

THE GENDER GAP IN ENTREPRENEURSHIP IN TRANSITION COUNTRIES AND MENA REGION

Rejhan Sulejman¹

**Corresponding Author: e-mail: rejhan.sulejman@unite.edu.mk*

Abstract

Many scientists have connected entrepreneurship with creation of new jobs, innovation and growth. However, for achieving sustainable development in employment and economic growth the participation of both men and women in entrepreneurship is fundamental. Even though the participation of women in the labor force is a basic human right, their engagement in entrepreneurship is lower than men. Gender stereotypes, lack of knowledge, lack of skills and experience are usually the factors that influence the low engagement of women in entrepreneurship.

This paper aims to investigate the influence of entrepreneurship in men and women unemployment rate in transition countries and Middle East and North Africa (MENA) region in the period 2008-2016. An econometric analysis of panel data is established in Stata 12 for 33 countries, to examine if entrepreneurship can be used as a strategy to decrease unemployment in men and women. There is no universal method to measure entrepreneurship, so data collected from different countries can bring incorrect and misleading results. To avoid misleading results, we use TEA (total-early-stage entrepreneurial activity) and EBO (established business ownerships) for measuring entrepreneurship, from GEM (Global Entrepreneurship Monitor), since GEM uses the same methodology in every country. The obtained results prove that TEA has no statistical significance in men unemployment rate while EBO is statistically significant at 10%. On the other hand, data also prove that both TEA and EBO are statistically insignificant in women unemployment rate. This study proves that entrepreneurship decreases unemployment rate in men, but only when it is an established business, however it does not influence the decrease of women unemployment rate.

Keywords: TEA, EBO, men unemployment, women unemployment

1. Introduction

The first economist to recognize the crucial role of the entrepreneur was Richard Cantillo. Beside Cantillo there have been many other economists who have accentuated the entrepreneur as a significant factor. However, the Austrian economist Joseph Schumpeter was the one who made the entrepreneur the center which all events turn around. He connected the entrepreneur with innovation and established the theory named Creative Destructive, which means that innovation progress revolutionizes the economic structure from within, demising whatever existed before. According to Barringer and Ireland (2009) entrepreneurs are the owners of enterprise that innovate and thus differentiate their business from their competitors, take the risk, combine, recombine and substitute the costlier production factors with cheaper ones and direct resources to the sectors of their most productive use.

Entrepreneurs have several characteristics in common such as innovative, risk taking, opportunist, communicative and flexibility in control (Rotar, 2014). Entrepreneurial qualities are equally found in both men and women, inelderly and the younger and they do not depend on

nationality, race, religious, social or other belonging (Fiti, Markovska & Bateman, 2007). According to physiological and sociological studies entrepreneurs genetically do not differ from any other person, which proves the statement 'entrepreneurs are born not created' to be total myth. However, studies show that people whose parents have been self-employed are more likely to become entrepreneurs (Barringer et al., 2009).

