



Investigating the relationship between inflation and the gender unemployment gap in Iran

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ARTICLE INFO

Article history:

Date of submission: 28-07-2024

Date of revise: 03-11-2024

Date of acceptance: 04-12-2024

JEL Classification:

P46

J21

J16

Keywords:

Inflation

Gender Unemployment Gap

Social Security Organization

Government Spending

Gross Domestic Production

ABSTRACT

Inflation is one of the most repeated and important economic terms, affecting all members of society. Unemployment, both at the micro and macro level has countless negative consequences and makes society face many challenges. The gender unemployment gap between men and women is one of the most important and effective issues in Iran's economy. In the process of this research, the manner and extent of the effect of inflation on the unemployment of men and women and gender gap. The data related to the inflation rate was extracted from the system of the central bank of the Islamic Republic of Iran, and the data related to the unemployment insurance policyholders by gender and province were extracted from the statistical yearbooks of the Social Security organization that cover the years 2008 to 2021. The results of panel regression estimation for the dependent variable of women's unemployment indicate that the independent variables of inflation and production have hurt women's and Men's unemployment. Independent variables such as government spending and population growth rate have had a positive effect on women's and Men's unemployment. The third dependent variable of this model is the gender unemployment gap. According to the inflation and production coefficients, it can be concluded that these two variables had a negative effect on the gender gap. According to the results of the upcoming research, the necessary measures to increase production, adopt policies based on economic growth, and limit and determine the extent of government interference in the economy are suggested.

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DOI: <https://doi.org/10.48308/jep.5.2.323>



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1. Introduction

Inflation is expensive, because it erodes the savings of people and also disrupts price signals (Nasr Esfahani and Yavari, 2003). Inflation, in addition to economic effects, affects the structure of the economy and macroeconomic variables. Inflation has now gained wide political and social dimensions. The reason for this problem is the close connection between inflation and people's lives. In addition, inflation is one of the indicators of the economic and political stability of any country. Therefore, this economic index can be considered as one of the most complex and sensitive social and economic categories today, and its investigation can play a significant role in the analysis of economic issues. According to the report of the International Monetary Fund, Iran has the highest inflation rate in the Middle East (Mehrgan, 2013). On the other hand, according to the 2020 gender gap report of the World Economic Forum, with the current trend, it will take 99.5 years to close the gap in the world and achieve equality between women and men. Unemployment, both at the micro level (family) and at the macro level (society), has countless negative consequences and makes society face many challenges. Unemployment at the micro level causes the lack of access of family members to the necessary facilities and finally, the welfare of the household is reduced to a level lower than the minimum subsistence level. The longer unemployment persists, the more restrictions people will face and the more their lives will be affected. In fact, not only the unemployed person suffers from unemployment, but the family and the people covered by this person have to bear the problems of the unemployment of the supervisor. The mental and psychological damage caused by unemployment in the family affects not only the lives of these people today, but also their future. In addition to the mentioned cases, unemployment provides a suitable platform for illegal activities and sometimes committing crimes. Unemployed people, due to not having a job, have more free time at their disposal, and the possibility of them being infected by immoral

entertainment and addiction is higher. Unemployment causes a person to be unable to apply his education and skills, and with the passage of time, the education and skills of an unemployed person become obsolete, and this factor makes the future employment of such people difficult to face threats. This issue mostly applies to university graduates, and their long-term unemployment causes a waste of resources spent on their education (Jahoda, 1982; Al Abbasi et al., 2017).

In addition to pointing out the importance of the effects of unemployment, the problem of the gender gap in unemployment has become very serious in the world and in developing countries such as Iran. According to the results of the Iran Statistical Center's labor statistics plan, the relative gender gap between men and women in the index of time devoted to employment and wage-related activities is 87% on average during the period of 2005-2019, and the gender wage gap for some selected jobs, agriculture expands up to 30% (Khorsandi and colleagues, 2019). According to the announcement of the Iranian Statistics Center in 2021, the share of the unemployed population who graduated from higher education was 38.9% of the total unemployed, and the share of women among them increased by 2.9% to 70.4%. According to these statistics, in the year 2021, the unemployment rate of the population aged 15 and over has decreased by 1.1 percent compared to last year and reached 9.6 percent, which was 15.6 percent for women and 8.4 percent for men. In Iran, the participation of the labor force reached 46% in 2014 to about 40% in 2013. In this rout, the economic participation rate of women has always been less than 17% and reached its lowest value in 2013. But this rate also increased from 2014 and reached 14.9% in 2015. The participation rate of women in 2018 is equal to 16% and in 2014 it is estimated to be 17% (Iranian Statistics Center, 2020). So, the unemployment gap between men and women is one of the most important and effective issues in Iran's economy. If this important category is neglected, irreparable damage will be done to the country's economy and, as a result, many cultural and social problems will be created

