite to its meaning is that it experiences the transition to factory production during the use of machines in craft production. The most prominent feature of this change has been observed as a result of a large number of workers coming under the control of an employer (David, Dorn, & Hanson 2013 2121).

Workers who started to work dependent on the employer, division of labor was made among the employed workers in line with the principle that is the basis of the manufacturing economy. According to Smith, there are three main reasons for the

increase in production that will occur as a result of the division of labor (Marx 2000, 20-21):

- Increases in the skills of each worker will occur with the division of labor.
- The fact that workers with different tasks will now be gathered in one task will help to save the time lost.
- It is the possibility of the invention of machines that facilitate the process as a result of the division of labor and enable the replacement of many workers to a single worker.

As a result, manufacturing has fragmented labor with the division of work and made people dependent on the employer by specializing in certain areas. It has made the craftsman and small producers part of the capitalist system by causing specialization in the field. This labor process, which started with manufacture, was integrated with the drying of factories and transformed the worker into a part that should only be for machines to work (David et al. 2013 2122).

2.1.1. Labor Market Definition and Types

There are scarce resources and endless needs of humans on the inhabited planet. The process of obtaining goods and services in order to meet endless needs with scarce resources is called production (Lialina 2019 1105). The main factors of this production in the literature are, labor, nature, entrepreneur and capital. The labor factor in these elements is the sum of the physical or mental (intellectual) movements and efforts of those who work in any job or sector by being subject to a determined wage. In other words, the workforce constitutes the basis of the labor factor, in other words, the labor force (Naidu, Posner, & Weyl 2018, 549).

The total population of a country is divided into two in terms of participation in the production process. This distinction is formed as active and inactive population. Active population phenomenon is the population between the ages of 15-64. In addition, the active population does not only consist of the employed. It includes those who are not employed and willing to work. Inactive population includes the population who is not employed but is not unemployed (Krebs and Scheffel 2013, 664). In fact, the population in this group constitutes the working age population. The population in this group

includes:

- Those in educational institutions,
- Those performing household services (housewives),
- Pensioners,
- Those who do not have a job due to reasons such as illness and disability (Alan 2011, 973).

Therefore the labor market is a concept related to the human factor operating in the field of the production of goods and services of any economic structuring. The labor force, which is subject to purchase and sale in a productive sense, constitutes the justification for this definition. Labor, which is a fundamental factor of the economy, constitutes the essence of the labor force representing the human element of economic activity and the labor market concept (Cobb-Clark 2015, 3).

In summary, capital owners who want to engage in an economic activity have to demand a small amount of labor despite the technological development used in production. This situation, which reveals the demand of labor, has also moved the labor supply. The labor supply side is expressed with the concept of labor. A laborer who wants to participate in economic activity in order to earn a certain income has to offer his labor to the labor market. Therefore buyers and sellers are also determined in the labor markets. As a result, the point where the labor force, which refers to the total labor supply in an economy, meets the demand for labor is called the labor market. So labor market is a combination of markets and methods where labor supply and demand meet, working conditions and wages are determined (Gericke, Burmeister, Löwe, Deller, & Pundt 2018, 46).

The geographical dimension occupies an important place in labor markets. While there is a general dimension covering the entire workforce of a country, there are also micro-dimension labor markets that show the structure of the labor force in the regional sense. Regional differences and the value of the labor force that changes accordingly change the value of the labor force in these markets. Since this market is a market where employers and wage earners exchange labor, in order for the labor supply, that is, the labor force, there must first be a demand for labor (Leuven and Oosterbeek 2011 283).

The workforce is divided into two parts among the civilian population between the ages of 15-64, those who supply their labor and those who do not and / or cannot supply their labor. In another definition, labor force is defined as the productive population consisting of the labor supply in a country. (Kaplan 2012, 446). The labor market is divided into those in the labor force and those who are not in the labor force. While creating those in the labor force, the employed and the unemployed, those who are not included in the labor force are voluntary unemployed workers (Häusermann and Schwander 2012 27).

Based on all these explanations, workforce is a concept that generally defines the working mass and job seekers in a country (Ülgener 1970, 79).

2.1.2. Labor Market in Terms Of Institutions

In order to achieve balance in the labor market, the characteristics of the markets are examined at institutional level. Theoretical labor markets are examined under six subtitles (Campolmi and Faia 2011, 793-795).

- Ideal labor market, It is not possible to encounter this market, which is called perfect competition market in the economic literature, in real life. The goods and services produced in this market are homogeneous, free to enter and exit the market, those who supply and demand labor have full knowledge of the market, there is sufficient demand for every good produced and every labor supplied, the intervention of the state is at the lowest level.

- Natural labor market, It is the labor market seen in the capitalist order, where social policy regulations are not developed, liberal economic practice is dominant, the duty of the state is only security and justice. In this market, the supply and demand of labor are determined according to the existing and developing conditions in the market, there is no balance between the supply and demand of labor, and there are reasons that hinder labor mobility, therefore the application of the principle of equal pay for equal work is prevented and union movements are either absent or in a position to affect the market.

- Institutional labor market, It is the type of market where legal institutional arrangements are made by the state, organized to defend the rights of labor supply and demanders, and organizations act in accordance with legal regulations. Social state understanding prevails in these markets. There is no balance between the supply and demand of labor, and the state makes legal and institutional arrangements to achieve this balance. The labor supply and demanders do not have complete information about the market, but there is no stored information. Goods and labor are not standard. The main purpose of the state's intervention in the market is to ensure full employment and there are no restrictions preventing the mobility of the labor force.

- Guided labor market, It is a type of market in which all kinds of regulations regarding the labor market are realized with the intervention of the state and the only authority of the market is the state. This market is the opposite of the ideal labor market. Labor is the only employer in the market, and the supply of labor has a single price set by the state.

- Protectionist labor market, It is the type of market in which the state regulates the market directly or indirectly to protect the working population in countries that have not completed their economic development or have problems due to economic reasons. The parties of the market do not have full information about the market. The distribution and characteristics of the workforce are uneven. Although it has the freedom to contract, it requires the state to intervene in the market with legal regulations due to the power imbalance between the parties. It is faced with this kind of market in Turkey.

- Flexible labor market, It is a type of labor market that has the characteristics of a protective and interventionist labor market.

2.1.3. Labor Market in Functional Aspects

It is the distinction that emerges by considering the mission undertaken by the labor market and the qualities of other factors in the market. In this respect, the labor market can be divided into three market types (Bauer, Schriber, Degischer, & King 2018 290):

- Labor market in terms of geography, It is the labor market distinction in which labor markets can be analyzed from different perspectives, internationally, nationally and regionally. Thanks to this distinction, the regional distribution of the labor factor and the problems it causes can be examined and solution-oriented policies can be determined.

- Occupational labor market, It is the type of market in which the supply of labor and the demand of labor force in any business and profession are not affected much by the demand created by different professions and business lines.

- Sectoral labor market, It is the type of market where the workforce is segregated according to their fields of activity. In this context, three labor markets emerge; agricultural, industrial and service labor markets.

2.2. PARTICIPATION IN THE WORKFORCE

The structure of the labor market is very important for an economy. The labor market gives important clues about the structure of the economy as it is a market where individuals contribute to production and earn income in return for this contribution. The participation in the workforce reflects the decision of individuals who are out of employment for reasons such as returning to the market or joining employment for the first time. ILO has focused on three important points in the definition of employment, The employment must be within a certain reference period, the individual must be a paid or self-employed person in this reference period, and the individual should have an official job application within the reference period (Hogan, Kyaw-Myint, Harris and Denronden 2012 1).

The labor force participation rate, which includes those who are employed in the labor market and the unemployed, refers to the proportional weight of those who are in the labor force and not in the labor force. In another definition the rate of the labor force in the non-institutional working age population is called the "Labor Force Participation Rate" (Güner 2010 11). Labor force participation rate is the comparison of the actual workforce with the potential workforce. Potential workforce concept is the sum of the population over the age of 16 and those considered as non-institutionalized population (Tekelli 2010, 4). While the labor force participation rate decreases during the recession periods of the economy, it increases during the expansion periods.

Active population concept according to ILO's definition includes all individuals between the ages of 15-64 who supply their labor to ensure the production of goods and services in the economy during a specified reference period. The ILO has included discouraged workers in the group of those who are not in the workforce. In cases where unemployment is prolonged and the possibility of finding a job in the labor market is low, some unemployed people may prefer to stay out of the labor force, thinking that there is no suitable job for them in the region. While these people are considered in the workforce as long as they are looking for a job, if they stop looking for a job, they are included in the "non-labor force" group. In the group of those who are not in the labor force, there are not only offended workers, but also those who do not work voluntarily, have relatives in need of care at home, and the reserve workforce dealing only with household chores due to the high income of their spouse (Joyce et al. 2010, 50).

Increases in the labor force participation rate cause an increase in the labor supply and thus an increase in economic growth. This rise in labor force participation will cause an increase in GNP (Gross National Product). Here, it is seen that there is a positive relationship between GNP and labor force participation. Likewise, an increase in GNP will create an increase in labor force participation. The importance of education, which is an effective factor in labor force participation, has been frequently mentioned in the literature and many studies have been conducted on this subject. There is a positive relationship between the labor force participation of an individual whose education level has increased and income. In all developed and developing countries, that as the education level rises, the rate of labor force participation increases. Considering the labor force participation rate by genders, it is known that the level of education is more effective and

higher in women's participation in working life than men (Gibb, Fergusson, Horwood, & Boden 2014, 14).

Economists use the concept of "Reservation Fee" along with the "Income-Leisure Model" in analyzing the labor force participation decision. According to Pearce et al. (2015, 30) the reservation fee is the wage that creates the difference in the decision whether individuals are in the workforce or not. In other words, the wage that a non-working individual determines in the optimal strategy that he will be included in the workforce at this wage level is called the reservation fee. Factors such as savings, rental income, wealth earned by inheritance affect the reservation fee of individuals. In addition to these, the social aids provided by the state, unemployment insurance, child benefits will increase the reservation fee of the individual and thus will affect the participation in the labor force. Individuals will respond to the decrease in the labor supply by seeking more social assistance from the state.

The concept of part-time work has emerged, which will camouflage the contraction in employment during recession periods of the economy. Part-time work causes a decrease in the market equilibrium wage level and working hours, but also plays an active role in rising labor force participation and decreases gender discrimination. It is observed that with the flexibility of production and / or the increase of part-time employees, enterprises decrease the number of full-time employees and tend to temporary employment. This system provides an opportunity to increase the employment of those who cannot take part in the labor markets due to their family responsibilities (Mehtap, Jayyousi, Gammoh, & Al Haj 2016, 790).

The concept of employment in the classical and neoclassical approach is explained by starting from the concepts of Say's law, interest theory, wage theory, and quantity theory.

Say's Law, Generally, production surplus or lack of demand is unacceptable. The reason for this is that each supply creates its own demand. Say argued that there may be some partial imbalances in the current market economy, and some sectors may face excess production due to some incorrect predictions by some entrepreneurs. However, he argued that an excessive production that includes the whole economy, that is, a lack of demand, will not occur because the production situation itself will create the market

necessary for the product to be sold in the market (Chen 2015, 174).

Interest Theory, According to the classical understanding of economics, while the worker earns wages, the landowner earns rent and the capital owner receives interest with the capital used by the entrepreneur. According to the classical approach, the reason why the lender demands interest is the profit that the borrower can obtain by using the existing capital at the end of this situation. Interest can be earned on the condition that the capital is owned. As a result of this situation, the total demand will be equal to the total supply as all the revenues obtained are spent (Hogan et al. 2012, 3).

Wage Theory, The wage is the price of the lobor. While the payment made for the service is the nominal fee, the real wage is the amount of goods and services that can be purchased with the income of the individuals. The condition determined by the supply and demand of labor is wages. Equilibrium occurs where labor demand and supply intersect. In the case of balance, the economy is at full employment level. Worker's welfare depends on the state of the real wage in the wage theory. If prices increase, real wages will fall. In order for real wages to increase, the increase in nominal wage levels must be much higher than the rate of increase of the general level of prices, that is, inflation (Gericke et al. 2018, 46).

Quantity Theory, The quantity theory includes a cause-effect relationship in that the price level is determined by the amount of money and when the amount of money in the market increases at a certain rate, the price level increases at the same rate. Therefore, the amount of money determines the price level. When there is an increase in the money supply, there will be more expenditure. However, the economy will not be able to produce more than it is in full employment and this surplus will lead to an increase in the general level of prices (Gibb et al. 2014, 15).

2.3. UNEMPLOYMENT

Unemployment is one of the most fundamental problems in all countries of the world. Regardless of the socioeconomic level, countries have not been able to cope with the phenomenon of unemployment, and studies on this issue have been inadequate. Unemployment in general is the situation of people seeking and not finding a job in market conditions despite their desire to work (Lloyd and Leibbrandt 2014,, 85). This

section provides information on various definitions and types of unemployment.

2.3.1. Definition of Unemployment

Unemployment consists of three basic criteria by the International Labor Organization. In order to be able to mention about unemployment, it is necessary that there is no employment within a defined time frame within the reference period, an application must be made to job search channels at least once in the last three months, when the person is offered a job, the person must accept the job and start work within fifteen days (Brandolini, Cipollone and Viviano. 2006, 153).

Today, one of the biggest problems of developed or developing countries is the problem of unemployment. The problems caused by the unemployment problem are the loss of national income and the deterioration of the social order. Although unemployment has manifested itself in different dimensions socially and economically in every country throughout history, it has maintained its place among the most serious problems of countries. The unemployment problem emerged at different levels in many countries with the industrial revolution, and it emerged especially in developing countries until the 1980s. Since this date, with the adoption of the neo-liberal approach in many countries, the problem of unemployment has also started to be encountered in developed countries (Card 2011, 552). The unemployed may create social unrest, as well as pose a political threat to democratic administrations. Therefore, the political authority should evaluate this problem from multiple perspectives and produce permanent solutions (Mryyan 2014,, 39).

Unemployment is generally a common problem of industrialized and industrializing societies. Although the causes of unemployment differ from country to country, the main reason for unemployment is the insufficient demand for labor in developed countries, ie the imbalance between labor supply and demand. In developing countries, this situation is attributed to the structure of the economy. In these countries, the vast majority of the population is involved in the production process, yet the revenue created remains much lower than the production potential (Shimer 2012, 127).

By definition, unemployment is the situation when the population who wants to work but reaches the working maturity cannot find a job. This situation is not due to their

own reasons. Another definition related to unemployment is the decrease in the need for labor as a result of the insufficient demand. The existing labor force cannot be used and remains idle. This idle labor is called unemployment because the workforce has a characteristic such as not being accumulated (Uysal and Pohlmeier 2011, 980).

According to another opinion, unemployment means the segment within the labor force that cannot find a place in working life. Individuals who could not be employed in a certain period of time have used at least one of the ways of finding a job in the last three months and will be able to start working immediately within fourteen days. Those who will start their business within a ninety-day period and those who will complete the deficiencies of the business they have established within this period are also considered as unemployed (Elsby, Hobijn & Şahin 2013, 530).

Individuals who meet all these conditions are in the unemployed category. As can be understood from these definitions, people who meet all the conditions for working but are not employed are called unemployed, and those who meet the above definitions, that is, those who do not want to participate in the labor force voluntarily, although there is no disability to work, are not included in the unemployed class (Smith 2011, 402).

In the member states of the European Union, unemployment is defined as those who are registered in labor employment agencies such as workers' assistance offices, who do not have a job and can switch to another job at any time (https://ec.europa.eu/eurostat/statistics-explained/index.php/Unemployment_statistics, Accessed on 02.01.2021).

The unemployment is one of the most significant problems of all countries whose economies are developing or continuing to develop. Creating new job opportunities for the growing population has become a challenge for countries. Unemployment is one of the most important economic issues for all countries. Since it is one of the factors that directly affect the country's politics, it has a political significance. Because unemployment is at the center of social life. The whole household is affected by this situation (Norström and Grönqvist 2015 110).

Whether the economies of the countries are good or not can be understood by whether everyone who wants to work for wages is employed. If the individual who wants

to work cannot find a job although the individual wants to, it is one of the wrong economic policies implemented by the country. The high and settled unemployment causes many social, economic and political problems in the society. It is one of the first causes of social explosions (Sumner and Gallagher 2017, 289).

Unemployment is one of the common problems of developed, developing or underdeveloped countries. Although it differs from country to country, the general causes of unemployment are similar. Although there are many and various reasons, some of them are as follows (the Shimane 2012, 127):

- The most important reason is that the population growth rate in the country is higher than the rate of increase in employment. Unemployment will increase as the population that reaches the working age causes an increase in the labor supply.

- Unemployment will occur as a result of the lack of employment opportunities. Adding new people to the workforce on top of existing job seekers will increase unemployment.

- Due to the imbalance in income distribution, those who want to work cannot get the necessary training. These people, who are described as unskilled labor, are included in the unemployed population.

- Due to urbanization, migration increases and the desire of migrants to seek a job increases due to high costs. This situation leads to a further increase in unemployment, considering that people from rural areas are unskilled.

2.3.2. Types of Unemployment

Unemployment is evaluated under different headings according to its characteristics. All these different reasons such as the age, gender, education level, ethnic origin, geographical location, occupation, fluctuations between countries cause different unemployment types. It is difficult to find the reason for being unemployed on an individual basis. However, it is easier to comment on the general unemployment reasons (Fujita and Moscarini 2017, 3875).

2.3.2.1. Open Unemployment

It is defined as unemployment in the sense of not being able to find a job despite the desire to work. Five different types are structural unemployment, technological unemployment, cyclical unemployment, seasonal unemployment and temporary unemployment (Brecher and Chen 2010, 990).

a. *Structural Unemployment,* As a result of changes in the structure of production, there may be shrinkage in some areas in the economy and progress in some areas. Although there is a shift in labor force from areas of contraction to areas of expansion, this takes a certain amount of time. At the same time, it does not fully meet the needs. In this case, structural unemployment occurs (Valletta 2013, 87). Among the structural causes of unemployment are economic expansion, poorly managed economy, industrial and technological progress (Estevão and Tsounta 2011, 2).

The striking situation in this type of unemployment is that economic growth causes structural unemployment. In the growing economy, there is a demand difference between the amount of input and the product produced. Production factors may not be able to catch this change in a certain period of time. Having to wait a while to keep up with this change will disrupt the balance between production factors and demand. During this period, structural unemployment can be seen in some sectors and occupational groups. There may be a difference in terms of labor demand in sectors with economic growth. The orientation of employment to expanding sectors, while people in some occupational groups will be educated and recruited to the sectors, some individuals will be untrained and unemployed (Restrepo 2015, 5).

b. *Technological Unemployment,* Technological unemployment is the type of unemployment that occurs with the use of machines as a substitute for labor. It is the substitution of capital for labor. Technological developments in industrial production caused radical *changes*. Increasing product demand with the capitalist mode of production made a big difference in labor demand (Feldmann 2013 1099). Due to the increase in technological opportunities in the world, factories have had to go to mechanization instead of labor-intensive production. The days of unemployment of laborers who lose their jobs to machines begin. It can be seen in developing and developed countries yet. However, less developed countries are more affected by this situation. Developed

countries will have no difficulty in creating new sectors for workers under changing conditions. However, it takes a long time for less developed countries to do this (Peters, Jandrić, & Hayes 2019, 242).

c. *Cyclical Unemployment,* There is no continuous growth or pause in the economy. There are fluctuations in growth rates. Due to these fluctuations, there are recessions, stagnations and depressions in the economy and as a result of these, cyclical unemployment occurs. In times of waves in the form of declines, many job losses can occur. Long time periods are needed for *this* situation to improve (Diamond 2013, 410). Conjuncture refers to the fluctuations in the economy. When everything in the economy reaches balance, savings increase, consumption and supply expand, investments increase, employment is provided, the value of money is regular, the 'high conjuncture', the economy begins to shrink, the value of money decreases, capital begins to decrease, investments decrease, consumption and money value decrease (Mueller 2017, 2081).

Demand is insufficient as a result of the contraction in the economy in times of low conjuncture. When there is not enough production, the need for labor decreases. Demand will decrease as unemployment increases, which will cause unemployment to increase further. In the periods when the conjuncture begins to expand, the need for labor will increase and the recruitment process will begin. This type of unemployment is seen mostly in industrializing countries, it does not spread over a long period of time like structural and technological unemployment, because the period is shortened with the measures taken (Kaplan, Collins and Tylavsky 2017, 281).

d. *Seasonal Unemployment,* There may be a decrease in the work done in certain seasons due to the climate or various social movements. The type of unemployment that occurs as a result of this decrease is called seasonal unemployment. The sectors most affected by this emerging unemployment type are tourism, agriculture and construction. Employees may be *unemployed* during the seasons they work due to any negativity in these sectors. They have to wait for the next season until the sector is organized (Ahamad, Khondker, Ahmed and Tanin 2011, 174).

e. *Temporary Unemployment,* Temporary unemployment is a type of unemployment that occurs when people start their first business life or when they leave their current job and transfer to *another* job. It is the type of unemployment that causes the least damage to the

national economy. It is also called accidental unemployment. This unemployment can be encountered even with full employment. If the labor industry had worked like other industries, there would only be frictional unemployment in the market (Albertini, Kamber and Kirker 2012, 326).

This type of unemployment is seen in all countries regardless of the economic level. It stems from the inability of labor markets to function properly. Job seekers find it difficult to find where the workforce is needed. Even if they do, transitivity is difficult because the change is costly and tiring. In addition, insufficient market knowledge of those who need a labor force and job seekers causes an increase in this type of unemployment (Axtell, Guerrero and López 2019, 184).

Structural unemployment and temporary unemployment are sometimes confused. If the labor force makes this change in a short time while changing the sector, it is called temporary but if this situation takes a long time, it is called structural unemployment (Ortego-Marti 2016, 5).

2.3.2.2. Disguised Unemployment

Disguised unemployment can be analyzed in four categories, hidden unemployment, voluntary unemployment, natural unemployment and continous unemployment.

a. *Hidden Unemployment,* Hidden unemployment refers to the separation of the labor force from production, but no reduction in total production, although there is no change in production patterns. In another definition, although the individual does not seem unemployed, the individual does not add any surplus value to production. This type of unemployment arises as a result of insufficient *capital* for the economy or not being able to use the existing capital actively and correctly, in addition to the low consumption demand. Hidden unemployment is less common in the private sector than in the public sector. It is mostly seen in the agricultural sector (Baum and Mitchell 2010, 233).

b. *Voluntary Unemployment,* Volntary unemployment is a more common situation in countries where the division of labor and *specialization* is highly developed. A person who is not unemployed by his own free will is regarded as voluntary unemployed. Classical economists argue that this type of unemployment does not exist. They think that

this unemployment is caused by people's dislike of the wages. Keynes thinks that this type of unemployment is caused by a lack of demand (Van Rie, Marx, & Horemans, 2011 125).

c. *Natural Unemployment*, Unemployment that cannot be eliminated despite all policies implemented is called natural *unemployment*. It is necessary to fight inflation while eliminating this type of unemployment. In short, it is the type of unemployment that is tried to be kept at the lowest rates without increasing inflation. A specific method cannot be used to measure the natural type of unemployment. Factors such as unemployment insurances, minimum wage amount, and growth rates in different sectors determine natural unemployment (Güriş, Tiftikçigil, & Thüroğlu 2017, 35).

d. *Continuous Unemployment*, Developed countries where growth has reached a certain point is likely to face this type of unemployment. Continuous stagnation of unemployment occurs with the continuation of the economy stagnant for a while. After the Great Depression of 1929, all of the world economies started to experience major crises. One of the most important crisis periods was the oil in 1973. In some periods, bottlenecks have occurred in the sectors, countries whose economies are not strong enough and not resistant to competition have lost their production markets with cheap labor and developing technology and have entered into constant stagnation (Kelly et al. 2014,, 636).

2.4. MALE AND FEMALE EMPLOYMENT

In this section, information and theories on male and female workforce are presented.

