




Quarterly Journal of Quantitative Economics

Journal Homepage:
www.jqe.scu.ac.ir
Print ISSN: 2008-5850
Online ISSN: 2717-4271



The Effect of Corruption on Female Labor Force Participation Rates: Simultaneous Equations System Approach

Siamak ShokouhiFard *, Roya Aleemran **,  Nader Mehrgan ***, Farzad Rahimzadeh ****

* PhD in Economics, Department of Economics, Faculty of Management, Economics and Accounting, Tabriz Branch, Islamic Azad University, Tabriz, Iran.

Email: siyamak.shokohifard@gmail.com

** Associate Professor, Department of Economics, Faculty of Management, Economics and Accounting, Tabriz Branch, Islamic Azad University, Tabriz, Iran. (Corresponding Author)

Email: alemran@iaut.ac.ir

 [0000-0001-9796-5340](https://orcid.org/0000-0001-9796-5340)

Postal address: Iran, Tabriz, East Side of Pasharan Highway, Islamic Azad University Complex, Faculty of Management, Economics and Accounting, Department of Economics.

*** Professor of Economics, University of Bu Ali Sina, Hamedan, Iran.

Email: mehreganader@buas.ac.ir

**** Assistant Professor, Department of Economic and Accounting, Faculty of Literature and Humanities, University of Guilan, Rasht, Iran.

Email: f.rahimzade@guilan.ac.ir

ARTICLE HISTORY

Received: 8 March 2020

Revision: 9 January 2021

Acceptance: 16 December 2020

JEL

CLASSIFICATION

D73, J21, C21

KEYWORDS

Female Labor Force
Participation Rate,
Corruption,
Simultaneous Equations
Model, Iran

FURTHER INFORMATION:

The present article is taken from the doctoral dissertation of Siamak Shokouhifard in the field of Economics with Supervisor of Roya Aleemran and Nader Mehrgan

and the advice of Farzad Rahimzadeh at Tabriz Branch of Islamic Azad University in Iran.

ACKNOWLEDGMENTS: All individuals and institutions that assisted the authors in conducting this research are acknowledged.

CONFLICT OF INTEREST: The authors declare no conflict of interest.

FUNDING: The authors have not received any financial support for the research, authorship and publication of this article.

How to Cite:

ShokouhiFard, Siamak., Aleemran, Roya., Mehrgan, Nader & Rahimzadeh, Farzad. (2022). The Effect of Corruption on Female Labor Force Participation Rates: Simultaneous Equations System Approach. *Quarterly Journal of Quantitative Economics(JQE)*, 19(2), 151-185.

 [10.22055/JQE.2020.32884.2228](https://doi.org/10.22055/JQE.2020.32884.2228)



© 2022 Shahid Chamran University of Ahvaz, Ahvaz, Iran. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0 license) (<http://creativecommons.org/licenses/by-nc/4.0/>)

EXTENDED ABSTRACT

INTRODUCTION

Among labor market indicators, economic participation rates are considered to be one of the key indicators of labor market supply. The desire to participate in economic activities is, on the one hand, driven by the economic needs of the household and, on the other hand, it provides the demand for firms to employ human forces. Whenever each of these factors in the economy is slowed or reacts to changes in the labor market, an important indicator such as the labor force participation rate is likely to decline. In reviewing the labor market situation of countries it can be stated that the higher the labor force participation rate, the higher level of social welfare. Alongside men, women can also participate in economic activities. Female labor force participation is important for strengthening economic and social development of a country because it will increase the efficiency level in the economy and Will bring about economic and social justice. In general, high female labor force participation rate shows two things: 1) women's progress in economic and social situations. 2) Empowering women. These cases increase justice and the use of human potential in society which can help build higher capacity for economic growth and reduce poverty. It is worth noting