(Kazemipour, 2006). In the literature the relation between unemployment and inflation discussed in different form of Philips curve (Albanesi & Ayşegül, 2018; Mariana, 2020), but the relation between gender unemployment gap and inflation mentioned less. In the process of this research, the manner and extent of the effect of inflation on the unemployment of men and women in each of the provinces of the country is examined and we find out which gender and which province had the most effect on unemployment. The main goal of the research is identifying the impact of inflation on unemployment by gender. So the main assumption is that inflation has a negative and significant effect on unemployment by gender in Iran's provinces.

The paper proceeds as follows. Section 2 explains the Theoretical literature and research background. Section 3 describes the Data and Empirical Strategy. Section 4 presents the results of the empirical analysis. Section 5 studies the Conclusions and policy suggestions.

2. Theoretical literature and research background

Unemployment and the gender unemployment gap are important issues in developing countries. In this part factors affecting employment are discussed with emphasis on the presence of women.

Factors affecting the gender gap in unemployment

Three types of gender discrimination can be observed in the labor market. First, women are paid less than men in similar jobs. The second discrimination is the exclusion of women from high-paying professional jobs and their concentration in non-technical and simple jobs. The third type of discrimination is that during economic recession, women are fired more than men (Rezaei, 2008). In general, the difference between the unemployment rate of men and women can be placed in two categories: The first category of unemployment rate gap between men and women can be attributed to internal factors. This means that either women themselves are less

productive compared to men, and the market chooses men for work in the competition between women and men. Or in general, in the prevailing economic framework, it is women themselves who are less willing to enter the labor market. The second category can be attributed to external factors. Among these factors, it can mention the conflict between men and women in the two levels of education and entering the labor market. In other words, the society does not provide the necessary conditions for the entry of all women in all fields of study in educational centers. Or that it fails to select women in the labor market compared to men (Fad'oš & Bohdalová, 2019).

According to neoclassicists, the wage paid to each person is proportional to the final value of his work, and discrimination between men and women in the labor market is a natural thing, and their income difference is completely consistent with the explanations of the theory and is due to the lower productivity of women, or it is caused by market failures (Anker and Hein, 2000). In the following, the theories of labor market analysis can be seen as a refinement of neoclassical theories, because it considers the labor market as a set that has been divided into different clauses or parts by organizational barriers. One of the most important theories related to the breakdown of the labor market is the dual labor market theory, which instead of considering gender differences as a result of women's inherent characteristics, attributed at least a part of it to the type of jobs. In this theory, two types of jobs are discriminated: the jobs of the first sector, leading jobs or static jobs, which have a relatively good situation in terms of wages, more supply and more opportunities, and jobs of the second sector with low wages and less supply, which are The limitation of the possibility of progress is facing us. Since the stability of the worker at work is important for the employer in the jobs of the first sector, the more displacement observed in women increases the probability of their recruitment to secondary jobs (Albanesi & Şahin, 2018). In the welfare theory, it focuses on the family and considers the role of women as child bearers. The main method of implementing this theory is to allocate cash assistance, free goods

and services, etc. to women. In this framework, if education is considered, the content of education will be adjusted according to the role of housewives. The theory of empowerment is mainly designed based on the conditions of developing countries and the experience of effective organizations in women's issues, and the main focus of this theory is changing the structure and conditions that impose inequality on women. According to the proponents of this theory, women should learn to participate in the family and society with self-confidence and acceptance of responsibility (Googerdchian et al., 2014). In gender theories, the position of women in the labor market and in the home and family is related to each other and is considered a part of a social system in which women are subordinate to men. The main point of these theories is assigning domestic work, especially taking care of children, to women. These theories emphasize that the trend towards women's jobs is a reflection of women's domestic role, and as in most societies, domestic work is considered low-value, these jobs and skills are also low-value (Beechey, 2013).