2.4.1. Differences Between Female and Male Employment in the World

The role of women in both economic and social life shows that they have an important influence in the rapidly developing world. Women have been in economic life at every stage and all over the world from the times when primitive conditions prevailed. Women, who previously had limited work area with the agricultural sector, gained the opportunity to work in a wide range of jobs with the industrial revolution. The globalization process experienced during and after World War II, like the industrial

revolution, is one of the important developments that strengthen the place women have gained in the labor market and increase their number (Robb and Watson 2012, 544).
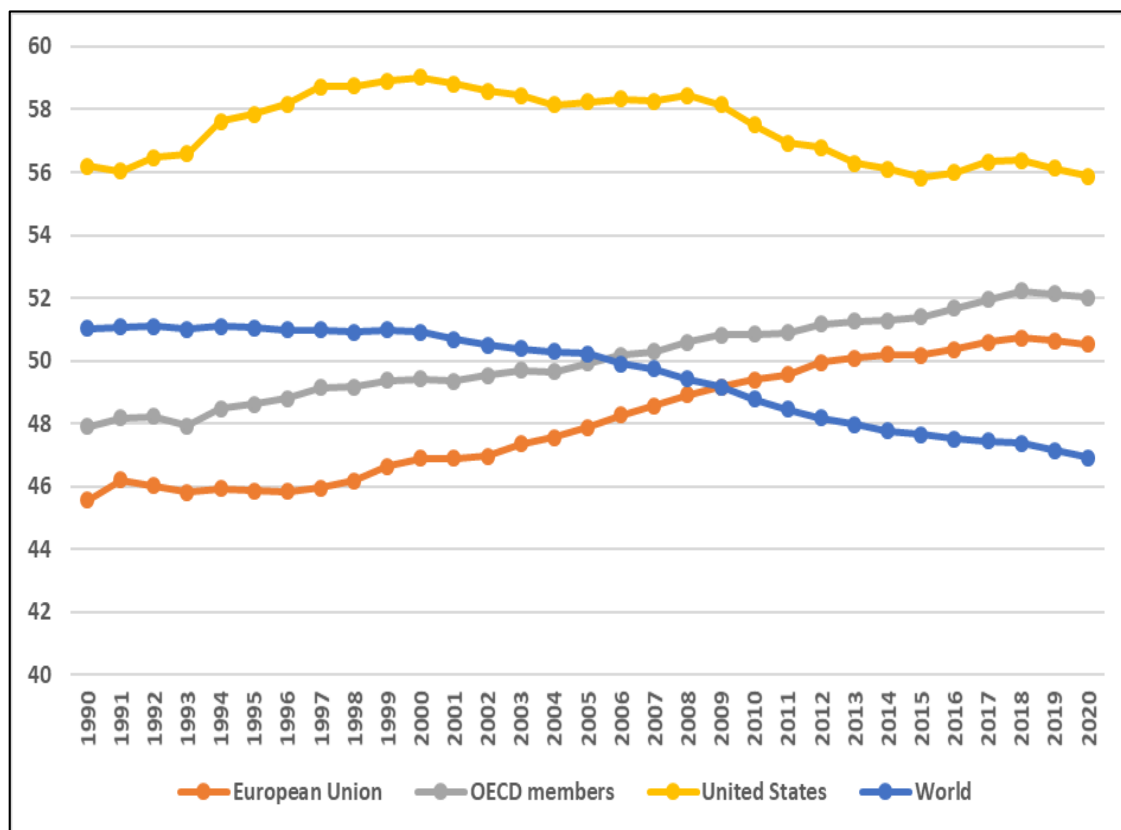
Figure 2.1. Labor Force Participation Rate of Females

Source: WorldBank 2020, https://data.worldbank.org/indicator/SL.TLF.CACT.FM.ZS.

The figure above shows the labor force participation rates of women worldwide and in some developed economies. In the world average, the participation of women in the labor force is decreasing every year compared to the female population. The female labor force rate decreased from 51 percent in 1990 to 47 percent in 2020. Similarly, the female labor force rate in the USA decreased from 56.2 percent in 1990 to 55.8 percent in 2020. On the other hand, female labor force participation rates raised in OECD countries and the EU. In OECD countries, the labor force participation rate of women, which was 48 percent in 1990, reached 52 percent in 2020. In the EU, the female labor participation force rate, which was 45.5 percent in 1990, rose to 50.2 percent in 2020.
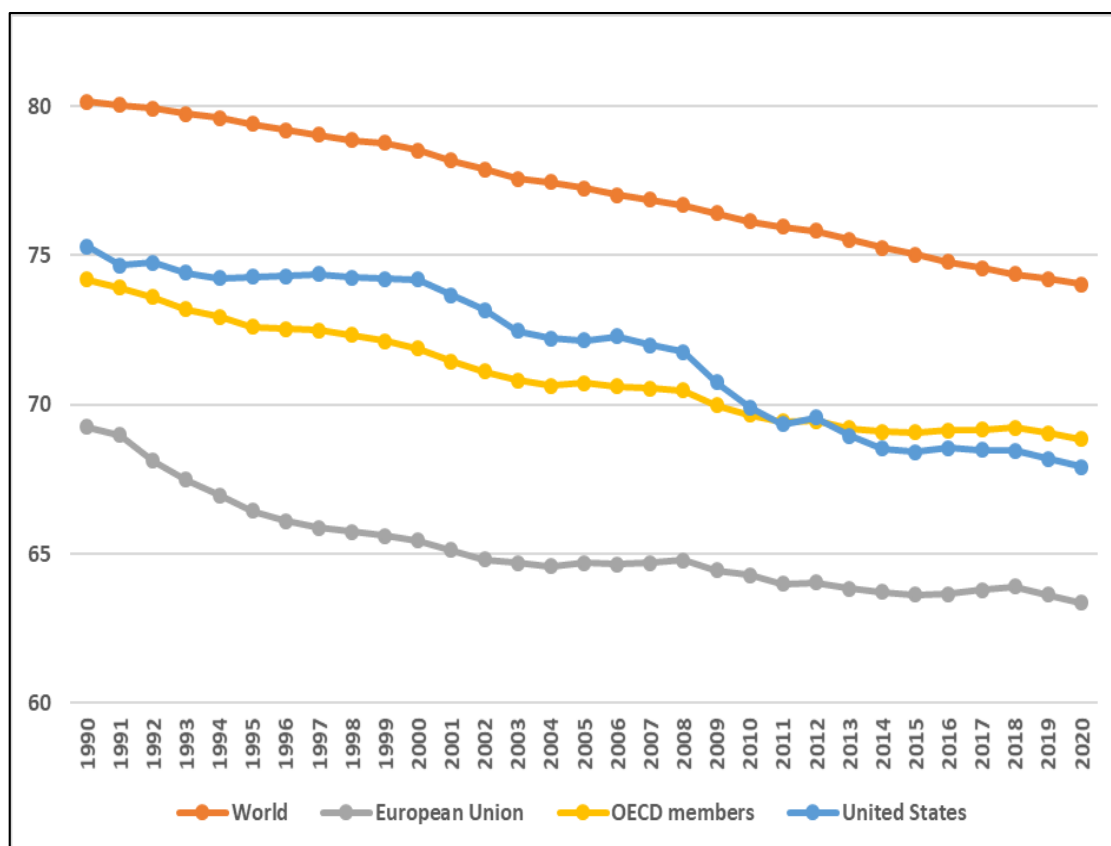
Figure 2.2. Labor Force Participation Rate of Males

Source: WorldBank 2020, https://data.worldbank.org/indicator/SL.TLF.CACT.FM.ZS.

The figure above shows the male labor force participation rates worldwide and in some developed economies. In the world average, the participation of male in the labor force is decreasing every year compared to the male population. The male labor force rate, which was 80 percent in 1990, declined to 74 percent in 2020. Similarly, the rate of male workforce in the USA, which was 75 percent in 1990, decreased to 68 percent in 2020. A similar situation is observed in OECD countries in the EU. However, despite this, the female labor force participation rate falls behind the male labor force participation rate.
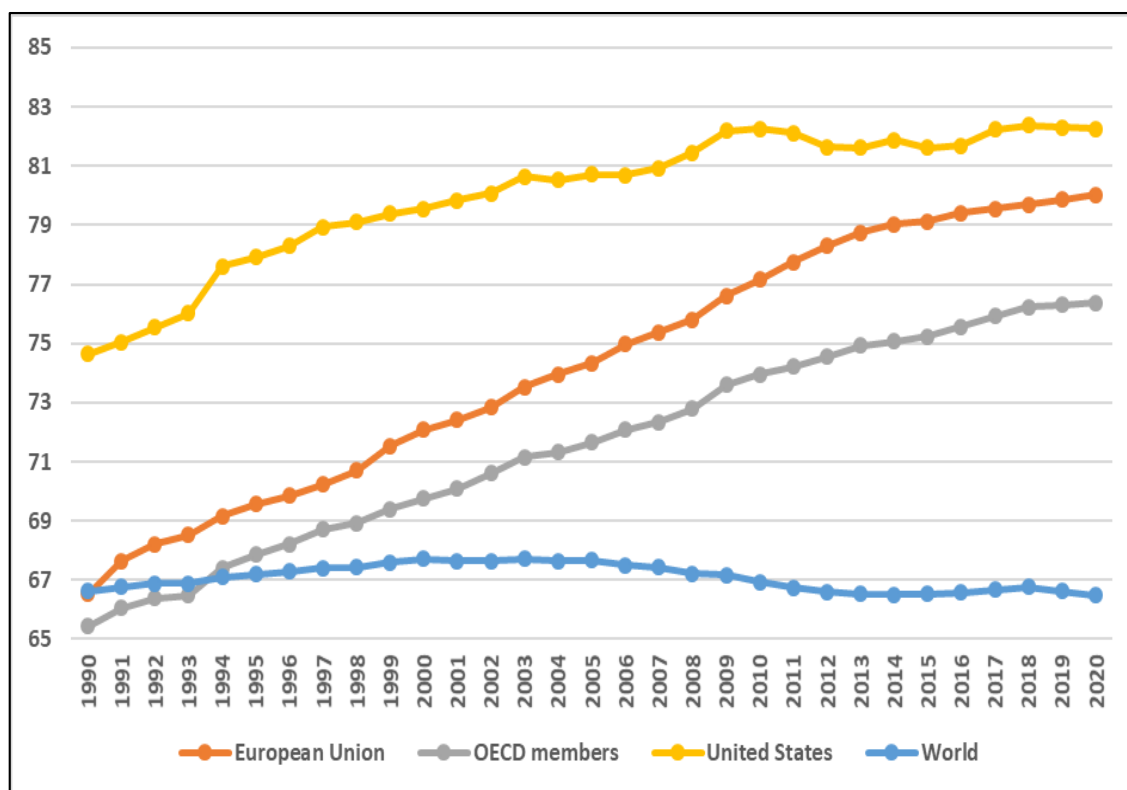
Figure 2.3. Ratio of Female To Male Labor Force Participation Rate

Source: WorldBank 2020, https://data.worldbank.org/indicator/SL.TLF.CACT.FM.ZS.

The figure above presents a comparison of the male labor force participation rate and female labor force participation rate in the world. Accordingly, it is seen that this ratio increases in favor of women in developped countries. In other words, the gap between the labor force rate of women and the labor force rate of men decreases with each passing year. However, the situation is differet in the world.

2.4.2. Differences Between Men and Women's Employment in Turkey

In general, in order for a country to be called a developed one, women living in that country should be in an effective and productive working life. The participation of women in working life is parallel to modernity in society. However, the perspective for women in Turkey complicates the realization of this state until the 1980s. The society considers the man as an income-generating individual, and the woman as an individual who should take care of housework. Globalization, which started in the 1980s, brought along economic crises. In order to overcome these crises economically, it has started to be viewed positively that women also work in an income-generating job. Included in the

working life with some kind of obligation, women started to play an important role in the fight against poverty. The woman, who started to help her household in terms of income, found the opportunity to showcase her talents and skills in the working environment (Karabıyık 2012, 240).

It is a fact that paid work is still not common for women in the country. The inclusion of women in business life outside of agriculture started after the 1950s with the rapid and unplanned settlements caused by migration from rural to urban. The adaptation to the characteristics of urban life and the change in mentality that occurred as a result of migration from rural to urban brought some changes and differences in understanding in family structure and family relations and affected the social position of women and their place in business life. As a result of these changes and developments, women started to work in non-agricultural sectors as they received basic and specialist training, realized and revealed their potential (Berber and Eser 2008, 3).

The cultural and social factors that determine the female labor force need, the division of labor based on gender, and the gender roles established on this division of labor hold women responsible for the elderly, sick, child care and housework. As a result, women have difficulties in looking for a job and entering the labor market. Particularly in cities, low-educated, skilled and talented women engaging in jobs outside of the home where they can earn income depends on the consent of the men in the family rather than the personal decision of the women. Again, the low demand for female workforce in Turkey and gender-based occupational discrimination in working life, the limitation of jobs and conditions deemed suitable for women, as well as low wages make working not an attractive alternative for women. Married women with children cannot benefit from both service institutions due to the scarcity of public service institutions for their children and the high cost of private service institutions. This situation causes women to be unable to work because of taking care of their children. When women work outside the home, they are asked to fulfill their domestic responsibilities to the same extent, and there is no job sharing in their home work (Taş, Küçükoğlu, & Demirdöğmez 2018 279).
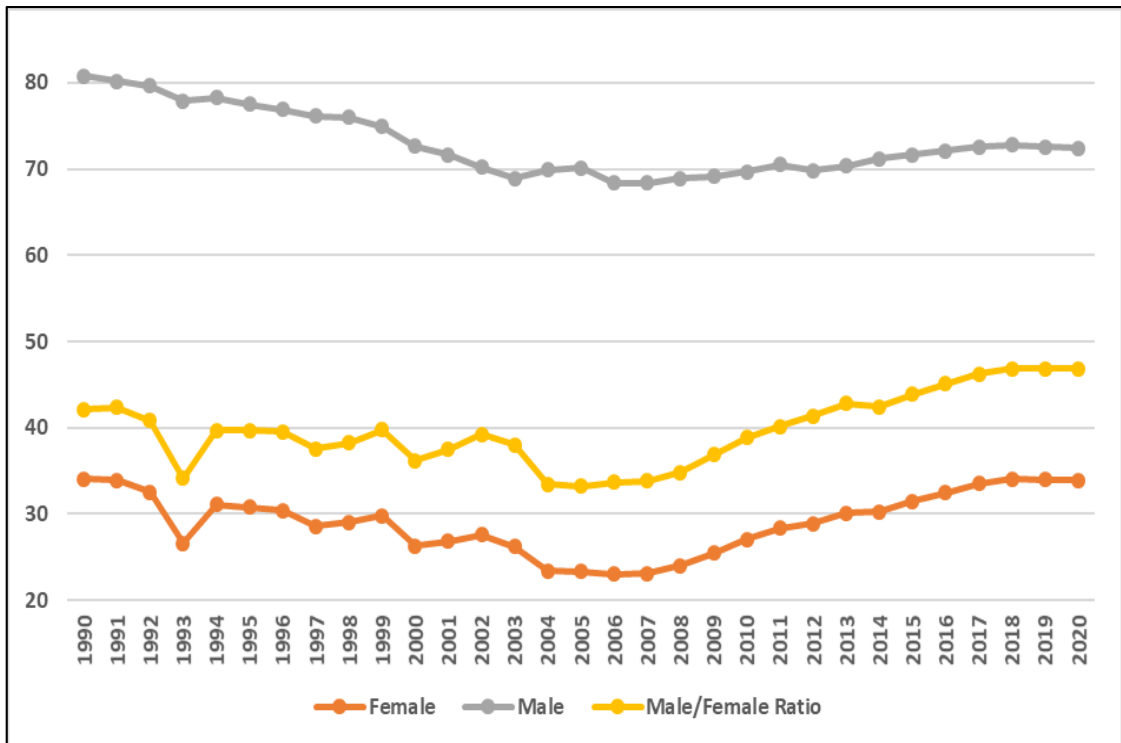
Figure 2.4: Labor Force Participation Rate of Males and Females in Turkey

Source: WorldBank 2020, https://data.worldbank.org/indicator/SL.TLF.CACT.FM.ZS.

The labor force participation rate of females in Turkey is far behind that of males. However, it is seen that the labor force participation rate of women rose after 2007 and the labor gap between men and women decreased. In this process, it is observed that the male labor force participation rate is progressing at a constant ratio.

3. THE ROLE OF GENDER IN LABOR FORCE PARTICIPATION

3.1. THE ROLE OF GENDER IN LABOR FORCE PARTICIPATION IN THE WORLD

Looking at the sectoral distribution of male employment across the world, it is striking that there are no extreme differences in the female and male employment rates between sectors in various countries. One observation is that the rates of women and men employed in agriculture and industry sectors worldwide are close to each other, except for the services sector. While there is a more balanced distribution among sectors for men, it is observed that there is a density in some sectors in women's employment. With practices such as improving working conditions, increasing the level of qualified education, and including flexible working conditions in business life, female labor force, which is kept idle, can be included in the labor market and the imbalance between the sectors can be eliminated. Thus, both the development level of the countries may increase and personal welfare may increase thanks to new individuals who start to earn income (Klasen 2019, 162).

Generally speaking, it can be seen that female labor force participation is lower than men in almost every region. Women in both middle-income and high-income countries are concentrated in wholesale and retail businesses, education and health services. Such assistant office jobs, in other words, pink collar jobs are considered more suitable for women, and most women in the service sector work in this type of jobs. In addition, the available data show that wage earners make up almost half of the total employees. Women are faced with the treatment of the reserve labor and recruited during times of economic growth and removed in times of crisis. It is a fact that as the positions in the employed jobs rise, the wage gap increases. Although women and men do the same job, it is observed that the pay of women is less than that of men in all countries and all

occupational groups. So much so that the difference is between 15% and 30%. Along with wage injustice, another problem that women struggle against is the invisible obstacles called "glass ceilings". While it is easy for young and single women to rise at work, it is not easy for those who are married and have children (Xiao and Asadullah 2020, 3).

Undoubtedly, all this discrimination mentioned is not just about employment. The unequal position of women in income and wealth sharing carries many areas such as low representation in decision-making bodies in every field, especially in politics, and problems caused by social-cultural values. However, the importance of women's position in employment for economic and social empowerment is an undeniable fact. For this reason, it is necessary to the position of women in education, quality and employment, and to eliminate discrimination and unequal conditions in working life. All these forces the understanding of the social state and its responsibilities to change (Begam and Mujahid 2019, 19).

Today, a very large field of study and discussion, which is called gender studies, entered social sciences first as feminist studies and then began to be called women's studies. US psychiatrist and psychoanalyst Robert Stoller has done the most extensive research on gender and this concept was first used by him in a 1968 study (Sex and Gender). Gender is a term used to depict the cultural and social definition of men and women as different from biological sex, the way the people separate men and women from each other, and the social duties imposed on them. The importance of gender for those who work on women has increased even more after it has been considered as a concept that will help to understand the difficult relationships between women and men and to question inequalities' (Karatepe and Arıbaş 2017, 8).

It is observed that gender research has gone through three stages in the last 50 years. The first stage is the level that emphasizes the male and female gender differences arising from the biological characteristics of the individuals. The second stage is the stage of looking at gender duties and roles learned later and socialization shaped according to this perspective. In the third stage, the central role of women; social gender, paid work, family, politics, everyday life, economic development, law and education (Eren 2020, 598).

Discrimination in terms of gender results in women's equal access from basic universal human rights to opportunities and possibilities. For these reasons, it is a mistake to classify business lines as women's and men's jobs. Women's spaces are restricted to the home and neighborhood unit, and they are generally defined on the basis of being mothers and wives. Women and their work are either not seen or seen as worthless. Gender-based discrimination has a spectrum starting from orientation to the profession, finding a job, increasing status and career, and dual attitudes and behaviors in the workplace in this process (Aşkın and Aşkın 2017, 23).

The high probability of women being absent from work, taking a break and leaving their jobs is put forward to justify the problems experienced in finding a job and status advancement. In terms of working women, their willingness to not participate in sustainable trainings for some reasons, especially family responsibilities, creates problems especially in activities outside of residence. These can be added to justified concerns. Due to these reasons, women candidates who apply for a job are asked questions about their private lives and pressures are put on the timing of having children. The high probability of working women to take a break from their business life due to having children and the thought that the character of women is weak in terms of senior management levels prevents women from being brought to the upper ranks of management and being promoted during their career. These practices are transparent ceiling injustices (Ilyas and Khan 2019, 525). When women are promoted to senior positions, the tolerance range shown is reduced, and they are put under pressure and control. Gender-based discrimination is also a common injustice in performance evaluations at workplaces.

Biologically, society's point of view on male and female gender is shaped by its value judgments and beliefs. These value judgments and beliefs define the perceptions, attitudes and behaviors of male and female individuals with the norms they have established for gender. Through these attitudes and behaviors, prejudices are formed regarding the behaviors of women and men in society. While individuals behave in accordance with this expectation, which is shaped according to feminine gender norms, is seen as positive as it ensures social harmony, non-compliance is expressed as deviation (Wolff et al. 2018, 322). Therefore, gender is accepted as a natural phenomenon that creates many positive and negative results for women. In some cases, the protection of

women and the granting of various special rights can be described as a positive inequality for women, while in some cases (mostly) women are actually banned from working in certain jobs or the actual regulations for women to work only in certain jobs for various reasons (Omay 2011, 144). This event plays a serious role in deepening and sharpening gender inequalities.

Therefore, there are differences in the labor market between men and women in terms of sectors and professions. As a result of the qualification of jobs or professions according to gender, the concentration of women in certain jobs and jobs suitable for their men led to the gendering of jobs and professions, and the emergence of major problems in recruiting female employees.

3.2. THE ROLE OF GENDER IN LABOR FORCE PARTICIPATION IN TURKEY

In Turkey, especially since the second half of the 2000s, it is possible to see a willingness to ensure gender equality in the labor market, with the effect of the harmonization process with the European Union acquis and the increased interest of civil society in the issue. Despite this enthusiasm, it is observed that especially women's labor force participation and employment rates are still quite low and indirect and direct discrimination based on gender continues in the labor market.

The studies conducted point to a growth phenomenon that does not create employment in Turkey in terms of ensuring gender equality in the labor market (İlkkaracan 2010, 21-57; Dedeoğlu and Elveren, 2012 29-46; Toksöz, 2012 103-126; Dedeoğlu 2012, 211 -230). It can be said that the economic policies implemented in Turkey are mainly aimed at ensuring competition in national and international markets, and the issue of creating employment remains secondary. The low labor force participation and employment rates among women indicate the low potential of the economic policies implemented to create new employment opportunities, especially for women. As a matter of fact, the restructuring process experienced since the 1980s, unlike the experiences of other countries, did not lead to feminization of labor force in Turkey (İlkkaracan 1998, 290), even in the service sector where feminization is expected, the employment rate of women is behind men. It is observed that women do not sufficiently benefit from the limited employment opportunities created.

Another dimension of gender inequality in the labor market is the low human capital of women. According to human capital theorists, the reason why women benefit less from employment opportunities than men and stratify them in secondary sectors where wages are low, labor turnover is high and opportunities for promotion are lower is that women have lower education levels and work experience (Mitra and Singh 2006, 779; Tufan- Tanrıöver 2000, 171; Demirel et al. 1999 17; England 1982, 358; Mincer and Polachek 1974, 76). Statistical indicators show that women's participation in the labor force has increased in direct proportion to the increase in the education level of Turkey. However, despite the linear relationship between education and female labor supply, women still do not benefit from educational opportunities equally. As a matter of fact, the Global Gender Gap 2014, report prepared by the World Economic Forum shows that Turkey ranks 105th among 142 countries in terms of women's access to education opportunities. It is necessary to draw attention to the tendency of women to not benefit from vocational education opportunities adequately and female students to concentrate on vocational education areas deemed appropriate for them based on gender. This situation, within the framework of the changing role of Turkey in the international division of labor, means that women benefit less from the new employment opportunities created by the need for intermediate staff (TİSK 2006-2007; Türkkonfed 2006, 31), and gender-based stratification in the labor market crystallizes its tendency. On the other hand, women's entry and exit to the labor market due to reasons such as marriage and childbirth and their career interruption cause them to have less work experience than men. This leads to the tendency of employers to employ male labor with high human capital, which they consider to be more productive and efficient for them. Although human capital is a very important and triggering factor in terms of participation in the labor force, benefiting from employment opportunities and accessing career opportunities, the high unemployment rates among women with high education levels in our country make it insufficient to explain the gender inequality in the labor market only within the framework of human capital theory.