2. Women and Entrepreneurship

Gender stereotypes that define the woman in the family only as a mother and a housewife have brought many obstacles for women to enter in the labour market and business world. Since the beginning of the project Global Entrepreneurship Monitor (GEM) in 1999, we can conclude from the given data that the participation of women in entrepreneurship is significant, but although their participation varies from one country to another, the rates across countries are measurable at about two-thirds that of men. These results indicate that women are influenced by many of the factors that affect men when making entrepreneurial decisions. However, the lower rates of female participation indicate that some differences that are not fully understood still exist (Minniti & Arenius, 2003). However, the strategy for equality between men and women 2010-15, by the European Commission accentuates the contribution of gender equality to economic growth, sustainable development and personal well-being, and identifies equal economic independence of women and men as a priority area (EIGE, 2015). Although, over the last 50 years there has been a quick increase in women's labour market participation, the participation of women in the labour market is still lower than men. In 2015, at the European Union-level, 78.3% of men were active in the labour market, unlike women with only 66.8%. Also, 9.9% of women were self-employed in the European Union in 2015, unlike men with 17.8%. However, over the period 2010-14, only 2% of women in the European Union specified that they operate or own a new business unlike men who were at 4% (OECD, 2017). In Western Balkan region, the employment rate in women is lower compared to European Union, women are under-presented in political and economic decision-making, the number of women entrepreneurs is very low, and they are often discriminated when trying to secure loans for their businesses (Ferk, 2013). The same is in Europe. United States has struggled to increase the number of women entrepreneurs in the last decades. According to the U.S. Census Bureau collected business ownership data, there were 6.5 million women-owned businesses in 2005, and this number is increased for 20% from 1997 (Barringer & Ireland, 2011). In sub-Saharan Africa these differences are least pronounced, i.e. the number of men is only slightly higher than the number of women entrepreneurs. Ghana, Nigeria and Zambia are the countries where there are more women entrepreneurs than men. In Brazil, Indonesia, Philippines, Thailand, Russia and Switzerland the ratio of men to women is almost identical, and the lowest rates of women entrepreneurs are found in several countries in the Middle East and North Africa. The situation in the region is identical, i.e. the percentage of male entrepreneurs is twice as high as the percentage of female entrepreneurs (GEM, 2013). However, it should be taken into consideration that the official statistics can underestimate the representation of women in business because women can be represented as partners or in family businesses as employers, but they remain 'hidden' in official statistics (Deakins & Freel, 2005).

Studies show that family care and work-life balance influence the decision to become an entrepreneur and further on entrepreneurial activities. Gender-based occupational integration is linked to different factors, such as: differences in human capital like training and education, gender

identity, stereotypes, norms, attitudes, entry barriers and organizational practices and culture, differences in household roles, and the distribution of unpaid work (EIGE, 2015).

Women feel and think that they do not have enough skills to become entrepreneurs. Over the period 2010-14, one-third of women have specified that they have sufficient knowledge, experience, and skills to become entrepreneurs unlike men who half of them responded positively (OECD, 2017). In 2012, only 9% of workers from the construction sectors were women, unlike 66% of those working in entertainment, art, and other recreation-related sectors. Remeikiene and Startiene (2008), state that the number of businessmen exceeds the number of women, except in the service sector such as hotels, restaurants, and financial intermediation, while men are more present in industry and construction.

Despite the many difficulties that women face to enter the labour market and eventually become an entrepreneur, there are different strategies that countries can apply to help them achieve their goals. Since the 1970s, with public policy support, women's entrepreneurship programs and policies have become regular in both developed and developing countries. Governments can help to increase the number of women who start their own business with campaigns for shifting social attitude towards women's entrepreneurship, giving awards to successful women entrepreneurs (OECD, 2017), by offering free courses and training for women who want to be self-employed, and by offering finances to women.

3. Methodology

To achieve the objectives of this paper, a statistical econometric analysis in Stata 12 was employed, to examine the influence of entrepreneurship in the labor market of men and women. The dependent variables i.e., data for men's unemployment and women's unemployment were collected from the World Development Indicators database and refer to men and women who are without work but seeking and available for a job from the total male and female labour force. On the other hand, there is no universal method to measure entrepreneurship, so data collected from different countries with different tools and methods can bring incorrect and misleading results. To avoid misleading results, for this paper the independent variable that measures entrepreneurship TEA (total-early-stage entrepreneurial activity) and EBO (established business ownerships). TEA represents new business or owners/managers of a new business are the persons who paid the salary after the first three months (thus completing the start-up phase), up to 3.5 years or 42 months after starting the business. EBO represents the population from 18 to 64 years old who are at the present owners/managers of an established business, which means owning and managing an established business that has paid wages and salaries for more than 42 months. Two other independent variables used in this research are the Growth Competitive Index (GCI) which reviews the capacity of the world's economies to achieve sustained economic growth (GCR, 2017- 2018), and Growth National Income per Capita (GNIC) which represents the nation's gross domestic product including the income it receives from overseas sources. The data for TEA and EBO were collected from Global Entrepreneurship Monitor, and the data for men and women unemployment rate, GCI, and GNIC were accumulated from the database of World Development Indicators.