that women's employment and economic participation require specific policies and measures and paying attention to their role in economic development should be given more than ever attention. In the scientific literature about labor market, several factors have been mentioned that affect the female labor force participation rate, including: 1) Individual characteristics such as age, gender, level of education, working income. 2) Family characteristics such as other family members' income, the level of education, marital status, employment and family size. In addition, one of the important factors that can influence the female labor force participation rate, is corruption. Corruption by encouraging activities in the shadow economy, Reduces private sector productivity and increases the tax burden by changing the saving-consumption swap. This reduces the supply of labor. Also corruption has a direct and negative impact on labor force participation. It also has an indirect and opposite effect on labor force participation. Considering the low female labor force participation rate and the high rate of corruption in Iran, it can be stated that the Iranian labor market requires policies and strategies in order to control corruption as well as increasing the female labor force participation rate in different sectors of the economy.

METHODOLOGY

In this study, the impact of corruption on the female labor force participation rate in the labor market of Iran and selected member countries of the Organization of Islamic Cooperation in the region during the period 2005-2018 was studied using simultaneous equations model. In this study, the sample includes Iran and 12 selected member countries of the Organization of Islamic Cooperation (which mainly includes countries in the region). These countries are: Pakistan, the Republic of Azerbaijan, Turkey, Egypt, Saudi Arabia, Bahrain, the United Arab Emirates, Oman, Jordan, Qatar, Morocco and Iraq. Data regarding these countries is extracted from the database of the World Bank and Transparency International.

FINDINGS

The results show that, first, there is a two-way causal relationship between the female labor force participation rate and the corruption variable. Second, high levels of corruption and unemployment have a negative effect on the female labor force participation rate in Iran and selected countries, and this effect is statistically significant at a significant level of 5%. The variables of urbanization ratio and economic growth also had a positive effect on female labor force participation but the effect of urbanization ratio is not statistically

significant at a significance level of 5%. The impact of female's fertility rate on female labor force participation in Iran and selected countries was negative and this effect was statistically significant at the significant level of 5%. Also the impact of education on female labor force participation in Iran and selected countries was positive and at the significant level of 5%, it is statistically significant.

CONCLUSION

In general, the results of the model estimate show that having a negative impact on economic growth and diverting government spending to unproductive ends, corruption has reduced the female labor force participation in Iran and in selected countries. The high unemployment rate also limits the ability of individuals to supply labor and participate in economic activities. Also, high female's fertility rate in the studied countries is considered as an obstacle to increase the female labor force participation.

Reference

- Agerberg, M. (2014). Perspectives on Gender and Corruption. Gender differences in regard to corruption in Europe from an individual and institutional perspective. Department of Political Science, University of Gothenburg, *Working Paper*, Series 2014(14).
- Akçay, S. (2006). Corruption and human development. *Cato Journal*, 26(1), 29- 46.
- Aligholi, M. (2016). The Relationship Between Women's Participation in the Workforce and Economic Development in Islamic Countries. *Women's Studies Sociological and Psychological*, 14(2), 63-86. https://jwsps.alzahra.ac.ir/article_2488.html (in Persian)
- Amarandei, C. M. (2013). Corruption and foreign direct investment: evidence from central and eastern European states. *Journal of CES working Paper*, 5(3), 311-322.
- Becker, G.S. (1975). Human Capital, University of Chicago Press, Chicago, IL.
- Breen, M., Gillanders, R., McNulty, G., & Suzuki, A. (2015). Gender and Corruption in business. Helsinki Center of Economic Research, Discussion Papers, 391.
- Brenke, K. (2014). Growing importance of women in the German labor market. *DIW Economic Bulletin*, 5(5), 51-61.
- Bustelo, M., Flabbi, L., Piras, C., & Tejada, M. (2019). Female labor force participation, labor market dynamic, and growth. *IDB Working Paper Series*, No. 966. Inter-American Development Bank.