In Turkey, there is a common tendency to explain gender inequality in the labor market with the strictness of regulations to protect the labor force and high non-wage costs. Since the second half of the 1990s, the rigidity of the labor market has been emphasized by employers as obstacles to competitiveness and productivity, especially the

cost of employment / labor. Due to legal regulations such as maternity leave, breastfeeding leave, breastfeeding room and the obligation to open a nursing home within the framework of the "Regulation on Breastfeeding Rooms and Child Care Dormitories on the Condition of Employment of Pregnant or Nursing Women", which entered into force in 2013, female labor is seen as a labor that imposes additional costs by employers. In this case, employers do not employ women who are likely to marry and give birth and have children of pre-school age in order to avoid these additional costs (Eyüboğlu, İncir, Ilgaz, Fidan & İnce 2000, 57; Sarıtaş-Eldem 2015 20-21), employment tends to keep the number of female workers employed below the number specified in the legal regulation (Toksöz 2007, 78; Urhan and Etiler 2011 191).

As emphasized in many studies (Kabasakal 1998, 303; Acar, Ayata, and Varoglu 1999 1-12; Healy, Özbilgin and Aliefendioğlu 2005 247), women cannot reach senior, decision-making positions within the organizational structure of companies. It is observed that the vertical stratification trend based on gender, which expresses the situation, continues. This situation, the fact that there exists glass ceiling for women in the labor market in cities, is an indicator that women cannot rise in their jobs and they can hardly be found in decision-making positions.

On the other hand, more than 50% of women employed in the labor market in Turkey are employed informally, the number of day care centers foreseen to be opened as per the Labor Law is not known exactly, whether the employers fulfill their obligations to open day care centers or not, is not effectively monitored. Considering the fact that sanctions are not deterrent, the periods of maternity and breastfeeding leave cannot be used as regulated by law, or some legal regulations that tend to protect women in the labor market turn into discrimination against women by employers, and women may lose their jobs (Ecevit 2012 220-265; Demirel et al. 1999 15-16), It should be emphasized that in Turkey, women's labor is already used as a flexible and insecure labor and that the discourse on the rigidity of the labor market cannot go beyond being a myth (Onaran 2004 211-233).

Even if employers do not discriminate women directly, women benefit less from employment opportunities due to their gender-determined roles. These stereotypes, which are socially constructed within the framework of gender roles, prevent gender equality,

cause employers not to fully benefit from the skills and potential of the workforce, and negatively affect the productivity and profitability rates of companies (Abbas, Hameed, & Waheed 2010 175).

3.3.FACTORS AFFECTING THE FEMALE AND MALE WORKFORCE

3.3.1. Education

Education, which enables the formation of desired behaviors in the individual, is one of the requirements for socialization. In this respect, education has become one of the most fundamental institutions in parallel with the development of modern and industrial societies, as it can increase as well as reduce inequalities in society. (Johnson et al. 2017, 558). The requirements and necessities of the industrial era formed the education system of the modern and industrial society. It is a system design that has criteria and standards and is generally shaped according to the blue-collar business potential, sees the use and consumption of knowledge rather than production, aims to provide individuals with only certain knowledge and skills, but does not require their constructiveness (Mehtap et al. 2016, 790).

The place where the discipline has been gained, has been mostly schools that provide mass education to each individual. However, it is often said that a new education model is needed that will respond to the conditions and needs of the age, as always, in a period when technology is quite advanced. Today the majority of people earn their income from the production of knowledge and services rather than industrial production. In this case, post-industrial societies are based on information / knowledge production, unlike the industrial society order (Deal et al. 2007, 722).

It is seen that a great momentum has been gained in the transition to the information society. In addition to all these mentioned, the knowledge-based workforce, which has become universal with increasing knowledge and great momentum, has become one of the most prominent characteristics of the society of the age. In other words, information constitutes the strategic source of the society in the information society. Because it is human who produces and uses knowledge, education has become an indispensable condition for the survival of this society due to human resources (Curtis, Robinson, & Netten 2009, 843).

The most important component of human capital theory is education. With the developing technology, the need for a more qualified workforce has increased. Before the change caused by technological development in production systems, unqualified labor force was sufficient for the continuation of production activities, now more skilled workforce is needed for mass production. As a direct consequence of this situation, the employment chance of the labor force, which is not productive, is decreasing. The prominence of concepts such as value given to human and high quality, especially in developed economies, necessitates the use of qualified labor that will work with high productivity (Korkmaz and Korkut 2012, 41).

The level of education that an individual obtains and / or will have is a factor that affects both the quality of economic activities and the rates of participation in the labor force (Kavak 1997 23). There is a correct and strong relationship between education and labor force participation. It is known that workers with a high level of education have higher participation in the labor force than workers with a low level of education. Schultz (1961 1-17) and Griliches (1970, 71-127) stated in their studies that education can be used as an important variable in human capital investments, production analysis and economic growth analysis.

Theoretically, education level evaluates and affects labor force participation from two different perspectives. Since employees with a high level of education can earn higher incomes in the labor market, the cost of time spent not working increases, people join the workforce in order to prevent further increase in costs and increase participation in the labor force. Also, since the education activity is a human capital investment with direct, indirect and psychological costs, the individual will supply the labor force to meet this cost and increase their participation in the labor force (Biçerli and Özer 2003, 66).

Education directly affects the wage income of a person (Palaz, Şenergin and Öksüzler 2013, 121). Women and men aim to achieve prestigious, good and high-income jobs as a result of increased education. Educated individuals, regardless of the region in the labor market of the country, will have full knowledge and will be able to choose suitable jobs for themselves. In this case, the rate of participation in the labor force of individuals with a high level of education will increase and, accordingly, the rate of participation in the labor force will increase.

In terms of investments made in human capital, the reason why women remain unskilled compared to men in terms of education in terms of education, especially in rural areas, the use of limited economic opportunities in favor of male children, male-dominated social characteristics and intensified internal migration are among the main reasons. However, with the increase in the level of education, women's participation in employment also increases. As a result of the intensification of migration from rural to urban, women who are unpaid family workers in rural areas are not employed and experience employment problems with it (Bloom, Canning, Fink and Finlay 2007, 569).

The low level of education due to the limited educational opportunities of women or their inability to benefit from these opportunities causes the low wage level they will earn in return for working in a job and the alternative cost of working is high. In addition, considering the negative effects of the raise in the number of people in education, it is stated that this situation delays participation in the labor market and tends to decrease the total labor force rate (Contreras, Mello, Puentes 2011, 2765).

3.3.2. Marital status

The most prominent element that defines traditional society is gender roles. In the traditional family structure, the roles of women and men are predetermined. According to this, household responsibilities belong to women, and external responsibilities to men. It is known that women are held responsible for family affairs such as housework and childcare, while the responsibility of the man is to earn the earnings that will provide the family's livelihood. For this reason, women's participation in social and economic activities, especially education and employment, remains limited. Therefore, women whose human capital equipment is inadequate compared to men do not receive sufficient attention in business life (Maurer-Fazio and Wang 2018, 567).

Processes that accelerated social evolution such as the French Revolution, Industrial Revolution and Scientific Revolution paved the way for the transition from the family structure of traditional societies to modern society and family structures. During this transition period, important developments have been experienced in women's social roles. In modern societies, significant improvements have been made in women's roles in social and economic life, and women have now become one of the important actors of social and economic life. At the same time, it is stated that part-time working style is an

important factor in increasing the effectiveness of women in the labor market (Tekelli 2010 18). While it is observed that especially women who have children in pre-school age stay away from the labor market, the existence of part-time work has played a role in increasing the employment of these women (McLaughlin, Uggen, & Blackstone 2017, 333).

Increasing part-time employment increases women's participation in the labor force, both supply-side and demand-side. Looking at the situation in terms of demand, in sectors where part-time employment is used intensely, the employment of married women is preferred. Especially in the industrial structure of the economy, the shift from the production sector to the services sector has facilitated the employment of married women through part-time employment. In terms of supply, part-time employment tended to increase during times of economic downturn or decline (Falzone 2000, 663).

Apart from being married, the fact that women having children and the number of children they have are also effective in their decision to participate in the labor force. While the increase in the number of children decreases the labor force participation of married women in urban areas, it increases in rural areas. There is also a prevailing opinion that unpaid family work has an affirmative effect on employment. However, it negatively affects the labor force participation of women, who are concentrated in the service sector in the urban area, because they cannot take their children to their institution (Er 2013, 36).

According to the results of a study executed in the United States, three factors were mentioned that help improve the participation of married women in the labor market. It is thought that the first of these is the facilitation of housework with increasing technology, the second is the increase in the costs of time spent at home, namely the alternative costs, and the third, the reduce in the wage gap between the genders, and accordingly the improvements and increases in the wages of women will increase the employment of married women (Jones, Menuelli and McGrattan 2015, 75). At the same time, it is thought that opening unpaid childcare homes for families and women with children will also increase the participation of married women in the labor force. Blauve Robins (1988, 374) states that 87% of married women will join the workforce if unpaid child care opportunities are increased.

In general, the presence of children, especially pre-school children, causes a decrease in the participation of married women in the labor force and working women withdraw from the labor market after having children. Women in the labor market are leaving the market because childcare is costly and time consuming. This is the reason why married women with children stay away from the labor market. The fact that babysitters, nurses and childcare center services are expensive is thought to have an adverse effect on the labor force participation of married women with children (Goette, Huffman, & Fehr 2004 216).

3.3.3. Spouse's Education Level

Another important factor in female labor force participation is the education level of the spouse. If the education level of the spouse is high, this factor may be effective in delaying the decision of the woman to enter the labor market, since the wage will be higher. On the other hand, the low level of education of the spouse can lead to a low income and as a result, women enter the labor market in order not to fall into financial difficulties and support the family (Lyngstad 2004 121).

The qualification of the woman and the fact that she lives in urban or rural areas is also important for the spouse's education level affecting the women's participation in the labor market. While the education level of the spouse does not have a significant effect for the skilled female workforce living in urban areas, the education level of the spouses does not make a statistically significant difference for the female workforce living in rural areas. In unskilled or low-skilled women living in urban areas, the high level of education of the spouse decreases the possibility of women to work (Garcia, Molina and Navarro 2010, 3607).

3.3.4. Unregistered Employment

Unregistered employment is expressed as not reporting the days or wages of the employees to the necessary official authorities or not reporting them incompletely (SGK 2018 1). One of the main problems of the labor market in the world is that women have unlimited opportunities to work in the informal sector due to the limited working areas of formal employment. The main reason for the high rate of unregistered employment in the female workforce is the high number of women working in agricultural work in rural

areas and unregistered women in the services sector (Yalçınkaya 2013 110).

3.3.5. Social structure

The traditional perspective dominating in the patriarchal social structure treats jobs such as housework and childcare as a role specific to women. This situation keeps the majority of women away from employment and directs them to adopt these roles imposed on women and to find professions suitable for these roles. The traditional perspective includes women in the labor market only in cases where a female labor force is required. Therefore, women are mostly employed in areas such as health and education. Due to the traditional roles attributed to women, the possibility of women quitting or disrupting the job is high, and it is not considered appropriate by the employer for women to be employed in senior positions (Dolmacı and Şalvarcı 2012 2).

In today's information society, equality of opportunity is becoming increasingly important in working life and employers also have flexible applications to reduce the home and work burden of the female workforce. The effect of the formation of sensitivity towards women's rights in the world is of great importance in experiencing these developments (Inverarity and McCarthy 1988 263).

Many feminist theories characterize patriarchy as an unfair social system that rules, discriminates, or oppresses women. Carol Pateman expresses the difference between masculinity and femininity in the patriarchal structure as the political difference between freedom and submission (Odok 2019 2). Hartmann expressed the patriarchal system as a set of hierarchical relations based on materiality and men to establish authority over women, and social relations where men are united with their fellows. In the patriarchal system dominated by men, men tried to control women in the home and business life, and this situation caused women to remain in the background (Özçatal 2011 25).

As seen within the scope of a study conducted by Özçatal (2011, 33-34), women stated that although they wanted to work, they would not be able to work unless their husbands gave permission. Özçatal states that the woman decides to work based on her husband's permission, regardless of her choice. The hierarchical system implemented by the patriarchal understanding that allows women to be controlled in the social structure is

the decision-making mechanism regarding whether or not women enter the working life.

In the patriarchal social structure, women are taught to adopt non-sociable behaviors by suppressing their behavior and emotions from an early age. Again, in this understanding of society, women submit to men and accept this situation due to the male-dominated understanding that has the right to control women in many issues from home to working life. Since this situation restricts women from the public sphere, it causes them to feel economically dependent on the man. These roles imposed on women constitute an obstacle for women to enter the business life and determine their goals for the future. However, women want to work in jobs that will not affect their roles imposed by the traditional system, or they have to spend more energy while performing their duties both within the family and in business life (Diraditsile and Ontetse 2017 131).

Apart from the decision of family members, traditions and customs adopted in the society where the woman lives are also effective at the stage of women's participation in working life. In Turkey, the prevailing form of understanding woman's house holds responsible for the care of his wife and child. Working in a job for women is seen as the defeat of men and it is considered inappropriate for women to work in the family, which creates an obstacle for women to enter working life. The woman who cannot enter the working life is also deprived of many areas of social life. This situation even limits the decisions that women will make in daily life and can cause them to be powerless and ineffective (Çakır 2008 27).

While it is not possible for women to work outside the home for wages in traditional families, the standard of living that emerged as a result of industrialization and urbanization after the 1950s cannot be achieved only with the earnings of the man, and this situation has created the need for women to work in a wage-earning job. As long as the spouse, mother and housewife are at the top of the roles deemed appropriate by the society and the woman, it is inevitable to make statements about women such as cheap labor and unpaid family workers. (Kuzgun and Sevim 2004 15).

There are many factors that prevent women's participation in the labor force at the desired level in the economic and social environment. Considering the previous studies, it is seen that among the factors that prevent women from entering the working life, there are situations such as gender inequality in society, family and social structure, and marital

status. The phenomenon of marriage causes a change of position and duty in the lives of women, culturally, it is expected that the woman is interested in her home and spouse and has an important effect on the decision to work (Çakır 2008, 33).

One of the common features of research on women is expressed as the permission of the spouse, and it is observed that the male members of the family do not allow women to enter the working life. In societies where the patriarchal mentality prevails, men can prevent women from participating in working life due to the occurrence of situations that will affect their authority within the family (women have financial power, fear of sexual harassment and adultery when working in the same environment with men). Women work only in compulsory situations where their husbands cannot work, and they are only accepted to work at workplaces where women are present (Çiftçi and Hırlak 2017 288).

In a study by Eyüboğlu et al. (2000), it was stated that the main reason why women did not enter the working life was neglect of childcare, the deterioration of the order in the home, and working with men in the workplace would not be deemed appropriate by the woman's environment (cited in Kuzgun and Sevim 2004 16). In a study conducted by Çiftçi and Hırlak (2017 293), the majority of women stated that although they wanted to work, they could not work because their husbands did not allow. In other words, the roles assigned to women in the family cause women to make a choice to work or not. In order to ensure the balance between work and family life, the sharing of roles attributed to women within the family and the legal basis to be provided by the state are very important in this regard (Korkmaz and Korkut 2012, 45).

One of the obstacles in front of women not being able to participate in working life is that they are mothers. Childcare is expressed as an "emotional labor" that affects women's entry into working life and their socio-economic status. Adiitionally, emotional labor cannot be measured in terms of its quality. Since childcare is an act performed with a feeling of motherhood, having a child reduces the desire of working mothers to work and causes them to have conscientious uneasiness when they receive care services for their children. As a result of this situation, which depends on the internal reckoning of women, women generally have to use these preferences from their children and give up working on their own decision without any influence of the employer (Hüseyinli and Hüseyinli 2016 109 120-121).

In Turkey, the inadequacy of legal regulations regarding childcare and the patriarchal mentality leave childcare to the responsibility of women, and the role of being a mother is considered appropriate for women. According to the patriarchal understanding, working of women is perceived as a situation that shakes the authority of men and is not considered appropriate within the family. This situation obliges women to be held responsible for childcare and reduces the labor force participation rate of women (Topateş 2015 12).

Responsibility for care includes children under the age of 15, who live in the same house or outside of the home and who regularly take care of them, and sick, disabled children, or elderly parents or relatives in need of care (TÜİK 2018). According to the motherhood role attributed to the woman, if the child she is responsible for is at the age or condition to need care, the woman decides whether to work or not by comparing the income she earns when she works and the cost of the caregiver she will need for the care of her child. If the income level of the woman is higher than the caregiver cost, this may affect the decision to work positively, and if it is low, it may affect negatively (Korkmaz and Korkut 2012, 51).

When employers' attitudes towards women's employment are evaluated, it is seen that employers do not want to employ women because they cannot afford the costs caused by pregnancy, maternity leave and childcare, or because their long working hours, shift system and working conditions do not match their reproduction understanding (Hüseyinli and Hüseyinli 2016 120). Because most of the employers in the labor market think that women are less reliable than men in working life, that women will leave their jobs after marriage or become mothers or that they cannot be productive in working life due to their roles in the home (Çakır 2008, 33).

Within the scope of the researches, women who have children are less likely to find a job or find a full-time job than women who do not have children. It is thought that the fact that care responsibility is not seen as a role attributed only to women, sharing this responsibility among individuals and alleviating the burden of child care on women through social services provided by the state will have an important effect in removing the barriers to women's participation in working life (Hüseyinli and Hüseyinli 2016 118.). The role of adoption, in other words, the presence of dependent parents in the family

also constitutes an obstacle for women to enter the labor market. Spouses, daughters and brides are generally held responsible for elderly care in the family. Women generally decide not to work because care services are not widespread and costly (İzgi and Akdeniz 2011 14).

In 2017, 38.7% of people between the ages of 18-64 who are not in the workforce in Turkey have care responsibilities, while this rate is 14.8% for men and 45.9% for women (TURKSTAT 2018). In Turkey, the "Regulation on the Determination of Disabled People in Need of Care and Determination of Care Service Principles" came into force in 2006, and with this regulation, it is aimed to support the care service of the elderly and disabled individuals in the family. In addition, it was decided that with this support, if the care service is provided by family members, economic support will be provided to the individuals who provide care services (Oğlak 2017, 82). Considering that this regulation, which has been implemented since 2006, is a positive development for people in need of care, but mostly women are responsible for care services among individuals who do not take a part in the labor force in Turkey, it is thought that this practice has a pacifying effect on participation in employment and keeps women away from the labor market.

In the Tenth Development Plan covering the years 2014,-2018, objectives for increasing the employment of women were determined, and it was emphasized that the elderly care services should be increased within these objectives (Topateş 2018 18). As of the end of 2017 144 "Nursing Homes and Nursing Home Elderly Care and Rehabilitation Centers" under the Ministry of Family and Social Policies provide services to 13,631 elderly people. It also provided services to approximately 12.038.237 elderly people in private nursing homes. In the Strategic Plan of the Ministry of Family and Social Policies covering the years 2018-2022, it was aimed to develop and expand this service by emphasizing the care services for the elderly. In this way, it is thought that the burden of care on women will be eased, and the barriers to entering the labor market will be reduced.

Additionally, housework is one of the most important obstacles for women to enter the labor market. The housework that women have in their homes is not a commodity that is bought and sold in the market, and women do not receive any wages

in return for their labor (Yılmaz and Zoğal 2015 13-14).

According to traditional sexist roles, housework is seen as the natural duty of women, and women's participation in working life is pushed to the second plan (Hüseyinli and Hüseyinli 2016 112). Today, in many countries, women's participation in the labor market cannot be achieved at a sufficient level, as their main job is seen as housework and the time allocated to housework is high (Berkün, Alacahan, & Yavuz 2015, 46). It is thought that accepting housework as the role of women by the society and holding women responsible for these works may be related with the internalization of this situation by women.

The reasons for unemployment are categorized as those who have no hope for finding a job, those who are busy with housework, those who are in education / training, those who are the retired and those who are unable to work (TÜİK 2018). When the data belonging to these categories are examined in general, the category of women being busy with housework, which is among the reasons for not participating in the labor force, draws attention because it was seen that the number of women who are not included in the labor force due to being engaged in housework is much higher than the data for other reasons. Although the number of women who cannot participate in the labor force because they are engaged in housework is high, it has decreased compared to previous years. Another striking factor is that there is no information about the number of men who are not included in the labor force because they are dealing with housework.

Due to the insufficient level of services to assist housework or their high cost in Turkey, women cannot enter the working life or have to leave working life (Hüseyinli and Hüseyinli 2015 126). It is observed that one fifth of women who have completed their education in Turkey quit working life due to housework and child care (Uşen and Delen 2011 177).

3.3.6. Discrimination Against Gender

As mentioned in previous chapters, factors affecting labor force participation differ according to gender. The factors that play an active role in this differentiation are known as human capital investment and the social role of women. Ann Oakley, who introduced the word "gender" into sociology, refers to sex and uses it to separate men and

women biologically, while gender indicate the social divide between masculinity and femininity. Therefore, attention is drawn to the social dimension of the gender differences between men and women. However, in the following processes, this concept has been expanded to include the cultural ideals of masculinity and femininity and social judgments (Falzone 2000, 210).

It is an opinion developed by Adam Smith that education and training is an investment in individuals and can be compared to investment in machinery. Smith says that individuals with differences in qualifications correspond to differences in returns required to cover the costs of the relevant qualifications. The division of labor between men and women varies according to the cultures and historical formations of societies. In every societies there are various perceptions of division of labor based on gender. But according to the main perception, women give birth, raise children and do housework, whereas men earn money by getting involved in labor force. The division of work that differs between countries means that a job considered as a woman's job in one country is considered a male job in another country. The first reason for this is that gender-specific male and female qualities differ in each country. Secondly, wages paid to work in labor markets are affected by different observable and unobservable factors. It is known that there is a division of duties between the genders in societies, which closes the private area where activity of work such as childcare and housework is practiced. Therefore, the fertility rate, distribution of childcare among spouses, distribution of reproductive work such as housework and elderly care and the intensity of these jobs have a significant impact on female employment. Korkmaz and Korkut (2012) claim that the low education level and the presence of children aged 0-5 at home are the most important factors in women's inability to participate in the labor force.

In addition to these, other factors affecting the participation of women in the labor force are that they are affected by personal and family characteristics and socio-economic background. The influencing personal characteristics depend on age, education level, experience, marital status and whether the woman is the head of the household in the family or what the definition of the role the woman assumes in the household. The number of children in the family and especially the number of children under the age of 6, the presence of children in the 7-12 age group, the size of the family and the educational level of the household head are important determinants of family characteristics in participation

in the labor force. Socio-economic variables are the income of the family, the number of individuals work in the household, and whether the household has non-wage income and the amount of this income. Çatalbaş (2015 249) made this point in his study. He pointed out that the main problems faced by women in participation in the labor force are dealing with housework and the presence of children in the household. He stated that if family responsibilities are shared by individuals and the state supports pre-school education, women's employment will increase.

Considering the effect of marital status on labor force participation in terms of gender, it is mentioned that there is a negative relationship with women and a positive relationship with men. Therefore, while the labor force participation of married women with children decreases, their participation in the labor force will increase as a result of the increase in the responsibilities of married men and the continuous increase in financial needs (Parnes 1973, 897). Divorced women, on the other hand, tend to increase their participation in the labor force. However, there are some who do not work after divorce. At this point, market reservation fees for women who are divorced and receive alimony increase. Due to the rising reservation fee, they are not included in the workforce.