There is evidence that shows that the relationship between women's employment and GDP as a measure of economic development is in the form of a non-uniform curve. In such a way that the effect of economic development on gender equality in employment through wage effects follows a U-shaped pattern (Vuluku, 2013). Accordingly, with economic development wages increase and the opportunity cost of leisure time increases. The increase in the opportunity cost of not working makes most of the people who did not work before, especially women, want to work in the labor market (Chen, 2004). On the other hand, economists such as Eastin & Prakash (2013) have found an S-shaped model with three separate stages in relation to economic development and gender equality in employment. In this model, in the first stage, with the improvement of economic conditions, women's participation increases and gender equality improves. In the second stage, the existence of discriminatory institutions has led to a distinction in earning for men and women, and this limits and reduces the opportunity for

women's development, and as a result, their social resistance against the increase of sexual norms. In the final stage, gender equality is improved again, because educational and technological progress provides new job opportunities for women and women are considered as human capital for workforce development. Also, Sajid (2014) believes that economic development by reducing the wage gap between men and women and increasing the level of income leads to an increase in total demand, an increase in the size of the economy, new job opportunities and an increase in the demand for work for women, and as a result, equality between men and women (Ahmadvand et al., 2019).

Economists consider education to be the main factor in empowering women and, as a result, increasing their productivity to participate in the labor market, which increases their ability to self-manage economically and control their resources (Panahi et al., 2017). Also, education through increasing the scope of people's vision about Various issues, reducing power divergence, increasing flexibility to accept new culture and norms lead to an increase in gender equality in employment (Chen, 2004). Social and cultural conditions are also undeniable in eliminating gender inequalities. Where awareness flows allow the change in women's conditions and their greater presence in the economic arena has given us, as in liberal and democratic countries, it have seen more investment in public care for women, their greater economic empowerment and the elimination of gender and racial inequalities. As a result, democratic regimes have more respect for women Human rights, including women, are biased towards authoritarian regimes (Anyanwu, 2016).

Inflation is also based on the Phillips curve, Phelps and Friedman discussions, the New Keynesian Phillips curve and the adjusted Phillips curve with expectations related to unemployment (Branson, 1983). According to Keynesian theories, government policies can improve the economy and increase production, thus reducing the unemployment rate. Scully (1989), Barrow (1991) and Rasolini and Shugart (1997) have

mentioned a lot of evidence in favor of the idea of a negative effect of government size on the growth rate of output, but research on the relationship between unemployment and government size complete, not known (Christopoulos et al., 2005).

2. Research background

Bielby and Baron (1986) report that among a wide variety of California firms and even among occupations that appear to be balanced in terms of access for women and men, women and men are more likely to work in Organizational conditions tend to be different. Often in organizations, women and men do the same work with different job titles and in different departments of the organization.

Abbasinejad and Kazemizadeh (2000) studied and analyzed the Phillips curve and determined the natural rate of unemployment in Iran. By rejecting the scenario of rational expectations and with the help of analogical expectations, they acknowledged the inverse relationship between unemployment and inflation in the short term. In such a way that in order to reduce unemployment by one percent, Iran's economy is forced to endure an inflation of about 13 percent. Likewise, they estimated the natural unemployment rate at 6.7%. Russell and Banerjee (2008) stated that many studies neglect the unstable nature of inflation. As a result, they do not properly test the verticality of the long-run Phillips curve. Considering the instability of inflation, they found a small but positive and meaningful relationship between unemployment and inflation. In addition, they showed that when the inflation rate increases, the substitution between inflation and unemployment becomes weaker. Su and Heshmati (2011) investigated the labor market of men and women, focusing on the difference in wages and salaries in China's urban labor market. In this research, they found that men's rights are more than women's in most cases. In addition, discrimination in employment doubles this heterogeneity. In this research, it was found that the two factors that cause the difference between men and women in the

labor market are the level of education and work experience. Dadger et al. (2014) with data related to the years 1974-2010 and forecasts up to the horizon of 2025, according to Okan's law, they simulated a model of the integration of dynamic system and econometric methods to determine the factors influencing growth. Identify economic, social welfare, birth rate and Okan's law. They found that human capital and labor variables have a positive and significant effect on economic growth. Economic growth has an inverse relationship with unemployment. The rate of unemployment and inflation has a negative effect on the social welfare index. Al-Abasi et al. (2017) studied the future of unemployment and employment with the help of scenario planning method for the country of Bangladesh. The results of the surveys show that the rate of economic participation is increasing, and due to the increase in the presence of women in the labor market and migration from villages to cities, job applicants will increase significantly in the future and to provide work for all citizens. Eligible, pre-determined solutions will be required. Expanding microcredits, offering special plans for new employment, focusing on people's skills and new job demand, in global markets, can be considered the most important solutions proposed by them. Mariana (2020) believe that although the Government take some actions in gender equity, the women unemployment is a challenge that exists in the labor market. This paper presents a balance between women unemployment and inflation rate. With using the NAIRU model, they show that recent decades have shown us that the processes of inflation and unemployment are interfering in many areas and with increasingly unexpected effects.