This research is based on 33 countries which include transition and MENA countries for the period 2008-2016. The countries used in this research are: Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Latvia, Lithuania, Kazakhstan, Kosovo, Montenegro, North Macedonia, Poland, Romania, Serbia, Slovakia, Slovenia, Algeria, Egypt, Iran, Israel, Jordan, Lebanon, Libya, Morocco, Saudi Arabia, Syria, Qatar, Tunisia, Turkey, UAE, and

Yemen.

4. Results

For this research, linear regression is used to identify the influence of entrepreneurship on men's and women's unemployment rates. The first step in the data analysis is the hypothesis (Almahdi, 2014). Before establishing the hypothesis, a correlation test was employed for two independent variables that measure entrepreneurship, i.e., for TEA and EBO. The Pearson's test shows us a positive correlation of the two independent variables, so to avoid correlation, separate regressions and separate hypotheses will be established for them.

The first step of the analysis is to define a suitable technique for the panel data. The Hausman test was used to define the model of the regression. According to the results from the Hausman test, the p-value is 0.000. Since the p-value is < 0.05, the null hypothesis is rejected, which means that a fixed effect method is preferred. The unit root testing of Levin, Lin & Chu was executed to identify issues with spurious regression, which proved that variables are at stationary with a p-value of 0.0002 and 0.0000 for women unemployment and men unemployment respectively. The last testing used in this research was the heteroscedasticity test and with Prob > ch2 = 0.0000, the results prove that in the regressions there is a presence of heteroscedasticity. To deal with the issue of heteroscedasticity, the robust standard error is applied. The panel data uses lagged data as control variables, since the agents in the economy may have a delayed response in unemployment (Stel, Carree and Thurik 2005; Koellinger and Thurik, 2012; Doulety, 2017).

For investigating the influence of entrepreneurship on women unemployment rate, were established the following hypothesis.

H1. The higher the TEA rate, the lower the rate of women unemployment

For this hypothesis the following equation was performed

$$WUN_t = \beta_0 + \beta_1 TEA_{i,t-1} + \beta_2 GCI_{i,t-1} + \beta_3 \log(GNIC_{i,t-1}) + \beta_4 WUN_{i,t-1} + \epsilon_{it}$$

In this hypothesis, the WU is the dependent variable and represents the women unemployment rate, TEA and GCI are the independent variables that represent the total early-stage entrepreneurship and growth competitiveness index respectively. GNIC represents the gross national income per capita, and WUN_{t-1} is the lagged dependent variable i.e., the ratio of youth unemployment from the previous year. t represents the time, i is the country index, and ϵ is the standard error term.

Table 1. The Effect of Total Early-Stage Entrepreneurial Activity (TEA) on Women Unemployment Rate with Robust Standard Errors

The effect of TEA on Women Unemployment	
L. TEA	-0.0359
	-0.0695
L. LOG (GNIC)	-13.2470***

	-4.4456
L. GCI	0.5752
	-1.8129
L. WOMEN UNEMPLOYMENT	0.5340***
	-0.1202
Constant	134.7043***
	-42.0069
Observations	110
Number of id	27
R-squared	0.5676

Source: Authors' calculations *, **, *** refer to statistical significance at the 10, 5, and 1% level, respectively. The number in parentheses represents the standard error of the representative coefficient.

In the panel data, the lag of the dependent variables is used. R-squared is 0.5676. TEA has a negative coefficient which shows that it may reduce the unemployment rate in women; however, the p-value of TEA is statistically insignificant. According to the estimated results entrepreneurial companies that are at an early stage do not have influence in the reduction of women unemployment.

