

Women's Economic Participation and Its Impact on the Economy of Pakistan

By

Muhammad Kamran Arshad

Department: Government & Public Policy National Defence University Islamabad Pakistan

Email: kamranarshad666@gmail.com

Dr. Sahar Latif Rana

UE Business School, Division of Management and Administrative Science, University of Education, Lahore

Email: sahar.latif@ue.edu.pk

Dr. Huma Fatima

UE Business School, Division of Management and Administrative Sciences, University of Education, Lahore

Email: huma.fatima@ue.edu.pk

Dr. Unbreen Arif

UE Businesses School, Division of Management and Administrative Science, University of Education, Lahore

Email: Unbreen.arif@ue.edu.pk

Dr. Abida Hafeez

Department of Economics, Division of Management and Administrative Science, University of Education, Lahore

Email: abida.hafeez@ue.edu.pk

Abstract

Women's role in a nation's economic development cannot be neglected. Literature shows the importance of women's role in the country's development. But due to structural changes in the economy from agriculture to industry, the participation of the women labour force shows a decreasing trend in Pakistan's economic development. The aim of present study is to check how much impact women's labour force participation has on the economy of Pakistan. To find out how much impact women's participation has on Pakistan's economy, time series data will be used from 1993 to 2022, and three models will be developed to determine the relationship between these variables. The standard Least Square regression method used to analyze the data. Results show that women's participation in different sectors which is our independent variable, has a significant and positive impact on dependent variable Economy (Gross Domestic Product, Manufacturing Growth Rate, Agriculture Growth Rate, and Services Growth Rate). From this, it is clear that women's participation positively impacts on economic growth. But, there are many factors which negatively affect the participation of the women labour force, like lack of education & training, religion, culture and norms, fertility rate and unemployment. All these factors have a direct relationship with Women's economic participation and an indirect relationship with economic growth and become the cause of reducing women's labour force participation. So the Government should take concrete steps through legislation to increase women's economic participation because they play an essential role in the country's economic growth.

Keywords: Economy, Gross Domestic Product, Fertility Rate, Culture Tradition & Norms, Education, Unemployment

Introduction

Women are the valuable assets of every society, and their role in the development of society cannot be neglected. A nation cannot get glory without the active role of their women in every field of life. Women's labour force participation plays a significant role in the economic prosperity of a country. More involvement in the women's labour force brings growth in the socio-economic condition of women and reduces their poverty graph. When more people work, the output will also increase, which is the cause of the country's economic growth (Kumar et al., 2022). Joblessness is the most significant loss of the national economy (Argy, 2005). There is a positive impact on a country's economic growth if both men and women participate in economic activities. Higher women's labour force participation also increases the productivity and the living standard of the women and their families. Better jobs become a source of more income for women, and as a result, the life of her family and society improve. Higher women's labour force participation also becomes the cause of the increasing literacy rate. When the graph of the women's labour force participation is high, the Government spends more on the education sector to improve the literacy rate. Countries with low women's labour force participation spend less for girls' education. Working women can make better decisions about their children's health and education as compared to non-working women. This is also a positive externality (SPO-World Bank 2009b). There is a direct and positive relationship between the country's economic growth and women's labour force participation; in different regions of the world, about 27 per cent of the GDP losses due to the gender gap in the labour market (Moulabuksh et al., 2022). According to Aguirre, if the rate of women's employment is similar to men, then a 34 per cent rise in GDP in Egypt, 12 per cent in UAE, 9 per cent in Japan and 5 per cent in the United States. In developing countries of the world, participation of women in the unpaid and paid sector is an essential factor in poverty reduction (Malik et al., 2023). If the rate of women's participation in Japan becomes similar to G7 countries, then there is a 4 per cent increase in GDP (IMF 2022). Unfortunately, the global rate of women's labour force participation is meagre. There is a vast gender gap in the world, and up to 2022, the gender gap between men and women in employment has reached up to 24.8 per cent. This gender gap is 9.3 per cent in Belgium, 18 per cent in the United States and 40 per cent in South Korea. The Global average rate of women's labour force participation is 48 per cent. The most significant participation of women labour force participation is 64 percent in Eastern Asia, and the minimum participation is 18 per cent in North Africa (Millennium Goals Report 2022).