The difference and innovation of the present research with previous researches is that, in this research, the relationship between inflation and unemployment by gender (male, female), by each province of the country and for a more recent period of time, and by studying the data The provisions of Social Security Organization unemployment insurance recipients have been paid.

3. Research methodology

The current research is practical in terms of purpose, correlational in terms of nature, and retrospective by the time. Based on Phillips curve theory and Keynesian unemployment theories, the specification of modeling is given in the following relationships. The increase in the general level of prices and inflation causes the cost of living to increase, and since most of the men in the family are responsible for providing the necessities of life, their employment is prioritized over women, and this factor causes the gender unemployment gap to increase. In this study, the unemployment rate (U_{it}) for men (U_{men}) and women (U_{weman}) and gender unemployment gap (GG) as dependent variables, inflation (INF_{it}) government expenditure (GE_{it}) population growth rate (POP_{it}) and the province's GDP (GDP_{it}) are as independent Variables.

$$U_{weman_{it}} = \alpha + \beta_1 Inf_{it} + \beta_2 Pop_{it} + \beta_3 Ge_{it} + \beta_4 Gdp_{it} + \varepsilon_{it} \quad (1)$$

$$U_{men_{it}} = \alpha + \beta_1 Inf_{it} + \beta_2 Pop_{it} + \beta_3 Ge_{it} + \beta_4 Gdp_{it} + \varepsilon_{it} \quad (2)$$

$$GG_{it} = \alpha + \beta_1 Inf_{it} + \beta_2 Pop_{it} + \beta_3 Ge_{it} + \beta_4 Gdp_{it} + \varepsilon_{it} \quad (3)$$

$$GG = U_{Weman} - U_{Men}$$

The inflation rate will be calculated based on the consumer goods and services price index (CPI) and the unemployment rate by dividing the unemployed population aged 15-65 by the active population multiplied by 100 (Department of Population, Labor and Census of Iran Statistics Center, 2018). The data related to the inflation rate was extracted from the system of the Central Bank of the Islamic Republic of Iran and the data related to the unemployment insurance policyholders by gender and province was extracted from the statistical yearbooks of the Social Security Organization system. The statistical population of this research is all the insured, both men and women in different provinces of Iran, who have become unemployed without their own will, but are ready to work and receive unemployment benefits from the social security organization. In this study, the panel data method was used. After

collecting the data and sorting them in Excel, used Eviews 10 software to test the hypotheses. The geographical scope of this research is unemployment insurance policyholders of the social security organization of each province of Iran. In terms of time, it covered the years 2008 to 2021.

4. Research results

In this section, to have a general and comparative view, the trend of changes in the gender unemployment gap (unemployment difference between women and men) can be seen in the graph below. Due to space limitations, only 5 provinces (according to the Persian alphabet) are listed in the period from 2008 to 2021. The horizontal axis of the chart below is the 5 selected provinces and its vertical axis is the gender unemployment gap based on the number of people.

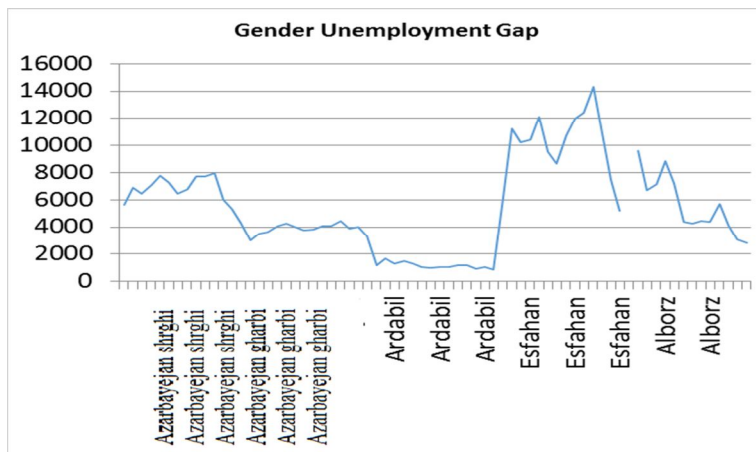


Fig 1. Gender Unemployment Gap in Iran's Provinces

Source: Research calculations

The gender unemployment gap in Azarbaijan sharghi province increased with a gentle slope at the beginning, followed by a decrease and then an increase. In the end, there has been a decreasing trend from 2018 to 2019. In