H2. The higher the EBO rate, the lower the rate of women unemployment

While previously a descriptive analysis was done for the self-employment among women, and the influence of TEA on the women unemployment rate, the following hypothesis investigates the influence of established business ownerships in lowering the unemployment rate in women. For this hypothesis was used the following equation:

$$WUN_t = \beta_0 + \beta_1 EBO_{i,t-1} + \beta_2 GCI_{i,t-1} + \beta_3 \log(GNIC_{i,t-1}) + \beta_4 WUN_{i,t-1} + \epsilon_{it}$$

In this hypothesis, WU is the dependent variable and represents the women unemployment rate, EBO is the dependent variable that represents that established business ownerships i.e., entrepreneurial companies that have been functioning for more than 42 months. GCI is the growth competitiveness index, and log (GNIC) is the log of growth national income. WU_{t-1} is the lagged dependent variable, i.e. the ratio of youth unemployment from the previous year, in order to avoid serial correlation in the equation. t represents the time, i is the country index, β is the coefficient for the independent variables and ϵ is the standard error term.

Table 2. The effect of established business ownerships (EBO) on women unemployment rate with robust standard errors

The effect of EBO on women unemployment	
L. EBO	-0.1843
	-0.1143
L. LOG (GNIC)	-14.0288***

	-4.4565
L. GCI	0.433
	-1.896
L. WOMEN UNEMPLOYMENT	0.5117***
	-0.1318
Constant	144.1434***
	-42.3302
Observations	110
Number of id	27
R-squared	0.5966

Source: Authors' calculations *, **, *** refer to statistical significance at the 10, 5, and 1% level, respectively. The number in the parentheses represents the robust standard errors of the representative coefficients.

This hypothesis investigates the long-term effect of entrepreneurship on the women's unemployment rate. From the given results we can conclude that H2 is not supported empirically since EBO is statistically insignificant, which means that new entrepreneurial companies do not have an effect in decreasing the unemployment rate in women.

H3. The higher the rate of TEA, the lower the rate of men unemployment

While the previous hypothesis investigated the influence of entrepreneurship in women's unemployment, with this hypothesis, the influence of TEA in the unemployment rate in men will be tested. For this hypothesis was used the following equation:

$$MUN_t = \beta_0 + \beta_1 TEA_{i,t-1} + \beta_2 GCI_{i,t-1} + \beta_3 \log(GNIC_{i,t-1}) + \beta_4 MUN_{i,t-1} + \epsilon_{it}$$

In this hypothesis, the dependent variable is MU which shows the unemployment in men.

The dependent variables are TEA, log of GNIC and GCI, which represent the total early-stage entrepreneurship, the gross national income per capita and growth competitiveness index respectively. MU_{t-1} is the lagged dependent variable i.e., the ratio of youth unemployment from the previous year. t represents the time, i is the country index, β is the coefficient of the independent variables and ϵ is the standard error term.

Table 3. The Effect of Total Early-Stage of Entrepreneurial Activity (TEA) on Men Unemployment Rate with Robust Standard Errors

The effect of TEA on Men Unemployment	
L. TEA	-0.1579
	-0.0988
L. LOG (GNIC)	-13.0070**
	-5.3479
L. GCI	-1.6008
	-2.4307
L. MEN UNEMPLOYMENT	0.4160***

	-0.1431
Constant	143.1284**
	-51.7162
Observations	110
Number of id	27
R-squared	0.5112

Source: Authors' calculations *, **, *** refer to statistical significance at the 10, 5, and 1% level, respectively. The number in the parentheses represents the robust standard errors of the representative coefficients.

In this panel data R-squared = 0.5112, meaning that 51.12% of the variables are explained in this model. The estimated results show that TEA has no statistical significance. GCI also has no statistical significance, however, GNIC is statistically significant at 1% with a negative coefficient of -13.007, meaning that gross national income per capita is an influential factor in the decrease of unemployment in men. According to the estimated results, total early-stage entrepreneurial activities do not influence lowering the unemployment in men. From the results, we can conclude that the test hypothesis (H3) is statistically rejected.