- Che, G. N., & Sundjo, F. (2018). Determinants of Female Labour Force Participation in Cameroon. *International Journal of Applied Economics, Finance and Accounting*, 3(2), 88-103.
- Cooray, A., & Dzhumashev, R. (2018). The effect of corruption on labour market outcomes. *Economic Modelling*, 74, 207-218.
- Debski, M., Jetter, S., & Mosle, D. (2018). Gender and corruption: The neglected role of culture. *European Journal of Political Economy*, 55(c), 526-537.
- Dollar, D., Fisman, R. & Gatti, R. (2001). Are Woman Really the “Fairer” Sex? Corruption and Women in Government. *Journal of Economic Behavior and Organization*, 26(4), 423- 429.
- Ehrenberg, R. G., & Smith, R.S. (2012). *Modern Labor Economics: Theory and Public Policy*. Published by, Prentice Hall (11th Ed).
- Faridi, M. Z., Chaudhry, I. S., & Anwar, M. (2009). The socio-economic and demographic determinants of women work participation in Pakistan: evidence from Bahawalpur District.
- Fatima, A., & Sultana, H. (2009). Tracing out the U-shape relationship between female labor force participation rate and economic development for Pakistan. *International Journal of Social Economics*, 36(1/2), 182-189.
- Gupta, S., Davoodi, H., & Alonso-Terme, R. (1998). Does Corruption Affect Income Inequality and Poverty?, *IMF Working Paper* © 1998 *International Monetary Fund*, International Monetary Fund Fiscal Affairs Department, <https://www.researchgate.net/publication/24054187>.
- Gupta, S., Davoodi, H., & Tiongson, E. (2000). Corruption and the Provision of Health Care and Education Services, *International Monetary Fund Working Paper* 00/116.
- Gupta, S., Davoodi, H., & Tiongson, E. R. (2001). Corruption and the provision of health-care and education service, In: A. K. Jain, Hrsg, *The Political Economy of Corruption*, London: Routledge, 6, 11-141.
- Heidari, H., Alinazhad, R., Mohseni Zonozi, S., & Jahangirzadeh, J. (2014). An Investigation of Corruption and Economic Growth Nexus: Some Evidence from D-8 Countries. *Economics Research*, 14(55), 157-183. https://joer.atu.ac.ir/article_926.html (in Perison) <https://data.worldbank.org/>.
- International Labour Office. (2016). *Women at Work: Trends 2016*, Geneva: ILO.

- Jafari Samimi , A., Monfared, M., & Hoseni, M. (2013). Women`s Participation Rate in Labor Market and Corruption. *Middle-East Journal of Scientific Research*, 14(6), 867-872.
- Jha, K., & Sarangi, S. (2018). Women and corruption: What positions must they hold to make a difference?. *Journal of Economic Behavior & Organization*, 151(c), 219-233.
- Karimi Petanlar, S., Babazadeh, M., & Hamidi, N. (2012). The Effect of Fiscal Corruption on the Composition of Government Expenditures: A Case Study of Selected Developing Countries. *Economics Research*, 12(46), 141-156. https://joer.atu.ac.ir/article_945.html (in Perison)
- Karimi, S., Gilak Hakim Abadi, M., & Nabati, Z. (2018). Financial Corruption and Women Employment in Selected Countries. *Women Studies*, 8(22), 65-81. https://womenstudy.ihcs.ac.ir/article_2996.html (in Perison)
- Khadim, Z., & Akram, W. (2013). Female labour force participation in the formal sector: An empirical analysis from PSLM (2007-2008). *Middle East Journal of Scientific Research*, 14(11), 1480- 1488.
- Khodapanah (2015). Estimate the index of Corruption in Iran Using Fuzzy Logic and Investigation of its Relationship with the Underground Economy using Hsiao causality test. *Quarterly Journal of Quantitative Economics (JQE)*, 12(3), 1-25. https://jqe.scu.ac.ir/article_11891.html (in Perison)
- Klasen, S., Pieters, J., Silva, M.S., & Ngoc Tu, L. T. (2019). What Drives Female Labor Force Participation? Comparable Micro-Level Evidence from Eight Developing and Emerging Economies. IZA Discussion Paper. No. 12067.
- Komae, R., & Afshari, Z. (2017). The Determinants of Female Labor Force Participation in Selected Countries (A Panel Data Analysis). *Women's Studies Sociological and Psychological*, 15(1), 49-77. https://jwsps.alzahra.ac.ir/article_2846.html (in Perison)
- Lim, K. Y. (2019). Modelling the dynamics of corruption and unemployment with heterogeneous labour. *Economic Modelling*, 79(c), 98-117.
- Lincove, J. A. (2008). Growth, Girls' Education, and Female Labor: A Longitudinal Analysis. *The Journal of Developing Areas*, 41(2), 45-68.
- Mauro, P. (1998). Corruption and the composition of government expenditure, *Journal of Public Economics*, 69(2), 263-279.