general, the gender gap in this province has been followed irregularly. The difference in unemployment between men and women, which is shown by the gender unemployment gap variable, for Azarbaijan gharbi province first increased, then decreased, and this irregular cycle continued until 2022. It should be noted that, in the last few years, this trend has been decreasing. It means that the gap between unemployment of women and men in this province has decreased. The gender gap in Ardebil province has increased, decreased, and decreased respectively. The gender unemployment gap variable in Esfahan province had an upward trend at first and a downward trend in the years leading to 2022. The variable of the gender unemployment gap in Alborz province has shown different values in different periods. In some years, there has been a decreasing trend, and in others, an increasing trend. This variable is included in a very irregular process. However, this variable has often had a downward trend in recent years. The minimum and maximum gender gap is related to Khorasan Jonubi province in 2008 with 131 people and Esfahan province in 2017 with 14308 people. In the following graph, the trend of gender unemployment gap changes can be seen in all the provinces of the country.

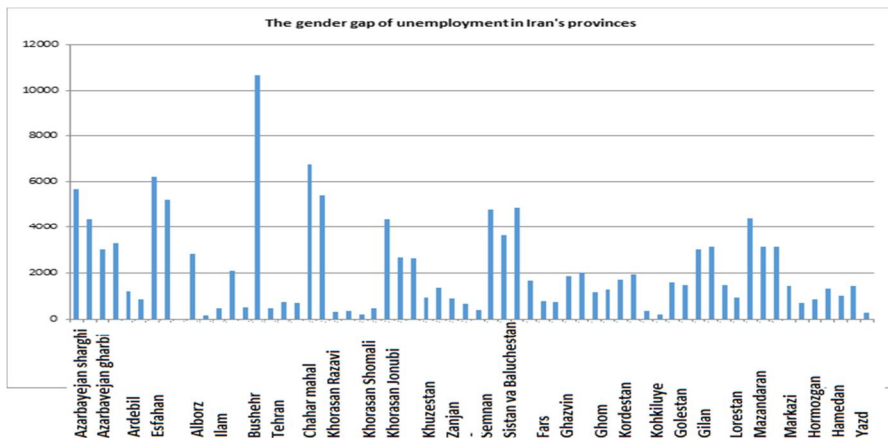


fig 2. the chart comparing the trend of changes in the gender unemployment gap

Source: Research calculations

According to the graph above, the highest and lowest gender unemployment gap differences in the beginning and end years of this research are related to Tehran and Khorasan shomali provinces, respectively. To estimate the panel data models of the country's provinces, the stationary test is first performed.

4-1. Stationary test

Different tests are used to detect the existence of a unit root in a time series. These tests help analysts determine whether a time series is spurious or not. The results of the stationarity test of model variables can be seen in the table below.

Table 1. the results of the unit root test

variables	statistics	probability	result
inflation	-3.3870	0.0004	I_0
Government expenses	-27.7610	0.0000	I_0
Gross domestic product	-8.4168	0.0000	I_0
Population growth rate	-3.8211	0.0001	I_0
Gender unemployment gap	-4.2134	0.0000	I_0
Men unemployment	-4.741	0.0000	I_0
Woman unemployment	-4.085	0.0000	I_0
Education	-3.852	0.0000	I_0
Urban population share	-4.496	0.0000	I_0
Trade Openness	-3.739	0.0000	I_0

Source: Research calculations

The results of the stationary test show that all the variables are at the same level. In the following table regression estimation is presented.

4-2. Limer's F and Hausmann test

In order to determine whether the use of panel data method will be efficient in estimating the model or not, the Limer's F test has been used. And, In order to make a comparison between random effects and fixed effects models in terms of explanatory power of the dependent variable, the Hausmann test test has been used.

Table 2. the result of the Limer's F and Hausmann test

Model name	Statistic (Limer's F)	probability	result
Gender unemployment gap	58.7191	0.0000	Panel data
Men Model	127.091	0.0000	Panel data
Women Model	91.079	0.0000	Panel data
Model name	Chi-Sq (Hausman test)	probability	result
Gender unemployment gap	1.9424	0.7464	Random effect method
Men Model	6.265	0.180	Random effect method
Women Model	13.522	0.009	Fix effect method

Source: Research calculations

The results of Limer's test show that all three models can be estimated as a panel.