In general, it is observed that there are little problems with male participation in the labor force. It is known that before neoliberal policies and especially before the industrial revolution, the livelihoods of individuals mainly consist of agriculture and animal husbandry. Due to the existence of a patriarchal working life idea in the cultural structures of societies, after the industrial revolution and neoliberal policies, families used human capital investment resources for male individuals. Women, on the other hand, continued their role in the household as unpaid family workers and this perception still continues, especially in rural areas women work as unpaid family workers. Along with these, it is observed that the labor force participation of married male individuals has increased and there is an affirmative relationship between marriage and labor force participation for male individuals. With the development and change of the socio-economic structure over time, it is known that women are responsible for housework, and men are responsible for meeting the needs of the household and maintaining their livelihood, and this social perception still continues, especially in rural ones, even if this social perception has broken slightly (Kasnakoğlu and Dayıoğlu 1997, 95).

It is argued that the biggest factor causing this breakdown is technological development and the resulting structural change in the labor market. With this transformation, women take part in business life. However, even though the duties of women, which are regarded as their duties, are still continuing since the change has not been experienced sharply, technological development and the shorter period of housework through machines have also positively affected the participation of women in the labor force (Kılıç and Öztürk 2014, 110). However, since social and cultural effects are faced with unfavorable conditions such as low level of job security, social protection and low wages in the labor market, the rate of participation in the labor force is mostly due to daily cleaning jobs, babysitting etc (Korkmaz and Alacahan 2013, 890).

As a result of the increase in the participation of female labor force, which was seen as a reserve workforce during the World War II, the concept of pink-collar workforce was added to the literature after the concepts of blue and white-collar labor (Kılıç and Öztürk 2014, 110). The problem of female employment in developing and underdeveloped countries still exists despite these flexible working styles. Women who continue to work as unpaid family workers have remained away from human capital investments and benefit less from human capital investments than men and continue to work in low-paid jobs that do not require education (Bozkaya 2013, 71-73).

Due to the domestic roles attributed to women by the traditional perspective, women either cannot enter the working life, or although men and women do the same job in working life, discrimination against women occurs in practices such as employment, income level, promotion, transfer and termination. Female employees in the labor market are also exposed to discrimination in situations such as education and vocational training, and enjoying social rights (Johnson et al. 2017, 558).

3.3.7. Migration and Urbanization

Another factor affecting gender gap in workforce is the phenomenon of migration and urbanization. In Turkey, there is intense migration from rural to city and from city to city (Korkmaz and Korkut 2012, 55). Migration from rural to urban is among the reasons that have reduced women's participation in the labor force since 1950s. One of the conditions that reduces the participation of women in the labor force is that mechanization in agricultural activities causes migration from rural to urban by reducing the workforce

working in agriculture, while another factor is the inability to provide enough employment opportunities to meet the labor force migrating from rural to urban in the industrial sector. Despite the fact that the female workforce migrating from rural to urban areas has higher job opportunities in urban areas than rural areas, female labor force has been mainly employed in informal jobs. (Çatalbaş 2015 263).

Unqualified women who work as unpaid family workers in rural areas work without pay in domestic roles attributed to women when they migrate to the city, and when they join the labor market, they are employed at lower wages than male labor force in the industry or services sector (Ataklı 2016, 89).

Economists have been interested in the fact that the concept of mobilizing international migration flows is effective in balancing wage levels in different locations. Within the framework of migration process factor mobility assumptions, the Neoclassical approach looks at the income differences between regions as an individual's reaction, and they think that the larger these differences, the more the volume of migration will increase. That is, they claim that, similar to other approaches, labor will migrate from low-income regions to high-income regions (Williamson 1988, 425).

At the beginning of the formation of migration flows, the individual makes a comparison between the lifetime earnings of individuals or households while making the decision to migrate and the present value of this earning. If the difference in earnings as a result of the comparison is greater than the cost of immigration, a rational consumer and / or household members make a decision to migrate. Some authors argue that if individuals and households, who will achieve a better quality of life and earning level, experience wage increases in these earnings, they will make a decision to migrate until the cost does not exceed the earnings (Bowman and Myers 1967, 876). Taşçı and Darıcı (2009 209) claim that even though the probability of finding a job and working for males increases in migration from rural areas to urban areas, females who are members of the household are less likely to enter the labor market than males. Kılıç and Öztürk (2014, 107) supported this in their study, emphasizing that as a result of the increase in employment opportunities in the cities, households decided to migrate and men entered the labor market more easily. According to Krueger and Sjaastad (1962, 423), in the decision process of the immigration that is planned to be made, the costs incurred with

migration are divided into monetary and non-monetary ones. While the first of these covers the expenditures made by the person, the second includes the earnings given up during immigration, the earnings given up when looking for a job again, and the psychological costs because individuals may initially be unemployed in the city, but over time they can find a job. However, Topbaş (2007) argued that immigrants will be able to find jobs over time, as well as in the absence of differences between regional wages, the immigration decision will not be made and there will be a constant equilibrium situation in labor markets that ensures equalization of labor supply and demand.

Additionally, Lordoğlu, Özkaplan, and Törüner (1999) think that the concept of migration affects the workforce in two ways:

- The migration movement that occurs without an increase in demand for the labor force.

- The migration movement that emerges to meet the increase in labor demand, this is called encouraged migration. In such migrations, the increase in supply can be shown by the movement on the labor supply curve.

It is known that individual immigration investments also include depreciation with age. If the wage earned at the job is relatively low, the person will either choose to emigrate to receive higher wages or to settle for a low wage by staying in the same place. Factors such as the age of the person and the level of experience individual obtains play an important role in this preference (Krueger and Sjaastad 1962, 87-88). When migration is viewed as a concept that increases the future productivity of the immigrant, that is, as with other investments, which includes gain and cost elements, investments such as education, work experience, health expenditures, which are complementary investments and in most cases, also affect the future productivity of the migrant person (Krueger and Sjaastad 1962, 92-93).

It is mentioned in the relevant literature that migration waves, which are small in scale and do not cause stagnation in the social system, positively affect the functioning of the global migration process. Driving factors such as income differences between

immigrants and receiving countries that continue to increase day by day, low living standards in the countries of immigration, insecurity and uncertainties, combined with selective policies emerging as a result of the increase in demand for qualified workforce in developed countries within the framework of global production regimes migration flows are becoming inevitable (Kuzgun 2009 2451).

3.4. LEGISLATION REGULATING EQUALITY OF WOMEN AND MEN IN WORKING LIFE

Women who have started to take an active role in working life face various problems in the labor market. The fact that women's employment is less in the labor market compared to men, low-paid and unqualified jobs in employment, informal jobs, gender discrimination and lack of social security are important problem areas. Therefore, in civil society initiatives and official policy designs, the emphasis is on practices aimed at eliminating the problems faced by women's employment. It is very important to consider these approaches in the labor market in terms of gender. Because in this way, studies reveal the defects in various dimensions (Tepav 2011, 31).

Based on the current inequality and gender discrimination that women employment frequently encounter in working life, studies are carried out to prevent these problems. Studies are mainly carried out by adapting and improving the studies and policies implemented by international organizations to national policies. Civil society support is also received in this regard. However, despite all efforts, the obstacles to women's employment are still a major problem. Based on the current inequality and gender discrimination that women employment frequently encounter in working life, efforts are being made to prevent these problems. Studies are mainly carried out by adapting and improving the studies and policies implemented by international organizations to national policies. Civil society support is also received in this regard. However, despite all efforts, obstacles to women's employment remain a major problem.

3.4.1. Legislation Regulating Equality of Women and Men in the World

3.4.1.1. Convention on the Elimination of All Forms of Discrimination Against Women

Women also have the right to benefit from human rights as individuals. However, in terms of gender discrimination and the principle of gender inequality, women's rights have been included in international documents and the necessary regulations have been made. The main reason for this situation has been shown to be the principle of inequality and the prevention of gender discrimination practices against women throughout their lives, and the need for this in order to improve the position of women in society. In 1945, this issue was supported and developed with the first step taken with the United Nations and the studies carried out within the European Union. "The Convention on the Elimination of All Forms of Discrimination against Women" (CEDAW) has been accepted and implemented as the most important document on the problems faced by women. In this convention, to which Turkey is also a party, gender discrimination against women in all circumstances is prohibited, and it obliges states to take measures to prevent discrimination. For those who think that their rights are violated, the establishment of control mechanisms that can be applied to is included in the contract as an additional (Parlak Börü 2017, 43)

"The Convention on the Elimination of All Forms of Discrimination against Women" was adopted in 1979 and entered into force in 1981. Turkey, on the other hand, signed this contract in 1985. The purpose of CEDAW is to direct the states parties to take concrete steps in order to prevent gender discrimination. In line with these principles, the state parties have also accepted to make legal arrangements. In the labor market, it covers the issues of ensuring gender equality without gender discrimination, creating opportunities for women, eliminating occupational discrimination and wage differences between women and men, preventing the employment of women working in informal jobs, making regulations regarding pregnancy / maternity situations. In this case, it would be appropriate to underline that it is the contract between work and family life and makes the most detailed regulations regarding the situations women encounter in working life (Parlak Börü 2017, 45).

Regarding women's employment, Turkey's gender equality policy has been

integrated into national legislation within the framework of "the Labor Law" and other laws in the European Union harmonization process. In accordance with Article 11 of CEDAW, Turkey is obliged to take all kinds of precautions to secure the right to work of women. In addition, Turkey has adopted many ILO conventions and the European Social Charter that directly or indirectly affect women's employment (T.R.Ministry of Development 2018, 40).

3.4.1.2. International Labor Organization Conventions

Founded with the Versailles Peace Treaty in 1919, the International Labor Organization adopted the principle of social justice and aimed to create lasting peace in the world. The organization, headquartered in Geneva, formed a legal basis for its activities, which it added to the constitution of the ILO in 1944 and aimed with the Philadelphia Declaration, and adopted to address the economic problems faced by wage earners in working life. In 1946, with the agreement signed by the ILO with the UN, it took place as the first specialized institution within the UN and continued to work in this direction (https://www.ailevecalisma.gov.tr/digm, Access Date, 04.06.2020) .

With the ILO's Decent Work for All Men and Women project, gender equality has been identified as the main item of the agenda. With the change experienced in the labor market, the inequality faced by women in working life, their low pay and their inability to use their social rights adequately led to the need for a policy in our country to overcome these problems. It is aimed to ensure gender equality with the "Decent Work for Women Project" jointly carried out by the International Labor Organization and Turkey. In the project covering the 2013-2016 period, the pilot provinces were determined as Ankara, Konya and Gaziantep provinces, and women between the ages of 18-29 were targeted. It is aimed to provide vocational training, job search, women's human rights training and self-employment training to the determined masses. A preliminary research report was prepared on the basis of the specified provinces, and studies were carried out to increase women's employment in the light of the prepared reports. In the light of these reports, İŞKUR provided vocational training to unemployed women and also provided entrepreneurship training (Ecevit 2010 20).

3.4.1.3. European Union Conventions and Directives

The most important objective of the "European Union Conventions and Directives" is to treat women and men equally. This understanding of equality has been a part of the policy of the EU until today. Established on an economic purpose, the European Community establishment mainly includes regulations for women. The community policy, which aims to provide opportunities for women and men within the framework of the principle of equality, started with the inclusion of the article 119 of the Treaty of Rome signed in 1957, with the provision of equal wages to women and men working in the same job in terms of job characteristics. This article initiated the spark of the process in the step taken towards achieving gender equality in order to prevent wage inequality between women and men, social insecurity in working life and injustices in social assistance opportunities (Bolcan 2010 253).

With the Maastricht Treaty (1992) and the Amsterdam Treaty (1997), some arrangements regarding the equality of men and women included in the 119th article of the Treaty of Rome were made and a new version was numbered with 141st. The current version of the new article (141) is intended to apply the principle of equal pay for female and male employees working in equal work or in an equal job. Based on this principle, measures have been introduced to ensure the implementation of equality of opportunity and equal treatment regarding employment and work. When compared with Article 119, it is seen that the concept of equal value work has been added, and two positive actions have taken place with the application of equal opportunity and equal treatment at work (Karatepe and Arman 2019, 32).

3.4.1.4.European Social Charter

The European Social Charter is a contract in which the obligations regarding social rights are included in detail. The European Social Charter, which was adopted by 13 states in Turin on October 18 1961, entered into force on February 26 1965. Turkey, which is among the signatory states of the European Social Charter, signed this agreement in 1989, with reservations to some of its articles. The European Social Charter completes the missing parts of the European Convention on Human Rights, which guarantees civil and political rights, in the economic and social sphere. European Social Charter focuses on the basic principles such as increasing employment, achieving equality of opportunity,

prohibition of wage inequality and promotion of discrimination in order to solve the problems that arise in working life and to create a quality working life. With the Revised European Social Charter adopted in 1996, the changes in the conditions of the period were kept up with, deficiencies were eliminated and the scope of social rights was expanded. The Revised European Social Charter, which was approved by Turkey on June 27 2007, entered into force on August 1 2007. The main focus was on equality of treatment and prohibition of discrimination (Ünlüoğlu and Taşdemir 2019 115).

The prohibition of discrimination against the article in the fifth part of the Revised European Social Charter, which is shown as the first aim of the enjoyment of social rights by all people without any discrimination in terms of race, color, sex, religion, political opinion or social origin in the European Social Charter with the provision. Increasing the living standards and social welfare of the urban and rural population with the necessary activities is shown as their second purpose. (TBMM Woman-Man Equal Opportunity Commission 2013 26).

3.4.2. Legislation Regulating Equality of Women and Men in Turkey

3.4.2.1. Equal Pay for Equal Work / Equal Pay for Equal Value Work

The principle of equal pay for work of equal value has been entered into Turkish law for the first time with the law on the amendment of some articles of Labor Law No. 5518 dated January 25 1950. In the Labor Law dated 22-05-2003 and numbered 4857, under the heading of the principle of equal treatment, in Article 5, "it is not possible to make discrimination based on language, religion, race, gender, political opinion, philosophical belief, religion and sect and similar reasons" and stated that "a lower wage cannot be decided for a job due to gender". It is also stated in the minimum wage regulation that "no gender difference can be made in determining the minimum wage". It is clearly defined in collective bargaining agreements and service agreements that no provisions against the principle of equal pay for equal work can be imposed.

Article 3 under the heading of general provisions in the Civil Servants Law No. 657 defines the basic principles of the law and Article 4 defines the types of employment, and there is no classification and distinction based on gender. In Turkey, there is no job classification system stated in the EU Directive in determining the wages in the public or

private sector. Article 3 of the Civil Servants Law No. 657 states that "the salaries of civil servants are determined according to the qualifications and professions required by their duties". The classification here is a classification divided according to "professions" such as general administrative services, health services, justice services, and education services (Acar and Demir 2019, 81).

3.4.2.2. Equal Treatment of Men and Women

In Article 5 of Law No. 4857, which is defined as "the Principle of Equal Treatment", discrimination due to gender is prohibited. In the third paragraph of the same article, "unless the employer requires biological reasons or reasons related to the nature of the work, the provision that a worker cannot perform different transactions directly or indirectly due to gender or pregnancy in the conclusion of the employment contract, in the establishment, implementation and termination of the conditions". However, since there is no definition of direct or indirect discrimination, it is not clear which situations are contrary to this article. The fifth paragraph stipulates that the application of "special protective provisions" due to the gender of the worker does not verify the application of a lower wage. In case of discrimination due to any reason including gender, the sanction to be applied to it is also included in the Labor Law (Kandemir and Yardımcıoğlu 2014,, 8).

According to Article 60 of the Turkish Constitution, "everyone has the right to social security". Those are the measures taken by the state in order to ensure this security and establish the necessary organization, its provision guarantees the principle of equal treatment in social security. In addition to the aforementioned article of the Constitution, regulations regarding social security are included in the Labor Law No. 4857, Social Insurance Law No. 506, Republic of Turkey Retirement Law Act No. 5434, Agricultural Workers Social Insurance Law No. 2925, Social Insurance Law on Self-Employed and Accounted Employees in Agriculture Law No. 2926 and Law on Tradesmen and Craftsmen and Other Self-Employed Social Insurance Institution No.1479 (Canbay and Demir 2013, 303).

3.4.2.3. Equal Treatment of Self Employees and Their Spouses

Legislation regarding the principle of equal treatment of those who work on their behalf and account and their spouses are Bağ-Kur Law No. 1479 and Agriculture Bağ-Kur Law No. 2926 (Employees on Their Behalf and Account in Agriculture). The aforementioned laws do not include maternity insurance. "The Social Insurance and General Health Insurance Law" entered into force on January 1 2007 and this problem was resolved (http://archive.ismmmo.org.tr/docs/yayinlar/kitaplar/4956/4956%20say%C4%B1l%C4%B1%20ba%C4%9F-kur%20kanunu.pdf, Accessed on 03.01.2021).

In the Agriculture Bağ-Kur Law No. 2926, the condition of being the head of the family was sought for women to be insured. This requirement was abolished in 2003 with Law No. 4956 and in this context, the principle of non-discrimination and equal treatment between women and men was implemented. There is no regulation in Turkish laws regarding the provision of social security of spouses of self-employed persons. However, according to Law No. 1479, women without any social security can have voluntary insurance. Law No. 1479 only covers females in this regard, and such a regulation does not apply to males (Diken 2018 193).

3.4.2.4. Protection of Pregnant, Maternity and Breastfeeding Women

The protection and rights of pregnant, puerperal and lactating women are regulated by the Labor Law No. 4857, Social Insurance Law No. 506, Civil Servants Law No. 657, Republic of Turkey Retirement Law No. 5434, Regulation on Working Conditions of Women Workers in Night Shifts, dated 9 August 2004 and numbered 25548 issued by the Ministry of Labor and Social Security within the framework of the Labor Law and Regulation on Working Conditions of Pregnant or Nursing Women, Breastfeeding Rooms and Child Care Dormitories dated 14 July 2004 and numbered 25522. "The Regulation on the Conditions of Employment of Women Workers in Night Shifts" covers women workers who are over the age of 18 in the workplaces under the Labor Law No. 4857. According to the regulation prepared on the basis of Article 73 of the Labor Law, female workers cannot be employed in night shifts for more than seven and a half hours, and female workers cannot be employed in night shifts for six months from the date of their pregnancy until birth. For breastfeeding workers, this period is

extended up to one year if the doctor's report indicates that it is necessary for maternal and child health (https://turkishlaborlaw.com/turkish-labor-law-4857/19-4857-labor-law-english-by-article/, Accessed on 03.01.2020).

3.4.2.5. Obligation of Proof in Gender-Based Discrimination Cases

Although Article 5 of the Labor Law No. 4857 states that discrimination cannot be made on the grounds of gender, it does not provide a definition for direct and indirect discrimination. On the other hand, there is no regulation on discrimination in the Civil Servants Law No. 657. Considering that indirect discrimination is the most common and difficult to prove type of discrimination, a detailed "legal definition" is needed (https://www.mevzuat.gov.tr/MevzuatMetin/1.5.7036.pdf, Accessed on 03.01.2020).

The Law on Labor Courts numbered 5521 is the regulation regarding judicial and administrative cases that can be filed in case of discrimination based on gender. Article 1 of the aforementioned Law states that labor courts will be established where deemed necessary, in charge of clearing legal disputes arising from employment contracts or any claims based on the Labor Law between persons considered to be employees and employer or employer representatives (https://www.mevzuat.gov.tr/MevzuatMetin/1.5.7036.pdf, Accessed on 03.01.2020).

3.4.2.6. Sexual harassment

Although there is no special section on sexual harassment in the Labor Law numbered 4857, paragraph (d) of Article 24 and paragraph (c) of Article 25 of the Law have listed sexual harassment among the conditions that give the employee and the employer the right to terminate immediately. According to the provision of paragraph (d) of Article 24, if the employee is subjected to sexual harassment at the workplace by another worker or third parties and the employer does not take the necessary measures despite notifying the employer about this situation, the employment contract may be terminated immediately. Paragraph (c) of Article 25 makes a similar arrangement for the employer. The legal period regarding the rightful termination authority is 6 working days from the date of learning of the action. The period for learning about the action is also limited to one year. Immediate termination of the contract with just cause gives rise to the right to demand compensation from the opposing party for the employee and the employer

(Article 26). In the case of sexual harassment in the workplace, the provisions of the Civil Law on the protection of personal rights and the articles of the Law of Obligations on moral compensation and the articles regulating the obligation of the employer to protect and supervise the worker bring various regulations (https://turkishlaborlaw.com/turkish-labor-law-4857/19-4857-labor-law-english-by-article/, Accessed on 03.01.2020).

4. METHODOLOGY

4.1. THE IMPORTANCE OF THE STUDY

The concept of gender equality generally expresses the need to behave equally between the genders in society. It is known that gender discrimination has been experienced in many areas in society since the past. It is observed that women are at a disadvantage compared to men, especially due to their social roles in working life. There are some problems faced by women when entering the working life due to gender. These problems are patriarchal structure, social customs, roles of being a wife, roles of being a mother, roles of being a child, housework. Even after entering the working life, women face some problems due to their gender understanding. These problems can be expressed as mobbing, glass ceiling obstacle, inequality in education, inequality in wages, and inequality in social rights. It is known that gender inequality has decreased in many areas both in the world and in Turkey compared to previous periods, but it still continues.

As in every field, gender inequality in working life has been a problem since the past. Women in particular face some problems both within the family and in the working environment, due to their gender before and after joining the business life. Problems regarding gender inequality in working life are still continuing today.

In this study, gender gap - low participation of women in employment- in Turkey will be revealed over the variables of male labor force participation rate, female divorce rate, GDP and inflation.

4.2. METHOD

Within the scope of the research, a causality relationship between women's labor force participation and other variables will be determined. In this context, the variables of male labor force participation rate, female divorce rate, GDP and inflation will be used and their relationship with female employment will be determined.

In order to examine the causality relationship between female labor force participation and other variables, it will first be analyzed whether the data are stable or not. Then, the causality relationship between the data will be analyzed using the Engle-Granger causality test. Finally, variables will be analyzed with the help of VAR analysis.

4.3. DATA

The data set of the research will be obtained from TURKSTAT. Variables that will be used:

- Female labor force participation rate
- Male labor force participation rate
- Divorce rate
- GDP
- Inflation

Table 4.1: Variables Used in Analysis

Variables	Abbreviation	Explanation	Data Source	Period
Famale Labor Force Participation Rate	FEMLABOR	Female Labor Force Participation Across Turkey (15+)	TURKSTATS	2000Q1-2019Q4
Male Labor Force Participation Rate	MALELABOR	Female Labor Force Participation Across Turkey (15+)	TURKSTATS	2000Q1-2019Q4
Gross Domestic Product	GDP	Nominal GDP (In Turkish Lira)	TURKSTATS	2000Q1-2019Q4
Divorce Rate	DIV	Female Divorce Rate Across Turkey (18+), Percent of Married Females	TURKSTATS	2000Q1-2019Q4
Inflation Rate	INF	Inflation Rate (%)	TURKSTATS	2000Q1-2019Q4

The use of production factors at the highest possible level and efficiency is an important determinant for economic progress. However, in all countries of the world,

labor participation of women is far beyond the labor participation of men, which is one of these factors (Özer and Biçerli, 2003-2004: 56). Participation of women in social and economic life and their way of benefiting from social and economic development are not directly proportional. Although women's benefiting from social and economic development can be associated with the development and underdevelopment levels of countries, it is a known fact that they generally lag behind men in all societies (Kakıcı, Emeç, & Üçdoğruk, 2007: 21). Therefore, in this study, male labor force participation is taken as the primary factor affecting female labor force participation, because increasing labor force participation in favor of men adversely affects female labor force participation.

One of the most important factors affecting women's participation in the labor force is marital status. There is an important link between women's marital status and their decision to participate in the labor force. Labor market participation disruptions arising from marriages and the presence of children make women economically more dependent on their husbands. Many studies have revealed the relationship between marital status and women's participatin in the labor force (Dayıoğlu & Kasnakoğlu, 1997; Ercan & Tunalı, 1998; Ermiş, 2009; Faridi & Rashid, 2014). The divorce rates of women are considered as an indicator of their singleness in this situation. Therefore, a similarity is expected between the raise in the divorce rate and the labor force participation rates of women.