- MilaElmi, Z., & RoustaeiShalman, KH. (2014). Study of Effective Factors on Female Participation Rate in the Eight Developing Countries Group. *Skill Training*, 2(6) :87-102. <http://faslnameh.irantvto.ir/article-۱۹۵-۱-fa.html> (in Perison)
- Mincer, J. (1962). Labor Force Participation of Married Women: A Study of Labor Supply. Aspects of Labor Economics: A Conference. Cambridge, Mass: National Bureau of Economic Research.
- Mishalova, J., & Melnykovshka, I. (2009). Gender, Corruption and Sustainable Growth in Transition Countries. *Journal of Applied Economic Science*, 4(3), 1-26.
- Moshiri, S., Tae, H., & Pashazadeh, H. (2015). Labour Force Participation in Iran the Role of Education and Gender. *Quarterly Journal of Economic Research*, 15(2) :49-72. <http://ecor.modares.ac.ir/article-18-11700-fa.html> (in Perison)
- Mujahid, N. (2014). Determinants of female labour force participation: A micro analysis of Pakistan. *International Journal of Economics and Empirical Research*, 2(95), 211-220.
- Psacharopoulos, G., & Tzannatos, Z. (1989) Female Labor Force Participation: An International Perspective. *World Bank Research Observer*, 4(2), 187-201.
- Rivas, M. F. (2013). An Experiment on Corruption and Gender. *Bulletin of Economic Research*, 65(1), 10-42.
- Schultz, T.W. (1961). Investment in human capital, Published by, American Economic Association.
- Seifzadeh, A. (2016). Investigating Citizens' Perception of Corruption and Demographic Variables Affecting It (Case Study: Birjand). *Khorasan Socio-Cultural Studies*, 10(4), 93-114. https://www.farhangekhorasan.ir/article_40831.html (in Perison)
- Serrano, J., Gasparini, L., Marchionni, M., & Glüzmann, P. (2019). Economic cycle and deceleration of female labor force participation in Latin America. *Journal for Labour Market Research*, 53(13), 1- 21.
- Shaghghi Shahri, V., Rasooli, S., & Tayari, M. (2016). Assessing the deterrent effects of financial corruption on attracting foreign direct investment in the field of Islamic Conference member countries. *Strategic and macro policies*, 4(14), 67-90. https://www.jmsp.ir/article_23958.html (in Perison)
- Sinha, J. N. (1967). Dynamics of female participation in economic activity in a developing economy. In World Population Conference, Belgrade.

- Transparency International. (2018). Corruption Perceptions Index, <http://www.transparency.org/cpi2014/results>.
- Tsani, S., Paroussos, L., Fragiadakis, C., Charalambidis, I., & Capros, P. (2013). Female labour force participation and economic growth in the South Mediterranean countries. *Economics Letters*, 120(2), 323-328.
- Varol, F. (2017). The Determinants of Labor Force Participation of Women In Turkey: A Binary Logit Analysis. *Journal of History Culture and Art Research*, 6(2), 92-108.
- World Bank. (2010). Labor force participation rate, total, <https://data.worldbank.org/>.
- World Bank. (2019). Labor force participation rate, total, <https://data.worldbank.org/>.
- World Bank. (2020). Labor force participation rate, total, <https://data.worldbank.org/>.
- Zafaranchi, L. (2020). Testing the "Unitary Model" of household labor supply. *Quarterly Journal of Quantitative Economics (JQE)*, 17(4), 61-87. https://jqe.scu.ac.ir/article_14859.html (in Perison)