After analyzing the stationary tests, Limer's F and Hausman tests, in this section, the results of the panel method of research models are presented:

Table 3. the results of panel model estimation

variables	gender unemployment gap Model				Men unemployment Model	Women unemployment Model
	I	II	III	IV GMM model		
inflation	-0.6338*** (-4.1619)	-0.512*** (-3.901)	-0.507*** (-3.002)	-0.829*** (-3.181)	-0.6435*** (-3.9221)	-0.7955*** (-4.6257)
Government expenses	0.4108*** (3.2796)	0.308*** (3.175)	0.298*** (3.504)	0.748*** (3.943)	0.0866** (2.1514)	0.3054*** (4.3379)
Gross domestic product	-0.3845*** (-2.0881)	-0.108** (-2.011)	-0.301** (-2.001)	-0.748** (-2.712)	-0.1119** (-2.1937)	0.1737** (-2.3880)
Population growth rate	0.7535*** (4.3941)	0.505** (2.101)	0.803** (2.112)	0.702** (2.345)	0.6718*** (4.7801)	0.3900*** (4.3820)
Education	-	-	-0.002* (-1.691)	-0.185* (-1.891)		
Urban population share	-	0.008 (0.853)	-	-		
Trade Openness	-	-0.307* (-1.891)	-0.125* (-1.841)	-		
D(gender unemployment gap)	-	-	-	-0.085* (-1.729)		
Model specification statistics						
R ²	0.9829	0.9899	0.9901	0.998	0.9956	0.9973
Durbin Watson	1.6905	1.8524	1.9903	2.025	1.8154	1.9371

Source: Research calculations; Numbers in parentheses show t statistics.

The signs of *, ** and *** indicate significance at the 0.1, 0.05 and 0.01 levels, respectively.

Durbin Watson's number is 1.6905, the model has no problem in terms of non-autocorrelation between error sentences, which is one of the classical assumptions, and does not violate this assumption. Independent variables (inflation, government spending, production and population growth rate) have explained the dependent variable of the gender unemployment gap. Inflation with a coefficient of -0.6338 and production with a coefficient of -0.3845 reduce the gender unemployment gap. From this research, it can be concluded that the effect of the inflation variable on the gender unemployment gap is negative. In other words, the dependent variable of this research decreases with the increase in inflation. As stated earlier, some degree of inflation is necessary for the economic growth of the country. Because the price of goods and services is the main motivation of producers to reduce or increase the level of production. With the increase in inflation and, as a result, the increase in the price of goods, the motivation of producers to produce increases, and the requirement to increase production is to increase at least one of the variable factors of production (assuming that other factors of production are constant).

If the government expenditure increases by one unit, the gender unemployment gap variable, which shows the difference between the unemployment of women and men, increases by 0.4108. Government spending affects unemployment in different ways. The intensity and type of government effects are different in different economies. From the results of this research, it can be seen that the effect of government spending on the gender unemployment gap is positive and increasing. In other words, as government spending increases, the gender unemployment gap increases and vice versa. The government's heavy involvement in the economy confirms the effect of forced substitution and reduces the motivation of the private sector and increases unemployment.

The results of the panel model estimation show that the production variable has a negative effect on the gender unemployment gap. In other words, with the increase in production, the dependent variable of this

research decreases and vice versa. The requirement to increase production is to increase at least one of the variable factors of production (assuming that other factors of production are constant). Among the factors (inputs) of production, labor force can be mentioned. With the increase in production, the employment of human power increases and this factor leads to a decrease in unemployment. The results of the upcoming research are consistent with Okan's law, which emphasized the negative relationship between economic growth and unemployment and stated that the reduction of unemployment depends on the increase of economic growth.

Among other independent variables, we can mention the population growth rate, which increases the gender unemployment gap with a coefficient of 0.7535. According to the results of the following study, it can be seen that with the increase in the population of a generation, unemployment increases in that generation; because job demand is more variable than its supply. Following the increase in the population and the constant assumption of job opportunities, men and women are looking for their suitable jobs, and since job opportunities are never distributed fairly, it increases the gender unemployment gap between them.

The results were done by using more variables as control variables such as education, the degree of trade openness and the ratio of the urban population to the total population as a sensitivity analysis of the results to the variables. Also, the results were repeated using a GMM model, which confirmed the robustness of the results.