Another aspect affecting female labor force participation is GDP. GDP is an important indicator for understanding the development level of a country. GDP is the amount of goods and services produced in a country (Şahin and Alp, 2019: 189). As GDP depends on production, the increase in female labor force participation is expected to increase production and GDP.

Inflation can also be considered as a different indicator for women's labor force participation. On Phillips curve, inflation rates are inversely related to unemployment rates. Therefore, it is expected that the increase in inflation rates will decrease the unemployment rates and accordingly increase the labor force participation of women (Gündoğdu, 2018: 67).

In the literature, VAR analysis models are frequently used for the differences between female and male labor force participation and especially for the factors affecting female labor force participation. Kızılgöl (2012) examined the aspects affecting the labor force participation of married and single women living in urban and rural areas with a logit model. In the study conducted by Doğan (2018), the role of gender in labor force participation was examined using econometric modeling method. Unit root tests and Granger causality analysis were used in this study. Ilalan (2017) examined the labor force participation of women in OECD countries. In the study, the relationship between women's labor force participation and economic development was analyzed with panel data estimates. On the other hand, Başkurt (2020) examined the relationship between female labor force participation and public expenditures and inflation using the VAR method. Dupuy, Fourage, and Buligescu (2009) developed an economic model to examine gender gap. This economic model is based on panel data analysis. In another study, Indangasi (2015) examined the relationship between economic development and gender inequality in labor force participation using the VAR model.

4.4. FINDINGS

In the following section, the causality relationship between female labor force participation rate, male labor force participation rate, female divorce rate, GDP and inflation.

A cointegration analysis will be applied using monthly data to determine the relationship between female labor force participation rate and other variables. The aftermentioned data are obtained from TURKSTATS databases.

Table 4.2: Female Labor Force Participation Rate in Turkey (%)

Years	Female Labor Force Participation Rate
2000	36,20
2001	37,45
2002	39,24
2003	38,04
2004	33,46
2005	33,23

2006	33,71
2007	33,79
2008	34,81
2009	36,87
2010	38,82
2011	40,16
2012	41,37
2013	42,77
2014,	42,46
2015	43,91
2016	45,06
2017	46,20
2018	46,85
2019	46,86

Source: TURKSTATS 2020.

Table 4.1 shows female labor force participation rates. When the rates are analyzed on an annual basis, it is seen that there is an increasing trend in general, although there is a decrease in certain periods. But women's participation in the labor force remained at 46.6 percent in 2019.

Table 4.3: Male Labor Force Participation Rate in Turkey (%)

Years	Male Labor Force Participation Rate
2000	73,50
2001	71,70
2002	71,80
2003	69,50
2004	72,10
2005	70,40
2006	70,10
2007	69,40

2008	70,30
2009	70,60
2010	70,40
2011	71,30
2012	71,80
2013	71,10
2014,	71,10
2015	71,40
2016	71,83
2017	72,07
2018	72,37
2019	71,50

Source: TURKSTATS 2020.

Table 4.3 indicates the labor force participation rates of males. When the rates are analyzed, a decrease appears on an annual basis. This means that the male population participating in the labor force is higher than the male population who can find a job. However, despite these decreases, the difference in labor force participation rates of females and males is high.

Table 4.4: Female Divorce Rate (% of Married Females)

Years	Divorce Rate (% of Married Females)
2000	0,8
2001	0,8
2002	0,8
2003	0,8
2004	1,3
2005	1,4
2006	1,3
2007	1,3
2008	1,4
2009	1,6

2010	1,6
2011	1,6
2012	1,6
2013	1,6
2014,	1,7
2015	1,7
2016	1,6
2017	1,6
2018	1,6
2019	1,6

Source: TURKSTATS 2020.

Table 4.4 presents the divorce rates of married women. According to the table, it is seen that divorce rates have increased. The divorce rate, which was 0.8 percent in 2000, doubled in 2019.

Table 4.5: GDP in Turkey (Million USD)

Years	GDP in Million USD
2000	274
2001	202
2002	240
2003	315
2004	409
2005	506
2006	557
2007	681
2008	770
2009	649
2010	777
2011	839

2012	881
2013	958
2014,	939
2015	864
2016	870
2017	859
2018	778
2019	761

Source: World Bank 2020.

When the GDP values of Turkey are examined, an increase in dollar terms is observed from 2000, to 20008. GDP values declined in 2009 and increased after 2010 until 2013. However, due to the depreciation of the Turkish lira against the dollar, the GDP in dollar terms has entered a downward trend after 2013.

Table 4.6: Inflation in Turkey (%)

Years	Inflation
2000	54,92
2001	54,4
2002	44,96
2003	21,6
2004	8,6
2005	8,18
2006	9,6
2007	8,76
2008	10,44
2009	6,25
2010	8,57

2011	6,47
2012	8,89
2013	7,49
2014,	8,85
2015	7,67
2016	7,78
2017	11,14
2018	16,33
2019	15,18

Inflation rates in Turkey are presented in Table 4.6. Accordingly, it is seen that the inflation rate constantly fluctuates. The inflation rate, which was 54.92 percent in 2000, dropped to 8.18 percent in 2005 and entered an increasing trend again until 2008. The inflation rate, which recorded small increases and decreases from 2008 to 2017, started to increase after 2017.

Time series graphs of each variable are presented below in order to better analyze the change of variables over time.
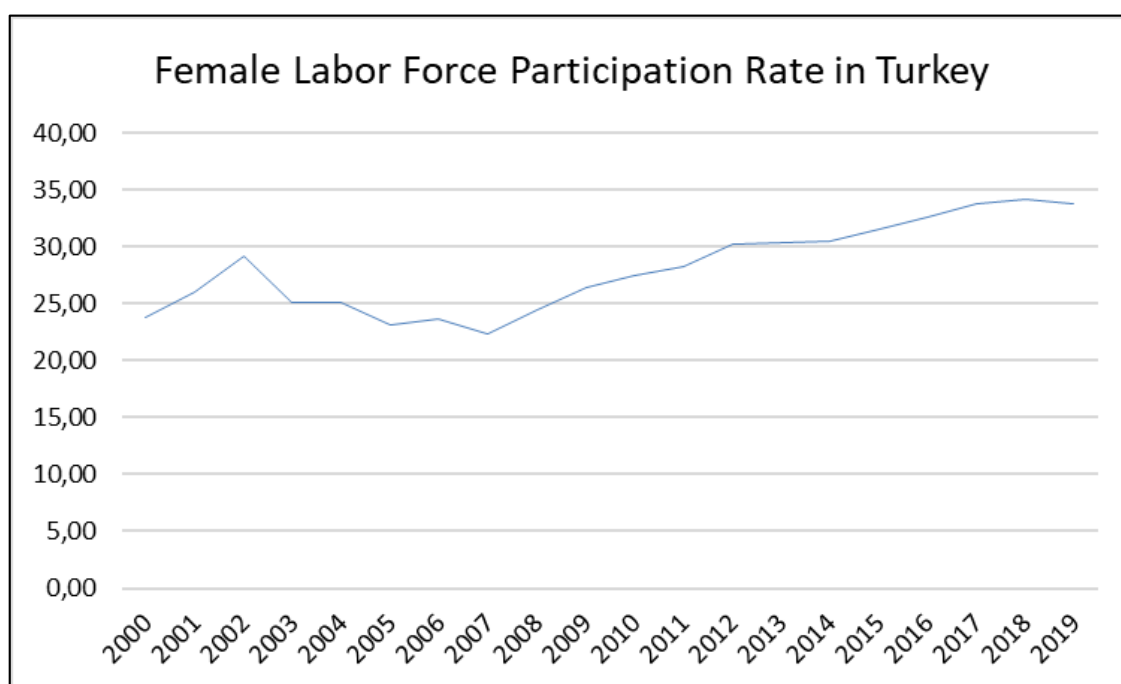

Figure 4.1: Time Series Graph of Female Labor Force Participation Rate in Turkey

When the time series graph of female labor force participation rates is analyzed, it is seen that there are fluctuations in certain years. It is possible to highlight an increasing trend after 2008.
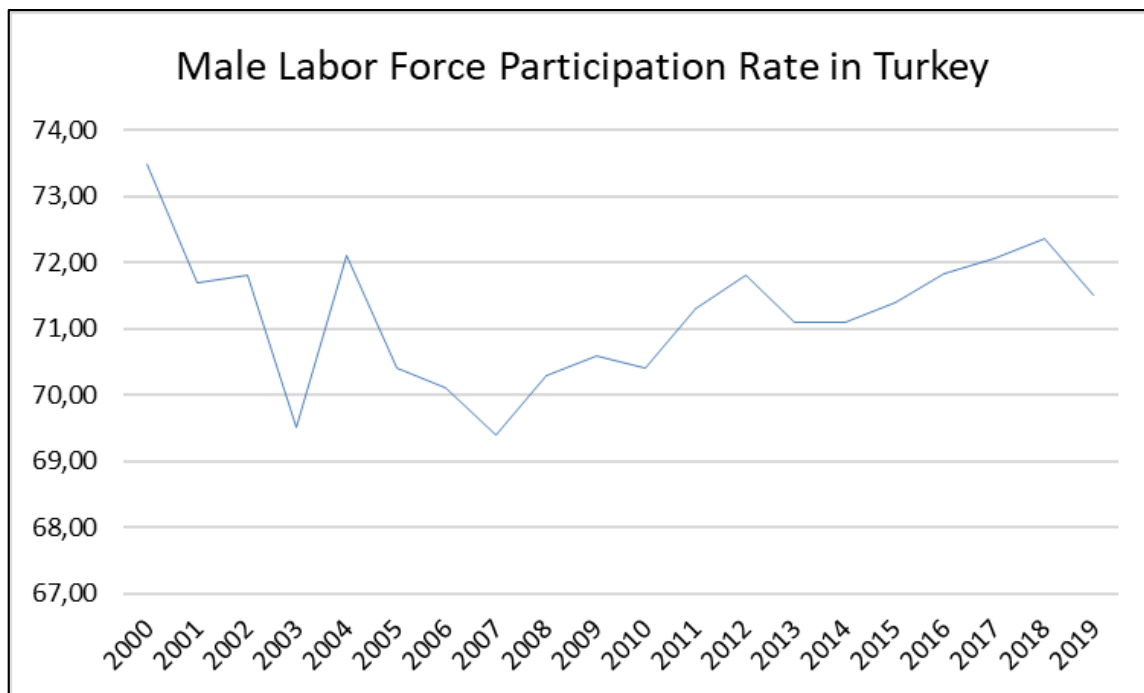

Figure 4.2: Time Series Graph of Male Labor Force Participation Rate in Turkey

High fluctuations in the labor force participation rates of males can be seen from the graph above. Male labor force participation rates do not follow any trends and are constantly changing.
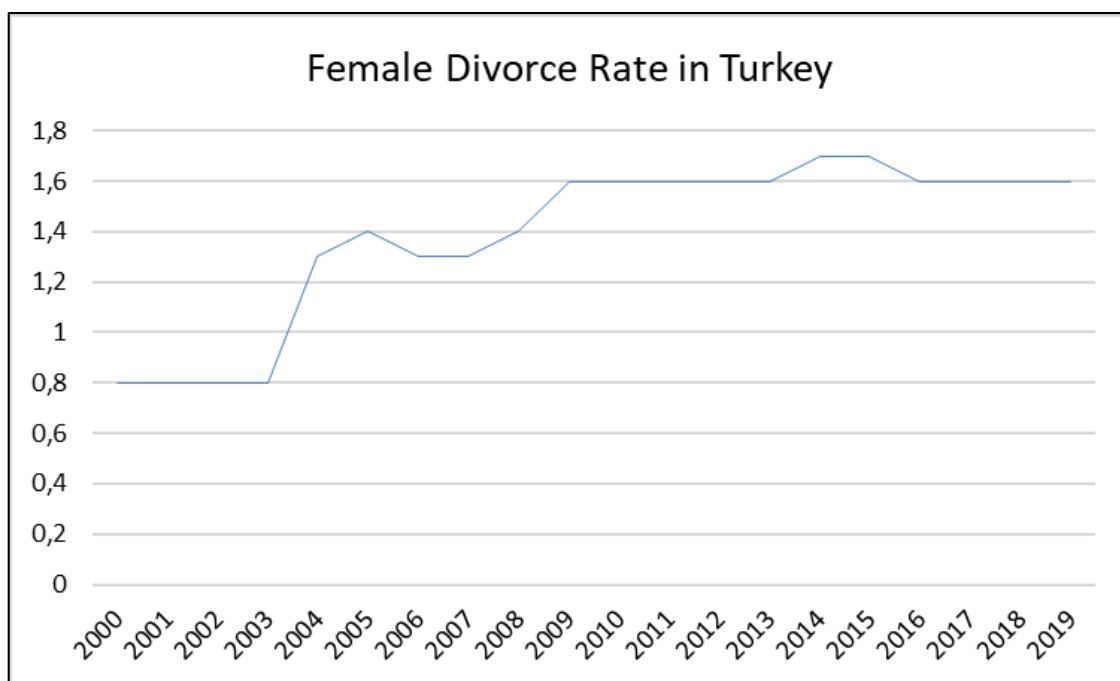
Figure 4.3: Time Series Graph of Female Divorce Rate in Turkey

Female divorce rate, on the other hand, shows an irregular movement, but generally shows an increasing trend.
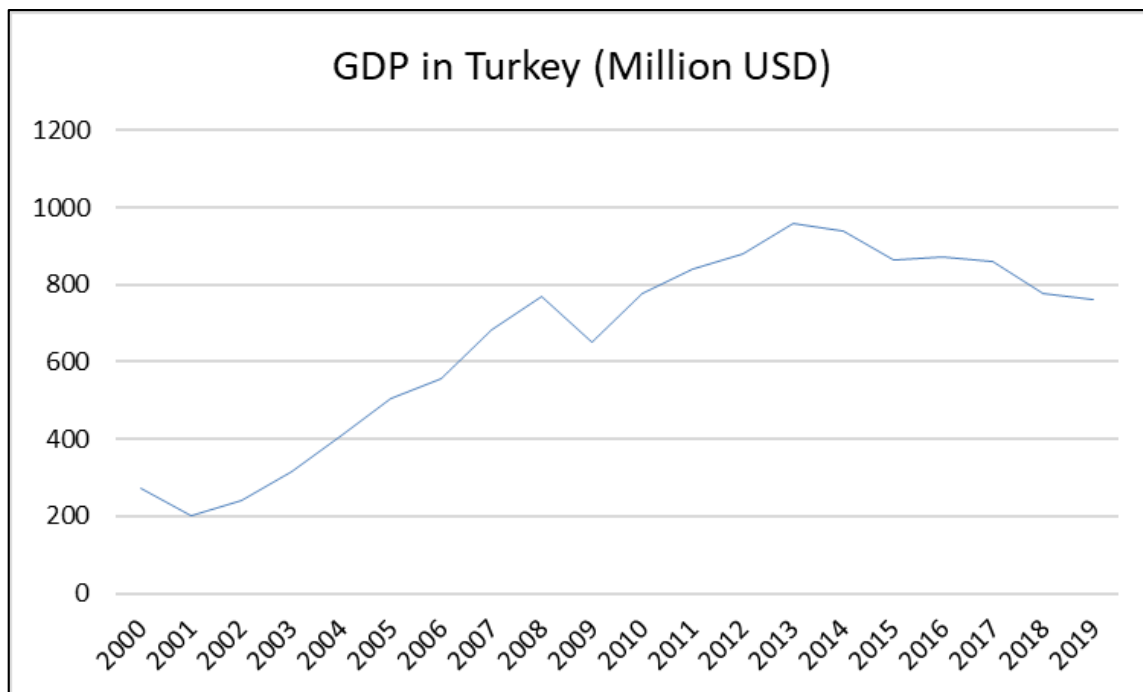

Figure 4.4: Time Series Graph of GDP in Turkey

It is seen that the GDP showed an increasing trend until 2012 and then entered a

downward trend. In addition, it is seen that it is also affected by seasonal fluctuations.
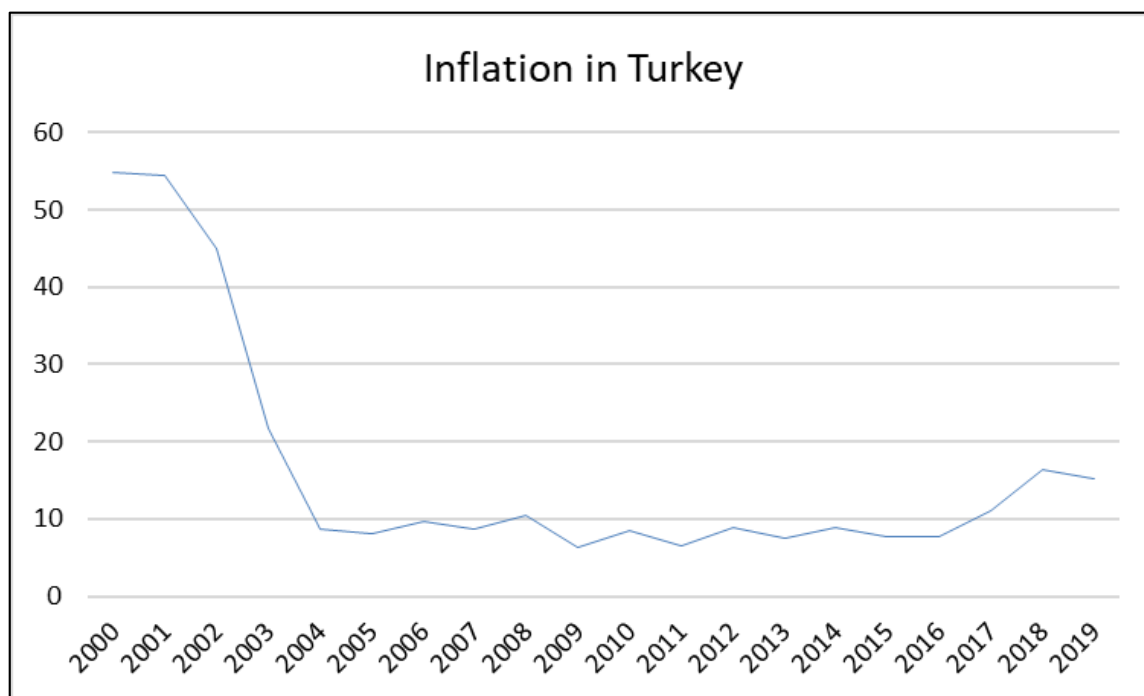

Figure 4.5: Time Series Graph of Inflation in Turkey

Similarly, it is seen that the inflation rate is affected by seasonality and has moved in a stable trend after 2004. However, it entered an increasing trend after 2016.

Table 4.7: Descriptive Statistics

	Average	Standart Deviation	Kurtosis	Skewness	Minimum	Maximum
Female Labor Force Participation Rate	28,11	3,78	-1,33	0,17	22,40	34,17
Male Labor Force Participation Rate	71,21	0,99	0,11	0,06	69,40	73,50
Female Divorce Rate	1,39	0,32	-0,25	-1,11	0,80	1,70
GDP	656,45	242,34	-0,96	-0,69	202,00	958,00
Inflation	16,30	15,29	2,51	1,96	6,25	54,92

Descriptive statistics for the variables in the period under consideration are presented in the table above.

The average rate of female labor force participation is 28.11, with a standard

deviation of 3.78. The kurtosis value of -1.33 indicates that female labor force participation rates are close to a steep distribution. The 0,17 skewness value shows that the distribution is right skewed. All values vary between 22.40 and 34.17.

The average male labor force participation rate is 71.21, with a standard deviation of 0.99. 0.11 kurtosis value indicates that male labor force participation rates are close to the normal distribution. The 0.06 skewness value indicates that the distribution is slightly right skewed. All values vary between 69.40 and 73.50.

The average female divorce rate is 1.39, with a standard deviation of 0.32. The kurtosis value of -0.25 indicates that the female divorce rates have a distribution close to the normal distribution. The value of -1.11 skewness indicates that the distribution is slightly skewed to the left. All values vary between 0.80 and 1.70.

The average of the GDP values is 656.45 and the standard deviation is around 242.34. The kurtosis value of -0.96 indicates that the GDP values have a steep distribution. The skewness value of -0.69 shows that the distribution is skewed to the left. All values range from 202 to 958.

The average inflation values are 16.30 and the standard deviation is 15.29. The kurtosis value of 2.51 indicates that inflation values have a steep distribution. The skewness value of 1.96 shows that the distribution is skewed to the right. All values range from 6.25 to 54.92.

The logoarrhythmic transformations of the series were taken to protect the time series data against autocorrelation. The stationarity state of time series has been tried to be explained by unit root test. The model in unit root test is as follows (Pantula, Gonzales-Farias and Fuller 1994, 449-459):

Yt = Yt-1 + et

The meaning of the above model can be expressed as the regression of the y value in any period according to its own value in the Yt-1 period. In the model, meat is considered as an error term.

Since the variables must be stationary in order to carry out VAR analysis, the stationary state of the series was investigated by applying the ADF test first. In this framework, three different models have been established for each series, "niether constant nor linear", "constant" and "costant, linear trend". Schwartz Information Criterion (SIC) was used in order to determine the appropriate lag length to be used in the models, and the necessary tests were made until the 11th lag since the series are on a quarter basis. Test results are given below:

Table 4.8: ADF Test Results

Variable	Neither Constant Nor Linear		Constant		Constant, Linear Trend	
	t-stat	p value	t-stat	p value	t-stat	p value
Female Labor Force Participation	1,22	0,94	-1,65	0,45	-3,88	0,01
Male Labor Force Participation	0,22	0,74	-1,44	0,55	-2,01	0,58
GDP	1,45	0,96	-1,11	0,70	-4,98	0,00
Female Divorce Rate	-0,25	0,59	-1,81	0,37	-1,54	0,80
Inflation	-1,38	0,15	-2,25	0,18	-1,39	0,85

When the table above is analyzed, it is observed that the p values for the female labor force participation rate and GDP variables are less than 0.05. In this case, it is possible to conclude that both variables are stationary at 95% confidence interval. However, it is observed that the variables of male labor force participation rate, female divorce rate and inflation are not stationary. Therefore, the first order difference of these variables is taken and presented in the table below:

Table 4.9: First Order Difference of ADF Test Results

Variable	Neither Constant Nor Linear		Constant		Constant, Linear Trend	
	t-stat	p value	t-stat	p value	t-stat	p value
Male Labor Force Participation	-3,67	0,00	-3,61	0,00	-5,05	0,00
Female Divorce Rate	-8,77	0,00	-8,91	0,00	-9,02	0,00
Inflation	-0,87	0,00	-8,79	0,00	-9,22	0,00

In the above table, first order difference of male labor force participation rate, female divorce rate and inflation variables are taken. Accordingly, these variables turned into stationary at 95% confidence interval.

An important feature of VAR models is that the model is sensitive to the lag lengths of the variables to be used. In this framework, different lag lengths can be determined for each variable in the model, and the same lag length can be used for each variable in order to provide the symmetry of the system as preferred in Sims (1980) study. In this study, it was decided to use the same lag length for each variable. In addition, the high lag length may reduce the power of the tests as it will reduce the degree of freedom in the tests to be performed. Therefore, the lag length to be determined should be at a level that will not reduce the power of the tests excessively, but to capture the relationship between error terms. In the study, SIC was used to determine the lag length and tests were made up to the 7th delay. The SIC values for each lag length are given in the table below:

Table 4.10: Determining Lag Lenght for VAR Model

LAG LENGTH	SC
0	-7,853361
1	-12,20909
2	-12,47407
3	**-12.88517***
4	-12,3432
5	-12,27539
6	-11,47607
7	-10,57387

As seen in the table, since the appropriate lag length is 3 according to SC criteria, the number of lags is determined as 3.

4.4.1. Granger Causality Analysis

In case there is a delayed relationship between two variables which depend on time, the Granger causality test is useful to statistically determine the direction of the causality of the relationship. Granger causality analysis concept demonstrates a relationship of cause- and- effect.