H4. The higher the rate of EBO, the lower the unemployment rate in men

This hypothesis is analyzed in a similar way to the previous hypothesis. However, with this hypothesis, the influence of established business ownerships on men's unemployment rate will be investigated. For this hypothesis, we use the following equation,

$$MUN_t = \beta_0 + \beta_1 EBO_{i,t-1} + \beta_2 GCI_{i,t-1} + \beta_3 \log(GNIC_{i,t-1}) + \beta_1 MUN_{i,t-1} + \mathcal{E}_{it}$$

The dependent variable is MUN which represents the men's unemployment rate and EBO is the dependent variable that represents the entrepreneurial companies that have been functioning for more than 42 months. The other variables are like the previous hypothesis where the log of GNIC represents the log of gross national income and GCI represents the gross competitiveness index. MUN_{t-1} is the lagged dependent variable i.e., the ratio of men's unemployment from the previous year, to avoid serial correlation in the equation. t represents the time, i is the country index, β is the coefficient of the independent variables and \mathcal{E} is the standard error term.

Table 4. The Effect of Established Business Ownerships (EBO) on Men Unemployment Rate with Robust Standard Errors

The effect of EBO on Men Unemployment	
L. EBO	-0.2611*
	(-0.1461)
L. LOG (GNIC)	-14.4382**
	(-5.7841)
L. GCI	-2.3326
	(-2.6282)

L. MEN UNEMPLOYMENT	0.3791**
	(-0.1434)
Constant	160.9555**
	(-58.0062)
Observations	110
Number of id	27
R-squared	0.5263

Source: Authors' calculations *, **, *** refer to statistical significance at the 10, 5, and 1% level, respectively. The number in the parentheses represents the robust standard errors of the representative coefficients.

According to the results $R\text{-squared} = 0.5263$, meaning that 52.63% of the variables are explained in this model. The estimated results present that EBO is statistically significant at 10%, meaning that for a 10% increase of entrepreneurship the unemployment in men is decreased by 0.2611. The coefficient of GNIC is also statistically significant at 5%, while GCI has no statistical significance, however, the magnitude of the coefficient is in the expected direction. The estimated results indicate that established business ownerships influence lowering the unemployment of men through starts up and through unemployment.

5. Discussion and Conclusion

The main purpose of this paper was to investigate the influence of entrepreneurship on men and women's unemployment rate in transition countries and the MENA region in the period 2008-2016. Studies prove that even though the participation of women in the labor market has been increasing quickly in the last 50 years, their participation in the labor market is still lower than men. There are still gender stereotypes that define the woman only as a mother and a housewife. Low self-confidence, lack of training and education, lack of financial support, and difficulties in work-life balance have influenced the low participation and women in entrepreneurship.

From the first and second hypotheses in this paper, we can conclude that entrepreneurship is not so successful among women. Through this investigation, we can see the low participation of women in entrepreneurship in transition countries and the MENA region. Even though the data show that entrepreneurship does not have a significant influence on the decrease of women's unemployment, this should not mean that entrepreneurship should be discouraged among women. On the contrary, the awareness of the benefits of entrepreneurship should be increased among women and the decrease of the undeclared work among women. From the third and fourth hypotheses, we can conclude that entrepreneurship unlike in the women labour market, which did not have an influence both in the short and long term, in men labour market entrepreneurship has a positive influence on the long term. Even though, data present that entrepreneurship at an early stage does not influence decreasing unemployment in men, that does not mean that entrepreneurship should not be encouraged among men, on the contrary men should be encouraged to develop their entrepreneurial ideas and activities and develop it to an official business. According to the obtained data, entrepreneurship may be a solution for men who are unemployed or for those that want to change their job. However, previous studies from the literature review show that the number of men and women entrepreneurs differs in different sectors.

To increase the participation of women in entrepreneurship, countries should focus on strategies for supporting women entrepreneurship like building awareness among women for the benefits of being an entrepreneur, improve the network of financial institutions with potential women entrepreneurs, and ensuring system support for the development of entrepreneurship by strengthening the participation of women in defining policies.

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