5. Conclusions and policy suggestions

Inflation has gained wide political and social dimensions due to its close and close connection with people's lives. In Iran, in the current situation, one of the most important challenges facing the government is unemployment. This problem, on the one hand, has been aggravated in the society due to the young population structure and abundant supply of labor, and on the other hand, the lower growth of the demand for labor, due to reasons such as

insufficient investment and structural problems in production. One of the available criteria for measuring gender discrimination in the labor market is comparing the unemployment rate between men and women. The difference between the unemployment rate of women and men can be explained in two ways. The first reason for this gap can be attributed to internal factors. This means that either men are more productive than women or the market chooses men. The second reason can be attributed to external factors, which is beyond the control of women's decisions. In other words, either the society fails to select women in comparison with men, or the society does not provide the necessary and sufficient conditions for the entry of all women in all fields of study (Norouzi, 2006). Therefore, in this article, the relationship between inflation and the gender unemployment gap in Iran has been investigated with an emphasis on the unemployment insurance recipients of the Social Security Organization in the period of 2008-2021. The results of the upcoming research show that inflation and production variables have a negative effect on the gender unemployment gap. This means that rising inflation has reduced male unemployment more, which has ultimately reduced the gender unemployment gap. This issue can be explained based on the occupation structure of the country where most men are engaged and inflationary shocks target them the most. The government expenditure variable has a positive effect on the gender unemployment gap, which is consistent with Abrams' opinion in this regard. With the increase of the population, assuming the stability of job opportunities and the unfair distribution of job opportunities, the gender unemployment gap increases, which these results are consistent with Easterline's beliefs. Contrary to Easterlin's beliefs, Shimer was based on the belief that with the increase in the young workforce, companies will also increase their job opportunities. That is, when the proportion of young people in the population increases, the labor force becomes more fluid. In other words, access to suitable workforce is easier and cheaper. For this reason, companies tend to attract young job seekers easily by creating new job opportunities. With the necessary

investigations, it can be seen that the results of this research are not consistent with Shimer's beliefs. These results are based on Chen (2004), Anyanwu (2016) and Mariana (2020) that indicate the gender unemployment gap is related to inflation. According to the research results, which show production variable has a negative effect on the gender unemployment gap, and in this way, economic prosperity causes impulses to the unemployment rate. Therefore, it is suggested to take necessary measures to increase production and adopt policies based on economic growth. According to the results obtained from this research, in relation to the negative relationship between government spending and the gender unemployment gap variable, it is suggested that in view of Article 44 of the Constitution, it is better for the government to take steps in order to reduce its employment by delegating its activities. In line with this action, the extent of the government's involvement in the economy should be limited and specified, and its goals should be well defined. One suggestion is improving the education of woman for their employment. Another suggestion is to avoid political influence in economic goals, and likewise, the creation of investments and industries should be without the direct intervention of the government and with the active presence of the private sector, along with the foundation and guidance of the government.

Suggestions for future studies include the examining the relationship between inflation and the gender unemployment gap in Iran, taking into account unemployment insurance recipients of other organizations. Investigating the relationship between other economic variables on the gender unemployment gap variable in Iran, And finally the use of non-linear models in order to better examine the relationships between variables is another future suggestion.

Funding

This study received no financial support from any organization.

Authors Contributions

All authors had contribution in preparing this paper.

Conflicts of interest

The authors declare no conflict of interest.

References

- Abassinejad, H. & Kazemizadeh, Gh. (2000). Adaptive Comparison of Phillips Curve and Determination of the Natural Rate of Unemployment in Iran. *Journal of Economic Research (Tahghighat- E- Eghtesadi)*, 35 (2), 133-160. (in Persian)
- Ahmadvand N, fotros M H, amini rad M. (2019). The Determinants of Gender Equality in Youth Employment in Developing Countries. *refahj*. 18(71), 45-84. doi:10.29252/refahj.18.71.2. (in Persian)
- Al Abbasi, A. A., Shaha, S., and Rahman, A. (2017). Employment and unemployment scenario of Bangladesh: A trends analysis. *Journal of Economics and Sustainable Development*, 8 (2), 108-13.
- Albanesi, S., & Ayşegül Ş. (2018). The gender unemployment gap. *Review of Economic Dynamics*, 30, 47-67.
- Anker, R., & Kathryn H. (2000). *Theories of Gender Inequality, Labor Market Supplement in – Iran*, (Parvin Raisi), Tehran: Roshangaran Publications.
- Anyanwu, J. C. (2016). Analysis of gender equality in youth employment in Africa. *African Development Review*, 28(4), 397-415.
- Beechey, V. (2013). Women and production: a critical analysis of some sociological theories of women's work. In *Feminism and Materialism (RLE Feminist Theory)* (155-197). Routledge.
- Bielby, W. T., & Baron, J. N. (1986). Men and Women at work: Sex segregation and statistical discrimination. *American Journal of Sociology*, 91 (4), 759-799.