A relationship may be observed between two different variables. This relationship does not always mean a causality. Although regression analysis works with the dependence of a variable on another variable, it does not always mean causation. No matter how strong a statistical relationship is, it cannot be conceived as a causal relationship. Statistically, a relationship is an expression of an association. Causality is primarily based on a theoretical explanation.

Granger's definition of operational causality is based on the following assumptions Granger (1969),

- The future cannot cause the past. The past can be the cause of the present or the future. The cause always happens before the effect. This needs a time delay between cause and effect.

- Through stochastic processes, causality can only be determined. It is not possible to know the causality between the two deterministic processes.

Granger (1969) established a relatively simple test that defines causality between variables. According to Granger (1969), if the prediction of Y is more successful when the past values of X are used than when the past values of X are not used, X is the Granger cause of Y. The Granger causality test with two variables y_t and x_t requires the first step of the estimation of the following VAR model:

$$y_t = \alpha_1 + \sum_{i=1}^{n} \beta_i x_{t-I} + \sum_{j=1}^{m} \gamma_j y_{t-j} + e_{1t} \tag{1}$$

$$x_t = \alpha_2 + \sum_{i=1}^{n} \theta_i x_{t-I} + \sum_{j=1}^{m} \delta_j y_{t-j} + e_{2t} \tag{2}$$

Granger causality test requires the determination of the number of lags in the

models. Because the Granger causality test finds its basis on the VAR model, the determination of the number of lags should be implemented primarily by using the Akaike Information Criteria (AIC) and SIC criteria as the VAR model suggests. As VAR analysis is sensitive to the length of the lag, it is significant to order the variables used in the system to measure the responses of the variables to shocks and to investigate the source of the change in the variables. Consequently, it is suggested to order variables from external to internal (Enders 1995 285). In addition, with Granger causality analysis, the internal-external distinction can be made for variables. Granger Causality analysis results related to the series in the study are given in the table below:

Table 4.11: Granger Causality Test

	F Statistics	p value
Male labor force participation rate does not the Granger cause of female labor force participation rate	33,85	0,00
GDP does not the Granger cause of female labor force participation rate	14,58	0,00
Female divorce rate does not the Granger cause of female labor force participation rate	2,88	0,40
Inflation does not the Granger cause of female labor force participation rate	3,25	0,35
Female labor force participation rate does not the Granger cause of male labor force participation rate	1,53	0,67

Female labor force participation rate does not the Granger cause of female divorce rate	2,89	0,39
Female labor force participation rate does not the Granger cause of GDP	28,58	0,00
Female labor force participation rate does not the Granger cause of inflation	2,16	0,53

For the Granger Causality tests shown in the table, the lag length is taken as 3 in parallel with the VAR model. In this framework, Granger Causality between variables has been examined. When the table above is examined, male labor force participation rate and GDP are seen as the Granger reasons for female labor force participation rate. Besides, it is seen that female labor force participation rate is a Granger reason for GDP. In this context, according to the results of the Granger Causality test, variables can be listed from external to internal as follows.

Female Divorce Rate - Inflation - Male Labor Force Participation Rate - Female Labor Force Participation Rate – GDP

4.4.2. VAR Analysis

Models consisting of single or multiple equations can be used in the analysis of economic variables. Single equation models in which the cause-effect relationship between a dependent variable and one or more independent variables are revealed cannot be used because it is not possible to separate the cause-effect relationship in economic series that are affected by many factors and affect many factors. In such cases, it would be more appropriate to use multiple equation models. While single equation models are useful in determining the short-term correlation relationships between variables and providing benefit in future estimates, multi-equation models are more useful in determining the structure of the system. While regression analysis is applied to single equation models, multi-equation models require solutions of simultaneous equation systems (Kumar, Leona and Gaskins 1995, 365).

In simultaneous models, all equations in the system are analyzed simultaneously and system coefficients are estimated. However, in simultaneous equation systems, there are difficulties in providing the necessary determination condition and determining which variables are internal and which are external. In order to overcome the identification problem, sometimes some restrictions are required on the structural model. These limitations create some difficulties for research. These limitations on simultaneous models were first solved with the new

methodology based on VAR models introduced by Sims in 1980 (Kumar, Leona and Gaskins 1995, 365).

In the VAR method, the existence of a definite economic theory that affects the formation of the model is not accepted. The constraints and assumptions put forward by the economic theory are not allowed to spoil the definition of the model. There is no pre-constraint on the relationships between variables. In this way, the negative effects of the presumptions that economists have to make during the modeling phase are largely eliminated. The VAR model differs from simultaneous equation systems in that the internal-external distinction of variables based on any economic theory are not required. VAR models can give dynamic relationships without any restrictions on the structural model and is therefore frequently used for time series (Özgen and Güloğlu 2004, 96).

VAR models are used to examine the relationships between macroeconomic variables and the dynamic effect of random shocks on the system of variables. Variance Decomposition and Impulse Response functions help analyze relationships between variables in VAR modeling based on Granger Causality Test. VAR modeling is very sensitive to the selected lag length. In VAR analysis, the lag length of the variables to be included in the model must be long enough to capture the dynamic relationships between variables. VAR models are a linear function of both the delayed values of each variable in the system and the delayed values of other variables. In this case, if there are no restrictions, the right hand side of each equation in the VAR model will contain the same variables. In addition, the lagged values of dependent variables in VAR models make it possible to make strong predictions for the future (Özgen and Güloğlu 2004, 96).

In VAR modeling, the preference is that the series are stationary because in stationary time series the shocks are temporary, that is, the effect of a random shock given to the system will disappear over time and the series return to long-term equilibrium levels, whereas for non-stationary time series the shocks are permanent (Özçiftçi 2007 24).

The most important step in VAR modeling is selecting the appropriate lag length. There is a consensus that the Impulse Response and Variance Decomposition analysis of the predictive errors obtained as a result of the modeling give inconsistent results in the case of incorrect determination of lag length. The lag length should be small enough not to reduce the degrees of freedom, but large enough to eliminate autocorrelation in error terms. It was concluded that a lag length larger than the required lag length increases the mean error squares of the predictions and the variance of the parameter estimates is high. Autocorrelated error terms are generated when a smaller delay length is selected. Since the VAR model includes delayed dependent variables as

parameters, it is important that the error terms are autocorrelated, which may cause inconsistent Multiple or Classical OLS estimates used in the calculation (Özçiftçi 2007 24).

As a result of the estimation of the VAR model, instead of interpreting the parameters obtained, future interpretations can be made by switching to the analysis of the residues obtained as a result of the estimation of the system. The effect of the shocks that will occur in the error terms of the variables in the model on other variables is measured by the Impulse Response functions. Impulse Response analysis shows the response of the other variables to a standard deviation in one of the variables in the system. Graphical representation of the Impulse Response analysis results is a practical way of visually presenting the progress of the series in response to various shocks. Variance Decomposition is a technique used in the analysis of residuals determined by the estimation of the model and measuring the prediction error variance. With the help of this technique, the effects of statistical shocks on variables can be seen. The economic relations between variables can be explained better by calculating the rate at which the shock to occur in the error term of a variable is explained by other variables. If the shock related to the error term of a variable can explain the forward prediction error variance of the other variable, the relevant variable can be evaluated internally (Kumar, Leona and Gaskins 1995, 366).

In the study, VAR analysis will be conducted to determine the relationship between female labor force participation, male labor force participation, female divorce rate, GDP and inflation. In this context, the stationary of the variables was examined first and it was observed that the variables of male labor force participation rate, female divorce rate and inflation rate were not stationary at the level. For this reason, the analysis was continued by taking the first order difference of the relevant variables. With the Granger causality test, variables were ordered from external to internal. As a result, the VAR model is estimated by taking the lag length as 3 and sequencing the variables from external to internal. The estimation results are shown in the table below. After the model was estimated, model fit tests were performed. In this context, in order to determine whether the residuals of the model are interrelated or not, the LM test was performed, and the Cholesky test was used to determine whether the terms were suitable for normal distribution (Schnabel and Eskow 1990 1139-1140).

Table 4.12: VAR Model Results for Female Labor Force Participation Rate

Variable	Coefficient	St. Error	Prob. p value
FEMLABOR -1	0.145059	0.15205	0.341
FEMLABOR -2	-0.295	0.16262	0.070
FEMLABOR -3	-0.418	0.14208	0.004*
DIV -1	0.170923	0.10295	0.098

Variable	Coefficient	St. Error	Prob. p value
DIV -2	-0.182	0.13987	0.193
DIV -3	0.051919	0.10420	0.619
GDP -1	-0.217	0.07721	0.005*
GDP -2	0.187492	0.09673	0.054
GDP -3	0.018825	0.08048	0.815
INF -1	-0.008	0.03060	0.804
INF -2	-0.014	0.03033	0.642
INF -3	0.061390	0.02589	0.018*
MALELABOR -1	-1.321	0.54924	0.016*
MALELABOR -2	-0.673	0.55901	0.229
MALELABOR -3	-0.244	0.43768	0.578
C	0.208793	0.19067	0.274

In the above VAR model, the divorce rate of women appears to be insignificant. For this reason, the VAR test was performed again by subtracting the divorce rate.

Table 4.13: VAR Model Results for Female Labor Force Participation Rate (Excluding Female Divırce Rate)

Variable	Coefficient	St. Error	Prob. p value
FEMLABOR -1	0.063	0.141	0.658
FEMLABOR -2	-0.326	0.141	0.022
FEMLABOR -3	-0.439	0.139	0.001*
GDP -1	-0.262	0.072	0.000*
GDP -2	0.224	0.095	0.018*
GDP -3	0.036	0.075	0.633
INF -1	-0.029	0.025	0.256
INF -2	0.001	0.026	0.955

INF -3	0.063	0.026	0.014*
MALELABOR -1	-0.862	0.478	0.042*
MALELABOR -2	-0.539	0.465	0.247
MALELABOR -3	-0.112	0.423	0.792
C	0.052	0.124	0.674

According to the above results, the biggest effect on female labor force participation rate belongs to male labor force participation rate. However, when the female divorce rate is removed and the VAR analysis is performed again, the effect of male labor force participation rate on female labor force participation rate decreases. However, the effect of GDP on female labor force participation is increasing.

The table below shows the results of the LM test created up to 3 lags in order to determine whether there is an autocorrelation problem regarding the VAR model established. Accordingly, by taking the number of lags as 3 in the VAR model, the terms are no longer related to each other.

Table 4.14: LM Test for Autocorrelation

Lag Length	LM Test Statistics	p value
1	51,95074	0,0013
2	115,309	0,0000
3	143,0163	0,0000

In order to test whether the residual terms of the VAR model are suitable for normal distribution, normality test was applied. The results are indicated in the table below:

Table 4.15: Normality Test Results

Component	Skewness	Chi-sq	df	Prob.*
1	4,995425	316,0875	1	0,378
2	-0,49151	3,060042	1	0,713
3	-0,315216	1,258577	1	0,2619
4	-0,056293	0,040139	1	0,8412
5	0,039108	0,019373	1	0,8893

The components in the table above indicate each variable in the order of entry into

the VAR model. As can be seen from the table, the normality assumption for each component was accepted at the 99% confidence level.

4.4.3. Robustness

In the sections below, the VAR test was re-conducted by excluding the male labor force participation rate.

Table 4.16: Determining Lag Lenght for VAR Model (Excluding Male Labor Force Participation Rate)

LAG LENGTH	SC
0	-3.643111
1	-8.077470
2	-8.234022
3	-8.076961
4	**-9.197936**
5	-9.074854
6	-8.760841
7	-8.234714

As seen in the table, since the appropriate lag length is 4 according to SC criteria, the number of lags is determined as 4.

When the VAR model is examined, it is seen that the variables are significant. When the male labor force participation rate is excluded, it is seen that the variable that affects the female labor force participation rate the most is the divorce rate.

Table 4.17: VAR Model Results for Female Labor Force Participation Rate (Excluding Male Labor Force Particiapation Rate)

Variable	Coefficient	St. Error	Prob. p value
FEMLABOR -1	0.065	0.113	0.564
FEMLABOR -2	-0.170	0.106	0.111
FEMLABOR -3	-0.239	0.106	0.025
FEMLABOR -4	0.536	0.105	0.000*
DIV -1	0.216	0.081	0.008*
DIV -2	-0.205	0.105	0.051

DIV -3	0.144	0.102	0.161
DIV -4	-0.119	0.076	0.117
GDP -1	-0.130	0.069	0.049*
GDP -2	0.149	0.078	0.058
GDP -3	0.036	0.077	0.644
GDP -4	-0.068	0.071	0.335
INF -1	0.023	0.026	0.369
INF -2	0.009	0.025	0.732
INF -3	0.077	0.025	0.002*
INF -4	0.038	0.021	0.080
C	0.265	0.162	0.104

4.4.4. Impulse Response Analysis

One of the two important tools used to interpret the relationships in the model arising from the complexity of the interpretation of the VAR model is impulse response analysis. The impulse response function indicates the direction and magnitude of the other variables taken internally against a standard deviation shock in any variable in the system.
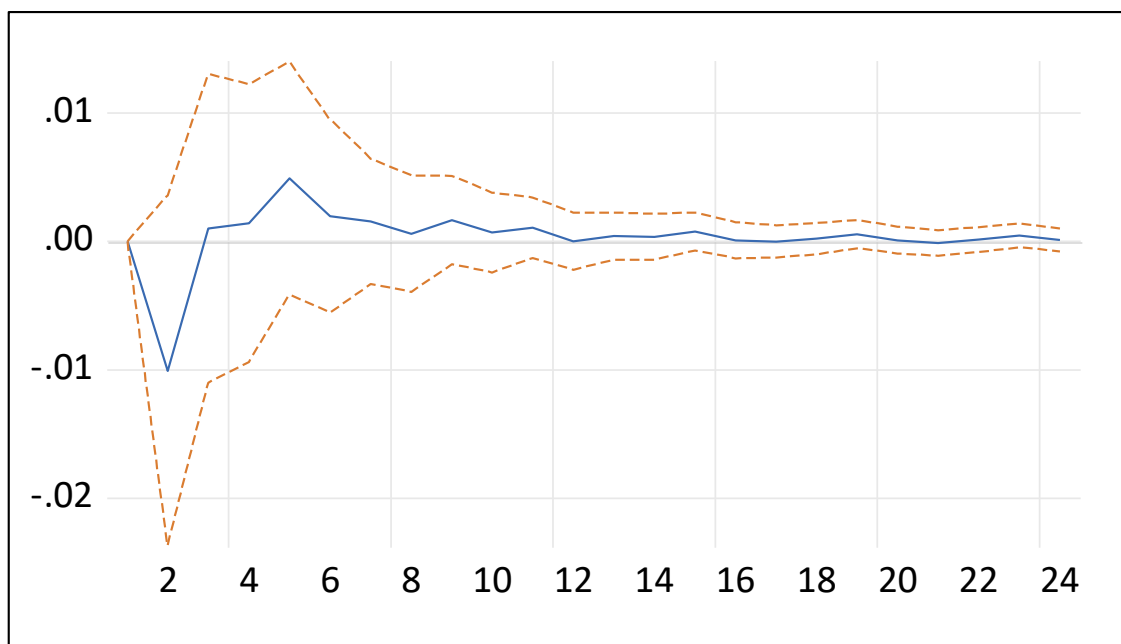

Figure 4.6: Response of Female Divorce Rate to Female Labor Force Participation Rate

It is possible to say that one standard deviation shock given to the female labor force participation rate has an effect first decreasing then increasing and then approaching

zero on the female divorce rate variable.

Figure 4.7: Response of Inflation to Female Labor Force Participation Rate

It is seen that one standard deviation shock given to the female labor force participation rate has an effect on the inflation variable, respectively decreasing, increasing, decreasing and then approaching zero.

Figure 4.8: Response of Male Labor Force Participation Rate to Female Labor Force Participation Rate

One standard deviation shock given to female labor force participation rate

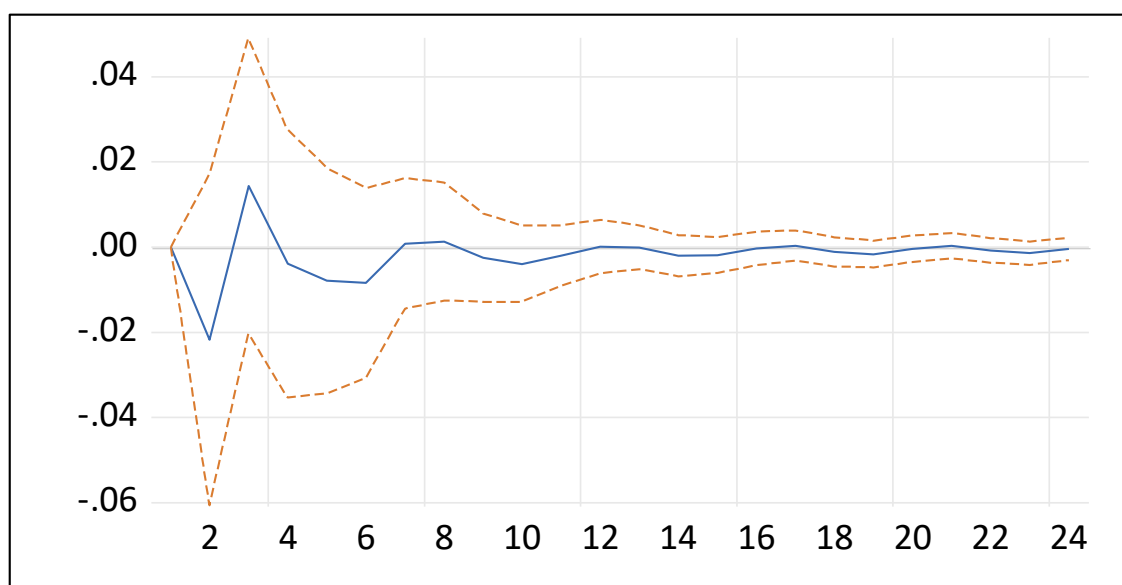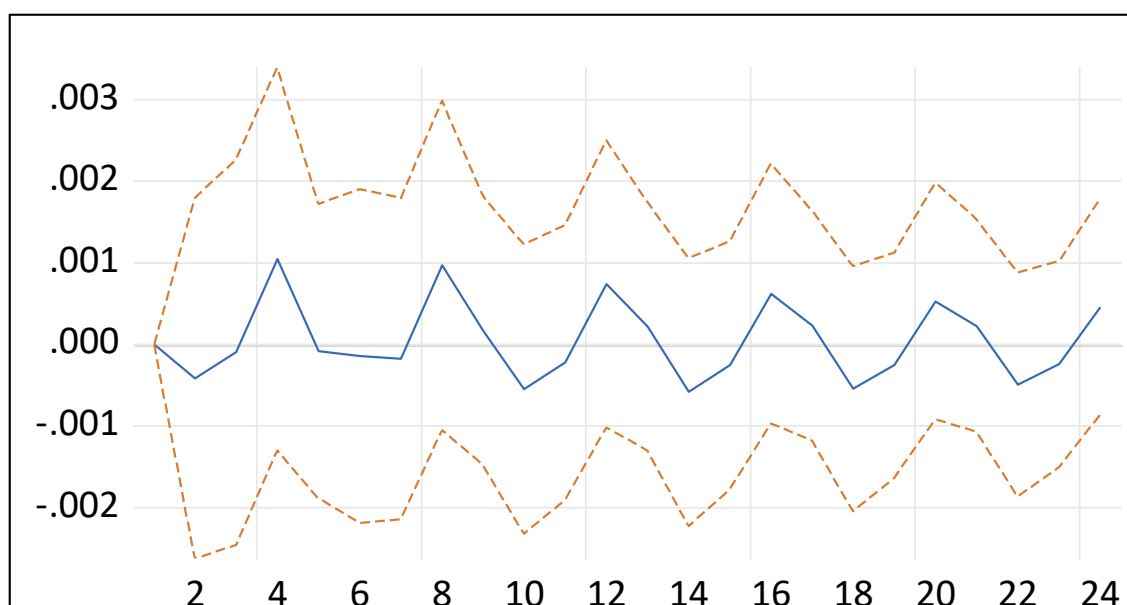appears to have a fluctuating effect on the male labor force participation rate variable.
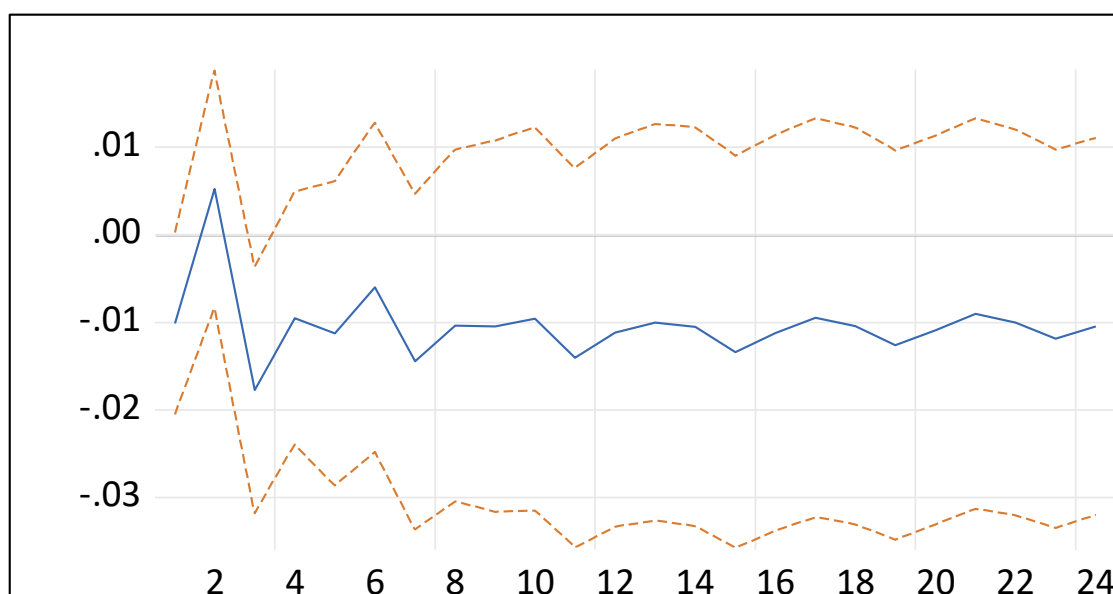

Figure 4.9: Response of GDP to Female Labor Force Participation Rate

One standard deviation shock given to the female labor force participation rate appears to have an initially rising and then decreasing negative fixed effect on the GDP variable.

Including confidence limits within the framework of estimated impulse-response coefficients is important in terms of analyzing whether impulse-response functions are statistically significant. The dashed lines (red) in these graphs show the confidence intervals for +/- 2 standard errors, while the solid lines (blue) show the response of the dependent variable over time to the 1 standard error shock occurring in the model's error terms. Since the impulse-response coefficients estimated for all series are within the 95% confidence interval, the impulse-response functions are statistically significant.

More broadly, impulse response functions depict the effect of a standard deviation shock in one of the random error terms on the current and future values of the internal variables, but are a system that gives an idea about the use of the influencing variable as a policy tool.

4.4.5. Variance Decomposition

Another tool used in interpreting the results of VAR analysis is variance

decomposition. With the variance decomposition, the source of the changes in a variable is investigated. The table below shows the results of variance decomposition for female labor force participation rate.