- Branson, W. H. (1983). *Macroeconomic Theory: Income Determination*: Princeton University. *The American Economist*, 27(1), 79-86.
- Bureau of Population, Labor and Census of Iran Statistics Center (2018).
- Central Bank of the Islamic Republic of Iran (2022). Time series data bank, <http://tsd.cbi.ir>
- Chen, D. H. (2004). Gender equality and economic development: The role for information and communication technologies. Available at SSRN 610329.
- Christopoulos, D. K., Loizides, J., and E. G. Tsionas. (2005). The Abrams Curve of government size and unemployment: evidence from Panel data. *Applied Economics*, 37 (10), 1193-1199.
- Dadger, Y., Nazari, R., & Fahimifar, F. (2014). Examining Okan's law test in Iran's economy with special emphasis on population structure. *Economic research*, 49 (4), 927-959. (in Persian)
- Eastin, J., & Prakash, A. (2013). Economic development and gender equality: Is there a gender Kuznets curve?. *World Politics*, 65(1), 156-186.
- Fad'oš, M., & Bohdalová, M. (2019). Unemployment gender inequality: evidence from the 27 European Union countries. *Eurasian Economic Review*, 9, 349-371.
- Googerdchian, A., tayyebi K., & ghazavi, E. (2014). Effect of Female Employment on Gender Income Gap in Iran (1991-2011). *JEMR*, 5 (17), 145-169.
- Jahoda, M. (1982). *Employment and Unemployment: A Social-Psychological Analysis*. Cambridge England: Cambridge University Press.
- Johnson, J & Dinardo, J. (1997). *Econometric Methods*, 4th edition, Mc Graw-Hall.
- Kazempour, Sh. (2006). Recent and future developments of the employment and unemployment situation in Iran with an emphasis on the employment situation of women. *Demographic Association Letter*, 1 (1), 20-42.
- Khorsandi, M., Mohammadi, T., Arbab, H., & Sakhai, E. (2019). The effects of foreign economic shocks on Iran's macroeconomic variables: Global vector autoregression (GVAR) approach. *Iranian Economic Research Quarterly*, 27 (91), 9-30.

- Mariana, R. O. B. U. (2020). Women Unemployment Driven by the Inflation. *Centre for Studies in European Integration Working Papers Series, 1*(16), 78-85.
- Mehrgan, N. (2013). *Macroeconomics*. 7th edition, Noor Alam publication. (in Persian)
- Nasrasafhani, R., & Kazem, Y. (2003). Nominal and real factors affecting inflation in Iran - vector autoregression (RAV) approach. *Economic researches of Iran, 5* (16), 69-99. (in Persian)
- Nowrozi, L. (2006). Gender differences in job structure. *Women's research, second year, 2* (1), 165-178.
- Panahi, H., Salmani, B., and Al Omran, S. A. (2017). The Impact of Inequality in Education on Iran's Economic Growth, *Two Quarterly Journal of Economic and Developmental Sociology*. (in Persian).
- Rezaei, Gh. (2008). Approach to women's employment status (some developing and developed countries). *Entrepreneurs Magazine Amir Kabir*. (in Persian)
- Russell, B., & A. Banerjee. (2008). The Long-Run Phillips Curve and Nonstationary Inflation. *Journal of Macroeconomics, 30*(4), 1792-1815.
- Sajid, S. (2014). Political economy of gender equality: Case study of Pakistan. *International Journal of gender and Women's Studies, 2*(2), 309-340.
- Social Security Organization, statistical yearbooks, <https://www.tamin.ir>
- Su, B. & Heshmati A. (2011). Analysis of Gender wage Differential in China's Urban Labor Market, *62* (2), 423-445.
- Vuluku, G., Wambugu, A., & Moyi, E. (2013). Unemployment and underemployment in Kenya: A gender gap analysis. *Economics, 2*(2), 7-16.