Table 4.18: Variance Decomposition for Female Labor Force Participation Rate

Period	Standard Error	Female Labor Force Participation	Female Divorce Rate	Inflation	Male Labor Force Participation	GDP
1	0.081523	78.74997	4.202460	1.462642	15.58493	0.000000
2	0.091770	75.60428	3.380809	4.694455	13.34634	2.974123
3	0.104467	74.35859	2.616211	3.624977	12.42058	6.979641
4	0.107399	70.89195	2.842024	5.379151	12.01435	8.872525
5	0.112661	69.87213	2.736727	5.401912	13.46526	8.523975
6	0.114898	68.56404	2.637423	5.626758	13.31986	9.851918
7	0.115898	68.82334	2.608861	5.544878	13.33999	9.682923
8	0.116189	68.48044	2.721885	5.729992	13.27334	9.794339
9	0.117488	67.31982	2.683786	5.823621	14.59123	9.581543
10	0.118400	66.42437	2.695934	5.735913	14.61448	10.52930
11	0.118891	66.07015	2.684077	5.746673	14.90172	10.59738
12	0.118996	65.98522	2.753106	5.736622	14.90940	10.61565
13	0.119572	65.35978	2.728394	5.749346	15.64226	10.52022
14	0.12014,4	64.74937	2.730150	5.695225	15.62338	11.20188
15	0.120645	64.22577	2.740161	5.739064	15.95504	11.33997
16	0.120742	64.17430	2.777005	5.736748	15.98282	11.32912

17	0.121152	63.74770	2.758304	5.724604	16.49250	11.27689
18	0.121587	63.29195	2.755238	5.686013	16.44721	11.81959
19	0.122074	62.78814	2.774254	5.732574	16.73757	11.96747
20	0.122163	62.75009	2.801241	5.738651	16.75858	11.95143
21	0.122491	62.43539	2.787269	5.720868	17.13759	11.91889
22	0.122839	62.08293	2.783427	5.691807	17.08330	12.35853
23	0.123277	61.64572	2.803104	5.731623	17.32079	12.49876
24	0.123353	61.61803	2.825259	5.741084	17.33232	12.48330
25	0.123621	61.37689	2.814824	5.723563	17.62406	12.46066

As seen in the table, the variables of male labor force participation rate, GDP, inflation and female divorce rates, in order of magnitude in the long run, contributed to the variance of the prediction error of female labor force participation rate. At the end of the 25th period, the contribution of 17.62% belongs to the male labor force participation rate variable. The change in the female labor force participation rate is 2.8 percent of the female divorce rate, 5.72 percent of the inflation rate 17.62 percent of the male labor force participation rate and 12.46 percent of the GDP value at the end of the 25th period.

Table 4.19: Variance Decomposition for Female Labor Force Participation Rate
(Excluding Male Labor Force Participation Rate)

Period	Standard Error	DIV	INF	FEMLABOR	GDP
1	0.033579	9.075437	2.187261	88.7373	0
2	0.045077	5.266165	2.548376	83.14537	9.040094
3	0.047783	4.824519	2.451679	82.58368	10.14013
4	0.050086	6.220944	6.263419	78.17231	9.343324
5	0.060154	15.01827	13.53107	63.92003	7.530638
6	0.065628	15.77156	14.91145	61.60244	7.714552
7	0.067468	16.08461	15.26965	60.43798	8.207753
8	0.068458	16.48361	15.4174	60.09329	8.0057
9	0.072785	17.66734	16.24741	58.47406	7.611183
10	0.07645	17.298	16.86641	58.248	7.587582
11	0.078151	17.03851	17.15902	57.76762	8.03485
12	0.079183	17.4053	17.42867	57.31626	7.849764
13	0.082124	18.31054	17.58128	56.35167	7.7565
14	0.084736	18.26082	17.91282	56.2606	7.565753

15	0.086185	18.03001	18.04959	55.96618	7.954224
16	0.087113	18.21891	18.21353	55.78073	7.786833
17	0.089428	18.78783	18.26634	55.23853	7.707296
18	0.091548	18.79216	18.49782	55.24536	7.464661
19	0.092823	18.62525	18.67764	54.97896	7.718153
20	0.093673	18.78306	18.83304	54.80499	7.578909
21	0.09556	19.21907	18.85035	54.42	7.51058
22	0.097351	19.26293	18.97929	54.47716	7.280616
23	0.09848	19.1174	19.11134	54.31516	7.456099
24	0.099261	19.22215	19.2511	54.18461	7.342137
25	0.100859	19.55291	19.272	53.90169	7.273392

As seen in the table, the variables of GDP, inflation and female divorce rates, in order of magnitude in the long run, contributed to the variance of the prediction error of female labor force participation rate if male labor force participation ratio is not taken into account. The change in the female labor force participation rate is 19,55 percent of the female divorce rate, 19,27 percent of the inflation rate and 7,27 percent of the GDP value at the end of the 25th period.

CONCLUSION

Female participation in economic life began with the use of a reserve labor force, especially in times of economic hardships and war. During the industrial revolution, the the labor participation of women in economic life increased in order to earn wages. In the 1980s, the number of women in working life increased with the increase in education level. Although the female labor force participation rate moves in align with the level of economic development, the barriers encountered in many countries around the world are similar. Depending on the development level of the country, its social and economic structure and the self-upbringing of the women who will enter the market, which barrier is more dominant varies.

Gender inequality limits female participation in the workforce. Therefore, women and men participation in global workforce are inequal to each other. Even though women population outweighs men population around the world, their labor participation falls behind in almost every country. Women are behind men in almost every aspect of life and have less access to education, health and employment opportunities. As a result of the lower participation of women in employment, the skills of the female workforce cannot be utilized.

The exemplary arguments causing less female labor participation are childcare or elderly care activities, other productive activities outside the formal labor market, laws and practices which are discriminatory, and social and cultural norms restricting women's employment opportunities.

Studies show that fighting gender discrimination in the labor market has favorable results. The rise in the female labor force participation rate boosts the total workforce of countries and has a positive impact on economic growth. To explore the significance of women in economic growth, the share of women participating in the labor market can be considered. Labor force participation rate, reflecting the proportion of individuals in employment or job seeking, is an important part of a country's total economic output. Therefore, as countries raise women's participation in the labor force, they have the potential to increase their economic output.

In this study, the gender gap in labor force participation, male labor force participation rate, divorce rate of women, GDP and inflation are discussed. First of all, gender gap data on participation in the labor force are revealed, and then the effect of other variables on female labor market participation rates has been examined with Granger causality analysis and VAR analysis. Within the scope of the research, quarterly data for the years 2000-2019 were examined. In the first stage, the data used for economic study were taken from the TURKSTAT database. Diagnostic tests were applied to determine whether the data are suitable for econometric analysis after logarithmic transformation. It was determined that there were no problems such as non-normal, changing variance and autocorrelation that would prevent econometric study in the data. Unit root test was also performed before performing the VAR analysis. It has been determined that male labor force participation rates, female divorce rate and inflation rates

are not stationary at the level. In order to solve the problem, the difference of the data was taken and included in the econometrics models.

With the Granger causality test carried out first, it was concluded that the male labor force participation rate was the cause of the female labor force participation rate. In addition, a reciprocal causality relationship has been identified between the changes in female labor force participation rates and the change in GDP rates. Based on this, there is a relationship between the increase or decrease in the GDP ratio in the country and the labor force participation rates of women. In the periods when GDP increased, women's participation in the labor force increased. The results are in line with similar studies (Günsoy, Özsoy, & Türküm 2012; Sevin, Bozkurt, & Sevinç 2016; Şahin & Cemile 2020).

In addition, according to Granger analysis, it was found that the data were listed from external to internal as Female Divorce Rate - Inflation - Male Labor Force Participation Rate - Female Labor Force Participation Rate - GDP.

In the second step, VAR analysis was applied to the variables. In simultaneous equations, some constraints should be imposed in terms of econometrics to distinguish which variable is internal and which is external. In order to eradicate the effects of these constraints, the solution is provided by VAR analysis. In order to analyze the results of the Var analysis in detail, Impulse Response analysis and Variance Decomposition were performed respectively. A lag length was determined according to the SIC criteria.

Impulse response function shows in which direction and magnitude the other variables react to a standard deviation shock in any variable in the system. In this framework, the responses of the other variables were measured when each variable was shocked with one standard deviation.

The shock of a standard deviation given to the female labor force participation rate caused a negative to positive effect on divorce rates, a converging to zero effect on the inflation rate, a fluctuating effect on male employment and a constant positive to negative effect on the GDP.

The result obtained from the tests conducted is that the male labor force

participation rate has a high impact on the female labor force participation rate. In addition, a high effect of GDP rate was observed on female labor force participation rate. However, the effect of women's divorce rate and inflation on female labor force participation rate is low.

The findings obtained with the study are also supported by the literature. Researchers state that there is a relationship between women's marital status and their participation in the labor force (Akgeyik, 2012; Kılar & Karlılar, 2017; Akgeyik, 2017). Akgeyik (2017) acknowledges that the increases in divorce rates are an indicator of the increase in women's labor force participation. In addition, Kızılgöl (2012) states that the labor force participation of married women is lower than that of single and divorced women.

In terms of GDP, another variable, there are many studies showing that GDP is effective on women's labor force participation (Serel & Özdemir, 2017; Şahin & Alp, 2020). Serel and Özdemir (2017) argue that a 1-unit increase in the labor force participation rate of women has an effect of 0.206 units on GDP. On the other hand, Dücan and Polat (2017) argue that the GDP has an adverse effect on women's labor force participation.

When analyzed in terms of inflation, Özer and Biçerli (2003) and Gündoğdu (2008) found a relationship between inflation and the labor force participation rate of women. While Gündoğru (2008) argues that the increase in inflation in the short term will decrease the participation of women in the labor force, Özer and Biçerli (2003) argue that the increase in inflation will force women to work for additional income and therefore, women's participation in the labor force will increase.

In Turkey, there are many studies, projects and policy implementations in order to popularize women's business. The liberative actions for women labor participation in Turkey is at a significant progress. It is not easy to overcome this long-standing understanding at once, but taboos should be broken, and women should be fortified to join the working life effectively. It is a fact that if a woman involves in working life, the national income of the country and subsequently the living level will rise. It is the mission

of society to put forth the measures required for women to take their rightful and necessary place in the workforce.

LIST OF REFERENCES

Abbas, Q., Hameed, A., & Waheed, A. (2010). Gender Discrimination & Its Affect On Employee Performance/Productivity. *Managerial And Entrepreneurial*

Developments In The Mediterranean Area.170-176.

Acar, F., Ayata, A., & Varoglu, D. (1999). Cinsiyete Dayali Ayrimcilik, Türkiye'de Egitim Sektörü Örnegi. *Ankara, TC Basbakanlik Kadinin Statüsü Ve Sorunlari Genel Müdürlügü*.

Acar, O. & Demir, Ü. (2019). Performansa Dayalı Ücret Ve Eşit İşe Eşit Ücret Paradoksu, Kamu Kurumları Üzerinden Analiz. *Uluslararası İktisadi Ve İdari Bilimler Dergisi*, *5*(2), 81-109.

Ahamad, M. G., Khondker, R. K., Ahmed, Z. U., & Tanin, F. (2011). Seasonal Unemployment And Voluntary Out-Migration From Northern Bangladesh. *Modern Economy* 2(02) 174-179.

Akgeyik, T. (2017). Türkiye'de Kadınların İşgücü Piyasasına Katılımını Etkileyen Faktörler: Tüik Verileri Üzerine Bir Analiz. *Sosyal Siyaset Konferansları Dergisi*, (70), 31-53.

Alan, M. (2011). Imperfect Competition In The Labor Market. In *Handbook Of Labor Economics* (Vol. 4, Pp. 973-1041). Elsevier.

Albertini, J., Kamber, G., & Kirker, M. (2012). Estimated Small Open Economy Model With Frictional Unemployment. *Pacific Economic Review* 17(2), 326-353.

Apaydın, F. (2018). Türkiye'de İşsizliğin Karakteristiklerinin Karşılaştırmalı Analizi. *Journal Of Suleyman Demirel University Institute Of Social Sciences*, *30*(1) 159-200

Artuk, M. E. (2006). Cinsel Taciz Suçu (TCK. M. 105). *Çalışma Ve Toplum Dergisi*, *4* 29-44.

Aşkın, E. Ö., & Aşkın, U. (2017). Toplum Yararına Programların Kadın İşsizliği Ile Mücadeledekı Etkınlığı, Tokat İlı Araştırması. *Is, Güc, Endüstri Iliskileri Ve Insan Kaynaklari Dergisi* 19(1) 23-48.

Ataklı, Y., R. (2016). Toplumsal Cinsiyet Eşitsizliği Ekseninde Kadın Istihdamı Ve Ekonomik Şiddet. *Journal Of Life Economics*, *3*(3), 77-100.

Axtell, R. L., Guerrero, O. A., & López, E. (2019). Frictional Unemployment On Labor Flow Networks. *Journal Of Economic Behavior & Organization* 1*60* 184-201.

Bălan, M. (2014,). Youth Labor Market Vulnerabilities, Characteristics, Dimensions And Costs. *Procedia Economics And Finance*, *8*, 66-72.

Bauer, F., Schriber, S., Degischer, D., & King, D. R. (2018). Contextualizing Speed And Cross-Border Acquisition Performance, Labor Market Flexibility And

Efficiency Effects. *Journal Of World Business*, *53*(2) 290-301.

Baum, S., & Mitchell, W. F. (2010). Labour Underutilisation And Gender, Unemployment Versus Hidden-Unemployment. *Population Research And Policy Review 29*(2) 233-248.

Begam, A., & Mujahid, N. (2019). The Nexus Between Economic Globalization And Female Labor Force Participation. *Pakistan Journal Of Gender Studies 19* 19-40.

Berber, M., & ESER, B. Y. (2008). Türkiye'de Kadın İstihdamı, Ülke Ve Bölge Düzeyinde Sektörel Analiz. *ISGUC The Journal Of Industrial Relations And Human Resources 10*(2) 1-16.

Berkün, S., Alacahan, N. D., & Yavuz, R. A. (2015). Kadın İstihdamını Artırmada Alternatıf Bır Degerlendırme, Evde Çalışma. *International Anatolia Academic Online Journal/Social Science Journal* 2(2), 43-61.

Biewen, M., & Steffes, S. (2010). Unemployment Persistence, Is There Evidence For Stigma Effects?. *Economics Letters 1*06(3) 188-190.

Blau, D. M., & Robins, P. K. (1988). Child-Care Costs And Family Labor Supply. *The Review Of Economics And Statistics*, 374-381.

Bloom, D. E., Canning, D., Fink, G., & Finlay, J. E. (2007). Does Age Structure Forecast Economic Growth?. *International Journal Of Forecasting 23*(4), 569-585.

Bolat, T., Seymen, O. A., & Bolat, O. İ. (2006). Örgütlerde Esnek Çalışma Uygulamaları Ve Buna İlişkin Olarak 4857 Sayılı İş Kanununda Getirilen Düzenlemelerin İncelenmesi. *Gazi Universitesi Iktisadi Ve Idari Bilimler Fakultesi Dergisi*, *8*(1) 1-30.

Bolcan, A. E. (2010). Avrupa Birliği Direktifleri Işığında Türk Çalışma Mevzuatında Kadın. *Çalışma Ve Toplum 24*(1) 253-276.

Boockmann, B., Zwick, T., Ammermüller, A., & Maier, M. (2012). Do Hiring Subsidies Reduce Unemployment Among Older Workers? Evidence From Natural Experiments. *Journal Of The European Economic Association 10*(4), 735-764.

Bowman, M. J., & Myers, R. G. (1967). Schooling, Experience, And Gains And Losses In Human Capital Through Migration. *Journal Of The American Statistical Association*, *62*(319), 875-898.

Bozkaya, G. (2013). Kadınların İşgücüne Katılımını Belirleyen Faktörler, Türkiye

Üzerine Bir Analiz. *Sosyal Bilimler Dergisi*, *3*(5), 69-89.

Brandolini, A., Cipollone, P., & Viviano, E. (2006). Does The ILO Definition Capture All Unemployment?. *Journal Of The European Economic Association*, *4*(1) 153-179.

Brecher, R. A., & Chen, Z. (2010). Unemployment Of Skilled And Unskilled Labor In An Open Economy, International Trade, Migration, And Outsourcing. *Review Of International Economics 18*(5), 990-1000.

Campolmi, A., & Faia, E. (2011). Labor Market Institutions And Inflation Volatility In The Euro Area. *Journal Of Economic Dynamics And Control*, *35*(5), 793-812.

Canbay, T., & Demir, M. (2013). Türkiye'de Sosyal Güvenlik Açıkları Ve Sosyal Güvenlik Ahlakı. *Yönetim Ve Ekonomi, Celal Bayar Üniversitesi İktisadi Ve İdari Bilimler Fakültesi Dergisi 20*(2), 303-315.

Card, D. (2011). Origins Of The Unemployment Rate, The Lasting Legacy Of Measurement Without Theory. *American Economic Review 101*(3), 552-57.

Castleman, T., & Allen, M. (1995). The Forgotten Workforce, Female General Staff In Higher Education. *Australian Universities' Review*, *38*(2), 65-69.

Chen, Y. (2015). The Distance-Decay Function Of Geographical Gravity Model, Power Law Or Exponential Law?. *Chaos, Solitons & Fractals*, *77* 174-189.

Cobb-Clark, D. A. (2015). Locus Of Control And The Labor Market. *IZA Journal Of Labor Economics*, *4*(1), 3.

Contreras, D., De Mello, L., & Puentes, E. (2011). The Determinants Of Labour Force Participation And Employment In Chile. *Applied Economics*, *43*(21) 2765-2776.

Curtis, L., Robinson, S., & Netten, A. (2009). Changing Patterns Of Male And Female Nurses' Participation In The Workforce. *Journal Of Nursing Management 17*(7), 843-852.

Çakır, Ö. (2008). Türkiye'de Kadının Çalışma Yaşamından Dışlanması. *Erciyes Üniversitesi İktisadi Ve İdari Bilimler Fakültesi Dergisi*, (31) 25-47.

Çatalbaş, G. K. (2015). Kadınların Işgücüne Katılımını Belirleyen Faktörlerin Belirlenmesi, Panel Veri Yaklaşımı. *Kafkas Üniversitesi İktisadi Ve İdari Bilimler Fakültesi Dergisi*, *6*(10) 249-280.

Çıkmaz, G. (2010). *Kadın Çalışanların İşyerinde Karşılaştıkları Sorunlar Ve*

Çözüm Önerileri, Bir Alan Çalışması, Kahramanmaraş Sütçü İmam Üniversitesi, Sosyal Bilimler Enstitüsü, Yüksek Lisans Tezi, Kahramanmaraş.

Çiftçi, E. G. Ve Hırlak, B. (2017). "Ev Hanımlarının İşgücüne Katılımlarının Önündeki Engeller", *The Journal Of Academic Social Science Studies - International Journal Of Social Science*, S. 54 287-301.

Çil, Ş. (2014,). 6100 Sayılı Hmk'ya Göre İş Yargısında İspat Yükü Ve Deliller. *İstanbul Üniversitesi Hukuk Fakültesi Mecmuası*, *72*(2), 87-102.

David, H., & Dorn, D. (2013). The Growth Of Low-Skill Service Jobs And The Polarization Of The US Labor Market. *American Economic Review 1*03(5) 1553-97.

David, H., Dorn, D., & Hanson, G. H. (2013). The China Syndrome, Local Labor Market Effects Of Import Competition In The United States. *American Economic Review 1*03(6) 2121-68.

Deal, C. L., Hooker, R., Harrington, T., Birnbaum, N., Hogan, P., Bouchery, E., ... & Barr, W. (2007). The United States Rheumatology Workforce, Supply And Demand 2005–2025. *Arthritis & Rheumatism*, *56*(3), 722-729.

Dedeoğlu, S. (2012). Türkiye'de Refah Devleti, Toplumsal Cinsiyet Ve Kadın İstihdamı. *Türkiye'de Refah Devleti Ve Kadın*. 211-230.

Dedeoğlu, S., & Elveren, A. Y. (2012). Türkiye'de Toplumsal Cinsiyet, Toplum Ve Refah Devleti. *Türkiye'de Refah Devleti Ve Kadın, Der. S. Dedeoğlu Ve AY Elveren*.29-46.

Demirel, A., Kayaalp Bilgin, Z., & Kocaman, M. (1999). Çalışmaya Hazır İşgücü Olarak Kentli Kadın Ve Değişimi. *Başbakanlık Kadının Statüsü Ve Sorunları Genel Müdürlüğü Yayınları*. 17.

Diamond, P. (2013). Cyclical Unemployment, Structural Unemployment. *IMF Economic Review*, *61*(3), 410-455.

Diken, M. E. (2018). 7143 Sayılı (Torba) Kanun Kapsamında Sosyal Güvenlik Uygulamaları. *Mali Cözüm Dergisi 28* 193-201.

Diraditsile, K., & Ontetse, M. A. (2017). Lived Experiences And Consequences Of Unemployment On Women, An Empirical Study Of Unemployed Young Women In Mahalapye, Botswana. *Journal Of International Women's Studies 18*(4) 131-143.

Dolmacı, N., & Şalvarcı Türeli, N. (2012). Varlığını Sürdüren Bir Sorun Olarak

Toplumda Ve İş Yaşamında Kadına Yönelik Farklı Ve Ayrımcı Tutumlar. *Akademik Bakış Dergisi*, *33* 1-13.

Duman, B. (2019). 4857 SAYILI İŞ KANUNU ÇERÇEVESİNDE DOĞUM VE EVLAT EDİNMEYE BAĞLI YARIM ÇALIŞMA İZNİ. *İnönü Üniversitesi Hukuk Fakültesi Dergisi* 10(1) 187-201.

Dücan, E., & Polat, M. A. (2017). Kadın İstihdamının Ekonomik Büyümeye Etkisi: Oecd Ülkeleri İçin Panel Veri Analizi. *Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, *26*(1), 155-170.

Ecevit, Y. (2012). Feminist Sosyal Politika Bağlamında Türkiye'de Çocuk Bakımı Ve Eğitimine İki Paradigmadan Doğru Bakmak. *Geçmişten Günümüze Türkiye'de Kadın Emeği* 220-265.

Elsby, M. W., Hobijn, B., & Şahin, A. (2013). Unemployment Dynamics In The OECD. *Review Of Economics And Statistics*, *95*(2), 530-548.

England, P. (1982). The Failure Of Human Capital Theory To Explain Occupational Sex Segregation. *Journal Of Human Resources*, 358-370.

Eren, M. V. (2020). Cinsiyet Eşit (Siz) Liğinde Genç Kadın İşsizliği Ile Kalkınma Arasındaki İlişki, Avrupa Birliği Ülkeleri Üzerine Ekonometrik Bir Analiz. *Journal Of Yaşar University* 15(59), 598-614.

Estevão, M. M., & Tsounta, E. (2011). Has The Great Recession Raised US Structural Unemployment?. *IMF Working Papers* 1-46.

Falzone, J. S. (2000). Labor Market Decisions Of Married Women, With Emphasis On Part-Time Employment. *International Advances In Economic Research*, *6*(4), 662-671.

Feldmann, H. (2013). Technological Unemployment In Industrial Countries. *Journal Of Evolutionary Economics* 23(5) 1099-1126.

Fujita, S., & Moscarini, G. (2017). Recall And Unemployment. *American Economic Review* 107(12), 3875-3916.

Garcia, I., Molina, J. A., & Navarro, M. (2010). The Effects Of Education On Spouses' Satisfaction In Europe. *Applied Economics*, *42*(28), 3607-3618.

Gericke, D., Burmeister, A., Löwe, J., Deller, J., & Pundt, L. (2018). How Do Refugees Use Their Social Capital For Successful Labor Market Integration? An Exploratory Analysis In Germany. *Journal Of Vocational Behavior* 105, 46-61.

Gibb, S. J., Fergusson, D. M., Horwood, L. J., & Boden, J. M. (2014,). The Effects

Of Parenthood On Workforce Participation And Income For Men And Women. *Journal Of Family And Economic Issues*, *35*(1) 14-26.

Goette, L., Huffman, D., & Fehr, E. (2004). Loss Aversion And Labor Supply. *Journal Of The European Economic Association* 2(2-3) 216-228.

Gregg, P., Machin, S., & Fernández-Salgado, M. (2014,). Real Wages And Unemployment In The Big Squeeze. *The Economic Journal* 1*24*(576), 408-432.

Griliches, Z. (1970). Notes On The Role Of Education In Production Functions And Growth Accounting. In *Education, Income, And Human Capital* (Pp. 71-127). NBER.

Guloglu, B., & Ispir, M. S. (2011). Is Natural Rate Of Unemployment Or Hysteresis. *Sector-Specifc Panel Unit Root Test Analysis For Turkey, Ege Academic Review* 1*1*(2) 205-215.

Gunderson, M. (1977). Logit Estimates Of Labour Force Participation Based On Census Cross-Tabulations. *The Canadian Journal Of Economics/Revue Canadienne d'Economique* 1*0*(3), 453-462.

Gündoğdu, A. (2018). *Kadınların İşgücüne Katılımını Etkileyen Faktörlerin Belirlenmesi: Türkiye Uygulaması* (Master's Thesis, Namık Kemal Üniversitesi).

Güney, A. (2009). İşsizlik, Nedenleri, Sonuçları Ve Mücadele Yöntemleri. *Kamu-İş Dergisi* 1*0*(4) 135-159.

Güriş, B., Tiftikçigil, B. Y., & Tıraşoğlu, M. (2017). Testing For Unemployment Hysteresis In Turkey, Evidence From Nonlinear Unit Root Tests. *Quality & Quantity*, *51*(1), 35-46.

Hakim, C. (1995). Five Feminist Myths About Women's Employment. *British Journal Of Sociology*, 429-455.

Häusermann, S., & Schwander, H. (2012). Varieties Of Dualization? Labor Market Segmentation And Insider-Outsider Divides Across Regimes. *The Age Of Dualization, The Changing Face Of Inequality In Deindustrializing Societies* 27-51.

Healy, G., Özbilgin, M., & Aliefendioğlu, H. (2005). Academic Employment And Gender, A Turkish Challenge To Vertical Sex Segregation. *European Journal Of Industrial Relations* 1*1*(2) 247-264.

Hogan, A., Kyaw-Myint, S. M., Harris, D., & Denronden, H. (2012). Workforce

Participation Barriers For People With Disability. *International Journal Of Disability Management*, *7* 1-9.

Horton, J. J., Rand, D. G., & Zeckhauser, R. J. (2011). The Online Laboratory, Conducting Experiments In A Real Labor Market. *Experimental Economics* 1*4*(3), 399-425.

Hüseyinli, N., & Hüseyinli, T. (2016). Çocuk Bakımının Kadın Işgücü Üzerinde Etkileri Ve Hukuki Düzenlemeler. *Akdeniz Üniversitesi İktisadi Ve İdari Bilimler Fakültesi Dergisi* 16(34) 108-137.

Ilkkaracan, I. (1998). Kentli Kadinlar Ve Çalisma Yasami. *A. Berktay Hacimirzaoglu (Ed.)*, *75*. 290.

Ilyas, M., & Khan, M. A. (2019). Democracy Versus Dictatorship, An Empirical Investigation Of Determinants Of Unemployment. *Pakistan Business Review* 20(3), 525-534.

Inverarity, J., & Mccarthy, D. (1988). Punishment And Social Structure Revisited, Unemployment And Imprisonment In The United States 1948–1984. *The Sociological Quarterly* 29(2) 263-279.

İlkkaracan, İ. (2010). Uzlaştırma Politikalarının Yokluğunda Türkiye Emek Piyasasında Toplumsal Cinsiyet Eşitsizlikleri. *İş Ve Aile Yaşamını Uzlaştırma Politikaları, Emek Piyasasında Toplumsal Cinsiyet Eşitliğine Doğru. İstanbul, İTÜ BMTKAUM* 21-57.

İşat, C., Sayın, A., Şenol, N., (2004), Avrupa Birliğine Giriş Sürecini İzleme Programı Kadınlar Ve Erkekler İçin Eşit Fırsatlar, *Türkiye, Sabanci Üniversitesi İstanbul Politikalar Merkez, Açık Toplum Enstitüsü,* İstanbul, S, 44

İzgi, B. B., & Akdeniz, S. (2011). Kadın İstihdamı Sorunsalı Nereden Doğuyor. In *Anadolu International Conference In Economics II* (Vol. 15, No. 17, Pp. 1-26).

Johnson, C. Y., Rocheleau, C. M., Lawson, C. C., Grajewski, B., & Howards, P. P. (2017). Factors Affecting Workforce Participation And Healthy Worker Biases In US Women And Men. *Annals Of Epidemiology* 27(9), 558-562.

Johnson, C. Y., Rocheleau, C. M., Lawson, C. C., Grajewski, B., & Howards, P. P. (2017). Factors Affecting Workforce Participation And Healthy Worker Biases In US Women And Men. *Annals Of Epidemiology* 27(9), 558-562.

Jones, L. E., Manuelli, R. E., & Mcgrattan, E. R. (2015). Why Are Married

Women Working So Much?. *Journal Of Demographic Economics*, *81*(1), 75-114.

Joyce, C. M., Scott, A., Jeon, S. H., Humphreys, J., Kalb, G., Witt, J., & Leahy, A. (2010). The" Medicine In Australia, Balancing Employment And Life (MABEL)" Longitudinal Survey-Protocol And Baseline Data For A Prospective Cohort Study Of Australian Doctors' Workforce Participation. *BMC Health Services Research* 10(1), 50.

Kabasakal, H. (1998). Türkiye'de Üst Düzey Kadın Yöneticilerin Profili. *Berktay Hacımirzaoğlu, A.(Ed.)*, *75*, 303-312.

Kandemir, M., & Yardımcıoğlu, D. (2014,). İş Hukukunda Eşitlik İlkesi. *Dicle Üniversitesi Hukuk Fakültesi Dergisi* 19(30-31) 1-44.

Kaplan, E. K., Collins, C. A., & Tylavsky, F. A. (2017). Cyclical Unemployment And Infant Health. *Economics & Human Biology* 27 281-288.

Kaplan, G. (2012). Moving Back Home, Insurance Against Labor Market Risk. *Journal Of Political Economy* 1*20*(3), 446-512.

Karabıyık, İ. (2012a). Türkiye'de Çalışma Hayatında Kadın Istihdamı. *Marmara Üniversitesi İktisadi Ve İdari Bilimler Dergisi*, *32*(1) 231-260.

Karabıyık, İ. (2012b). Structural Characteristics Of Labor Market And Issue Of Women's Labor Force Participation In Turkey. *Journal Of Human Sciences*, *9*(2) 1282-1310.

Karatepe, S. G., & Arman, S. M. (2019). Türkiye'de Eğitimli Kadın İşsizliğinin Temel Belirleyicileri Ve Mevcut İstatistiksel Görünüm. *Sosyal Ve BeşErî Bilimler Dergisi* 1*1*(2), 32-47.

Karatepe, S., & Arıbaş, N. N. (2017). İş Hayatında Kadın Yöneticilere Ilişkin Cinsiyet Ayrımcılığı, Türkiye Için Bir Değerlendirme. *Yasama Dergisi*, (31), 7-23.

Kasnakoğlu, Z., & Dayıoğlu, M. (1997). Earnings Inequality Between Genders In Turkey. *Economic Dimensions Of Gender Inequality, A Global Perspective*, 95-117.

Kelly, E., Mcguinness, S., O'connell, P. J., Haugh, D., & Pandiella, A. G. (2014,). Transitions In And Out Of Unemployment Among Young People In The Irish Recession. *Comparative Economic Studies*, *56*(4), 616-634.

Kılıç, D., & Öztürk, S. (2014,). Türkiye'de Kadınların Işgücüne Katılımı Önündeki Engeller Ve Çözüm Yolları, Bir Ampirik Uygulama. *Amme İdaresi Dergisi*, *47*(1) 107-130.

Kıral, G., & Karlılar, S. (2017). Türkiye'de Kadın İşgücüne Katılımını Etkileyen

Faktörler: Adana İli Üzerine Bir Uygulama. *Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, *26*(3), 272-286.

Kizilgöl, Ö. A. (2012). Kadınların İşgücüne Katılımının Belirleyicileri: Ekonometrik Bir Analiz. *Dogus University Journal*, *13*(1), 88-101.

Klasen, S. (2019). What Explains Uneven Female Labor Force Participation Levels And Trends In Developing Countries?. *The World Bank Research Observer*, *34*(2) 161-197.

Koç, M., & Görücü, İ. (2011). 4857 Sayılı İş Kanunu'na Göre Kısmi Çalışma Uygulaması Ve Sonuçları. *Çalışma Ve Toplum Ekonomi Ve Hukuk Dergisi* 28(2011) 149-178.

Kolaşin, G. U., Akgül, T., & Dinçer, M. A. (2008). Politika Notu 08/1, Istihdam Paketinin Ekonomik Etkileri. Bahçeşehir Üniversitesi Ekonomik Ve Toplumsal Araştırma Merkezi. 1-10

Korkmaz, A., & Korkut, G. (2012). Türkiye'de Kadının İşgücüne Katılımının Belirleyicileri. *Suleyman Demirel University Journal Of Faculty Of Economics & Administrative Sciences* 17(2), 41-65.

Korkmaz, M., & Alacahan, N. D. (2013). Türkiye'de Formel Piyasaya Yönelmede Kadın İşgücü Arzı Ve Gsyh Etkileri, Ampirik Bir Çalışma. *Electronic Turkish Studies*, *8*(7), 887-900.

Krebs, T., & Scheffel, M. (2013). Macroeconomic Evaluation Of Labor Market Reform In Germany. *IMF Economic Review*, *61*(4), 664-701.

Krueger, A. O., & Sjaastad, L. A. (1962). Some Limitations Of Enke's Economics Of Population. *Economic Development And Cultural Change* 10(4), 423-426.

Kuzgun, İ. (2009). Türkiye'de Özürlülerin Ücret Karşılığı İstihdamını Belirleyen Değişkenler Ve Öneriler. *Journal Of Yaşar University*, *4*(15) 2451-2466.

Kuzgun, Y., & Sevim, S. A. (2004). Kadınların Çalışmasına Karşı Tutum Ve Dini Yönelim Arasındaki Ilişki. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, *37*(1) 14-27.

Leuven, E., & Oosterbeek, H. (2011). Overeducation And Mismatch In The Labor Market. In *Handbook Of The Economics Of Education* (Vol. 4, Pp. 283-326). Elsevier.

Lialina, A. (2019). Labor Market Security In The Light Of External Labor Migration, New Theoretical Findings. *Entrepreneurship And Sustainability Issues*, *6*(3)

1105-1125.

Lloyd, N., & Leibbrandt, M. (2014,). New Evidence On Subjective Well-Being And The Definition Of Unemployment In South Africa. *Development Southern Africa*, *31*(1), 85-105.

Lobao, L. (2019). Renewed Significance Of Space In Social Research, Implications For Labor Market Studies. In *Inequality In Labor Market Areas* (Pp. 11-31). Routledge.

Lordoğlu, K., Özkaplan, N., & Törüner, M. (1999). Çalışma İktisadı, Beta Yayınları, 3. *Baskı, İstanbul*.

Lyngstad, T. H. (2004). The Impact Of Parents' And Spouses' Education On Divorce Rates In Norway. *Demographic Research* 1*0* 121-142.

Marx, K. (2000). *Karl Marx, Selected Writings*. Oxford University Press, USA.

Maurer-Fazio, M., & Wang, S. (2018). Does Marital Status Affect How Firms Interpret Job Applicants' Un/Employment Histories?. *International Journal Of Manpower*. 39(4), 567-580.

Mclaughlin, H., Uggen, C., & Blackstone, A. (2017). The Economic And Career Effects Of Sexual Harassment On Working Women. *Gender & Society*, *31*(3), 333-358.

Mehtap, S., Jayyousi, Y., Gammoh, N., & Al Haj, A. (2016). Factors Affecting Women's Participation In The Jordanian Workforce. *International Journal Of Social Science And Humanity*, *6*(10), 790-793.

Mert, A. (2018). *Türkiye Ekonomisinde Çalışan Kadınların Konumu Ve Kars İlinde Çalışan Kadınların Girişimcilik Algısı,* Kafkas Üniversitesi, Sosyal Bilimler Enstitüsü, Yüksek Lisans Tezi, Kars.

Mincer, J., & Polachek, S. (1974). Family Investments In Human Capital, Earnings Of Women. *Journal Of Political Economy*, *82*(2, Part 2), S76-S108.

Mitra, A., & Singh, P. (2006). Human Capital Attainment And Female Labor Force Participation—The Kerala Puzzle. *Journal Of Economic Issues*, *40*(3), 779-798.

Morozov, M. A., & Morozova, N. S. (2018). Development Of Digital Service Economy And Its Impact On The Labor Market. *Service Plus* 1 100-107.

Mryyan, N. (2014,). Demographics, Labor Force Participation, And Unemployment In Jordan. *The Jordanian Labour Market In The New Millennium*, 39-63.

Mueller, A. I. (2017). Separations, Sorting, And Cyclical Unemployment. *American Economic Review* 1*07*(7) 2081-2107.

Naidu, S., Posner, E. A., & Weyl, G. (2018). Antitrust Remedies For Labor Market Power. *Harv. L. Rev.* 1*32*, 536-610.

Norström, T., & Grönqvist, H. (2015). The Great Recession, Unemployment And Suicide. *J Epidemiol Community Health*, *69*(2) 110-116.

Odok, G. E. (2019). Disruption Of Patriarchy In Northern Islamic Nigeria. *Gender, Place & Culture* 1-19.

Oğlak, S. (2017). "Yaşlı Bakımında Görünmeyen İşgücü, Aile Bakımı Ve Ekonomik Değeri", *İstanbul Gelişim Üniversitesi Sosyal Bilimler Dergisi,* 4 (2), 73-87.

Omay, U. (2011). Yedek İşgücü Ordusu Olarak Kadınlar, Çalışma Ve Toplum Dergisi 2011 (3) 137-166.

Onaran, Ö. (2004). Emek Piyasasına Dayalı Yapısal Uyum, Katılık Miti. *İçinde, N Balkan Ve S Savran (Haz.), Neoliberalizmin Tahribatı Türkiye'de Ekonomi, Toplum Ve Cinsiyet. İstanbul, Metis Yayınları* 211-233.

Ortego-Marti, V. (2016). Unemployment History And Frictional Wage Dispersion. *Journal Of Monetary Economics*, *78*, 5-22.

Özçatal, E. Ö. (2011). Ataerkillik, Toplumsal Cinsiyet Ve Kadının Çalışma Yaşamına Katılımı. *Çankırı Karatekin Üniversitesi İktisadi Ve İdari Bilimler Fakültesi Dergisi* 1(1) 21-39.

Özer, H. D. (2009). Doğum İzninin İşçinin Kıdemine Ve İş Sözleşmesinin Feshine Etkisi. *Çalışma Ve Toplum* 2*1*(2009/2) 123-136.

Özer, M., & Biçerli, K. (2003). Türkiye'de Kadın İşgücünün Panel Veri Analizi. *Anadolu Üniversitesi Sosyal Bilimler Dergisi*, *3*(1), 55-86.

Palaz, S., Senergin, O., & Oksuzler, O. (2013). Egitim Duzeyi Farkliliklarinin Gelir Dagilimina Etkisi, Turkiye Ornegi.[The Effect Of Dıfferences In Educatıonal Level On Income Dıstrıbutıon, The Case Of Turkey]. *Girisimcilik Ve Kalkinma Dergisi*, *8*(2) 119-131.

Parlak Börü, Ş. (2017). Kadının Korunmasına Ilişkin Uluslararası Sözleşmeler Ve Türkiye'nin Konumu. *Türkiye Barolar Birliği Dergisi*, *30*, 43-63.

Parnes, H. S. (1973). " Human Resources And Labor Markets, Labor And Manpower In The American Economy". By Sar A. Levitan, Garth L. Mangum, And Ray Marshall (Book Review). *Industrial And Labor Relations Review* 26(2), 897.

Pazarlıoğlu, V., & Çevik, E. İ. (2007). Verimlilik, Ücretler Ve Işsizlik Oranları

Arasındaki İlişkinin Analizi, Türkiye Örneği. *Yönetim Ve Ekonomi* 14(2) 1-17.

Pearce, A., Timmons, A., O'Sullivan, E., Gallagher, P., Gooberman-Hill, R., Thomas, A. A., ... & Sharp, L. (2015). Long-Term Workforce Participation Patterns Following Head And Neck Cancer. *Journal Of Cancer Survivorship*, *9*(1), 30-39.

Peters, M. A., Jandrić, P., & Hayes, S. (2019). The Curious Promise Of Educationalising Technological Unemployment, What Can Places Of Learning Really Do About The Future Of Work?. *Educational Philosophy And Theory*, *51*(3) 242-254.

Restrepo, P. (2015). Skill Mismatch And Structural Unemployment. *Massachusetts Institute Of Technology Job Market Paper* 1-94

Robb, A. M., & Watson, J. (2012). Gender Differences In Firm Performance, Evidence From New Ventures In The United States. *Journal Of Business Venturing* 27(5), 544-558.

Sarıtaş-Eldem, C. T. S. (2015). Genç Kadin Emegi Ve Sermaye Arasindaki Pazarlik, Devlet, Emek Piyasasi Ve Aile Baglaminda Bir Issizlik Analizi/The Bargain Between Young Women's Labour And Capital, An Unemployment Analysis Through State, Labour Market And Family. *Fe Dergi*, *7*(1) 16-31

Schultz, T. W. (1961). Investment In Human Capital. *The American Economic Review* 1-17.

Serel, H., & Özdemir, B. S. (2017). Türkiye'de Kadın İstihdamı Ve Ekonomik Büyüme İlişkisi. Yönetim Ve Ekonomi Araştırmaları Dergisi, 15(3), 134-150.

SGK, (2018). "Kayıt Dışı İstihdam", Http://Www.Sgk.Gov.Tr/Genelbilgi/Index.Html (Erişim, 01 Kasım 2020).

Shimer, R. (2012). Reassessing The Ins And Outs Of Unemployment. *Review Of Economic Dynamics* 15(2) 127-148

Smith, J. C. (2011). The Ins And Outs Of UK Unemployment. *The Economic Journal* 12*1*(552), 402-444.

Sumner, R. C., & Gallagher, S. (2017). Unemployment As A Chronic Stressor, A Systematic Review Of Cortisol Studies. *Psychology & Health*, *32*(3) 289-311.

Şahin, B. Y., & Cemile, A. L. P. Kadınların İşgücüne Katılımının Ekonomik Büyüme Üzerine Etkisi: Türkiye Örneği. *Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, *17*(45), 186-202.

Şenesen, G. G., Pulhan, E., & Özar, Ş. (2000). Kadın İstihdamı İçin Yeni

Perspektifler Ve Kadın İşgücüne Muhtemel Talep. *New Perspectives On Women's Employment And Possible Demand On The Female Labor Force)*. Ankara, KSSGM.

Şentürk, M., & Akbaş, Y. E. (2014,). İŞSİZLİK-ENFLASYON VE EKONOMİK BÜYÜME ARASINDAKİ KARŞILIKLI İLİŞKİNİN DEĞERLENDİRİLMESİ, TÜRKİYE Örneğii. *Journal Of Yasar University*, *9*(34), 5820-5832.

Tasçı, H. M., & Darıcı, B. Türkiye'de İsgücüne Katılımın Cinsiyet Ayırımına Göre İncelenmesi, Bir Mikro Veri Analizi. *Yönetim Bilimleri Dergisi*, *7*(1) 209-233.

Taş, H. Y., Küçükoğlu, M., & Demirdöğmez, M. (2018). Türkiye'de Genç İşsizliği Sorunu Ve Alternatif Çözüm Önerileri. *HAK-İŞ Uluslararası Emek Ve Toplum Dergisi*, *7*(18) 279-294.

Tatlıoğlu, E. (2012). Güvenceli EsnekliK ÇerçevesiNde Esnek Çalışmanın UygulanabiLiRliGi. *Ejovoc (Electronic Journal Of Vocational Colleges)* 2(2), 69-84.

Toker, Y. (2016). İşyerlerinde Cinsel Taciz, Kapsamı, Öncülleri, Sonuçları, Kurumsal Baş Etme Yöntemleri. *Türk Psikoloji Dergisi*, 38 1-19.

Toksöz, G. (2007). *Turkiye'de Kadın Istihdamının Durumu*. ILO.

Toksöz, G. (2012). Neoliberal Piyasa, Özel Ve Kamusal Patriarka Çıkmazında Kadın Emeği. *Türkiye'de Refah Devleti Ve Kadın* 103-126.

Topateş, K. A. (2015). "Dünyada Ve Türkiye'de Kadın Yoksulluğu", *Anahtar Dergisi*, S. 315, 8-13.

Topgül, S. (2012). Sosyal Sigortalar Ve Genel Sağlık Sigortası Kanunu'nda Kadının Durumu. *Yönetim Ve Ekonomi* 19(2), 301-319.

Tufan-Tanrıöver, H. (2000). Medya Sektöründe Kadın Işgücü. *Toplum*, *86* 171-193.

Tunalı, İ., & Ercan, H. (1998). *Labor Market Segmentation İn Turkey*. Koç University.

TÜİK, (2018). "İstatistiklerle Kadın 2018", Http://Tuik.Gov.Tr/Prehaberbultenleri.Do?Id=30707, (Erişim 15 Aralık 2020).

Urhan, B., & Etiler, N. (2011). Sağlık Sektöründe Kadın Emeğinin Toplumsal Cinsiyet Açısından Analizi. *Çalışma Ve Toplum* 2(29) 191-215.

Uşen, Ş., & Delen, M. (2011). Eğitimli Kadınların Çalışma Hayatına İlişkin Tercihleri, İstanbul Örneği. *Kamu İş 1*1(4) 127-182.

Uysal, S. D., & Pohlmeier, W. (2011). Unemployment Duration And Personality. *Journal Of Economic Psychology*, *32*(6), 980-992.

Ünlüoğlu, D. Ü., & Taşdemir, Z. S. (2019). Avrupa Sosyal Şartı Çerçevesinde Türkiye'de Kadın İşgücünün Değerlendirilmesi, Eskişehir Özel Sağlık Sektörü Örneği. *Anadolu Akademi Sosyal Bilimler Dergisi* 2(1) 113-130.

Valletta, R. G. (2013). House Lock And Structural Unemployment. *Labour Economics* 25, 86-97.

Van Rie, T., Marx, I., & Horemans, J. (2011). Ghent Revisited, Unemployment Insurance And Union Membership In Belgium And The Nordic Countries. *European Journal Of Industrial Relations* 17(2) 125-139.

Williamson, J. G. (1988). Migration And Urbanization. *Handbook Of Development Economics* 1, 425-465.

Wolff, R. A. (Ed.). (2018). *Kadın Çalışmalarında Güncel Konular*. Eğitim Yayınevi.

Xiao, S., & Asadullah, M. N. (2020). Social Norms And Gender Differences In Labor Force Participation In China. *Feminist Economics* 1-35.

Yalçınkaya, Ö. (2013). "Türkiye'de Kadınların İşgücüne Katılımında Gözlenen Kayıt Dışı İstihdam Sorunu". *İstihdamda Ve Sosyal Güvenlikte Cinsiyet Eşitliği Paneli Ve Çalıştay Bildirileri*. Yayın No:64. Ankara, Sosyal Güvenlik Kurumu Yayınları 107-138.

Yamak, R., Abdioglu, Z., & Mert, N. (2012). Factors Determining The Labor Force Participation In Turkey, A Microeconomics Analysis. *Anadolu University Journal Of Social Sciences* 12(2), 41-58.

Yaman Öztürk, M. (2010). Ücretli İş Ve Ücretsiz Bakım Hizmeti Ekseninde Kadın Emeği 1980'lerden 2000'lere. *Der) Saniye Dedeoğlu, Melda Yaman Öztürk, Kapitalizm, Ataerkillik Ve Kadın Emeği İçinde* 25-78.

Yenilmez, F., & KILIÇ, E. (2018). Türkiye'de İşgücüne Katılma Oranı-İşsizlik Oranı İlişkisi, Cinsiyet Ve Eğitim Düzeyine Dayalı Bir Analiz. *Eskişehir Osmangazi Üniversitesi İktisadi Ve İdari Bilimler Dergisi* 13(2), 55-76.

Yılmaz, M., & Zoğal, Y. (2015). Kadının İşgücüne Katılımının Tarihsel Gelişimi Ve Kadın İstihdamını Etkileyen Faktörler, Türkiye Ve Avrupa Örneği. *Uluslararası Ekonomi Kongresi-Econworld 2015-Torino* 1-25.