In Pakistan, about half of the country's population comprises women who play an essential role in the country's economic development. Women's labour force participation is low in Pakistan as compared to other countries of the world. However, the annual growth rate of women's participation increased from 15.9 per cent in 2013-14 to 19 percent in 2015-16 (Khaskheli et al., 2023). Like other developing countries of the world, in our country, Pakistan, both males and females over ten years of age can actively participate in economic activities, which will become the cause of reducing poverty and increasing the living standard of society. But most of the population is not ready to participate in economic activities (Javed et al., 2022). The role of Women's labour force participation cannot be neglected in a country's poverty reduction and economic development (Khalid et al., 2022).

In Pakistan, the rate of women's participation in the formal sector is just 26 per cent, which is very low as compared to other countries of this region. In Pakistan, Women essentially

participate in agriculture without any remuneration. The work of women without any payment is also a problem. Secondly, the cost of women not participating in the modern sector is high and is increasing day by day. The population of Pakistan is increasing day by day. If it grows at the same rate, then there is no doubt that in near future, Pakistan will be included in the list of the top five world-populous countries, and this rate is high among women. So it has become necessary for women to participate in the modern sector for their family's survival. Some factors become a hurdle in women's participation in the contemporary economy sector, like culture, norms, tradition, and lack of education and training of women, especially the family background. In some areas of the country, these cultures, standards and rules are strongly followed, and the literacy rate is also low among women. That's why women's participation is meagre compared to other areas where these values are not followed so strictly. So, in the end, we can say that ordinary women's non participation in the modern sector is a problem.

Literature Review

Many factors impact women's economic participation, like the differentials between men and women, marriage, divorce, fertility rate and family earnings (Field & Vyborny, 2022). Women's labour force participation in developed and developing countries has become essential for economic development (Shaheen et al., 2022). Women's involvement not only becomes the cause of increasing the aggregate economic efficiency but also the cause of increasing the country's overall development (Oluwatosin, 2022). There are some examples of different countries like Taiwan, which from 1969 to 1999, rose 30 per cent in women's economic participation, have a significant impact on Taiwan's economic development. Similarly, Turkey has a strong relationship between women's participation, education and economic growth (Zaman et al., 2022). An increase in women's education not only increases their productivity at the factory but also on farms (Baig et al., 2023).

There is a direct and positive relationship between women's economic participation and economic development, which is the cause of increasing the GDP. The rise in GDP in Egypt is 34 per cent, in the United Arab Emirates, 12 per cent, and 10 per cent in Africa. In Japan, it will increase by 9 percent due to the participation of women in the labour market. But unfortunately, compared to the 22 per cent male population, about half of the world's female population is unutilized. In some countries like Latin America and the Caribbean, where there is a rise in the number of paid women labour force plays a significant role in poverty reduction (World Development Report on Jobs 2013).

Ali et al., (2022) determine the relationship between women's labour force participation and education in Sri Lanka, Korea, Indonesia, Thailand and the Philippines. He finds a U-shaped relationship between education and women's labour force participation. In these countries, primary education hinders women's labour force participation. In contrast, higher education will become the cause of increasing the involvement of women in the labour market (Amin et al., 2022).

Isran (2022) determines the causes of low women's labour force participation in Pakistan. According to him, employment is beneficial to increase household income. But some factors become hurdle in women's labour force participation in Pakistan, like culture, tradition, norms, religion and lower education rate (ul ain Rana et al., 2022).

According to wydick and Kevane (2001), women's labour force participation is increasing in the informal sector of the economy instead of the formal sector because it has become difficult for women to enter in the legal industry, and the absorptive capacity of the

formal sector is also limited. Norms and traditions also become a hurdle in the participation of women in the formal sector.

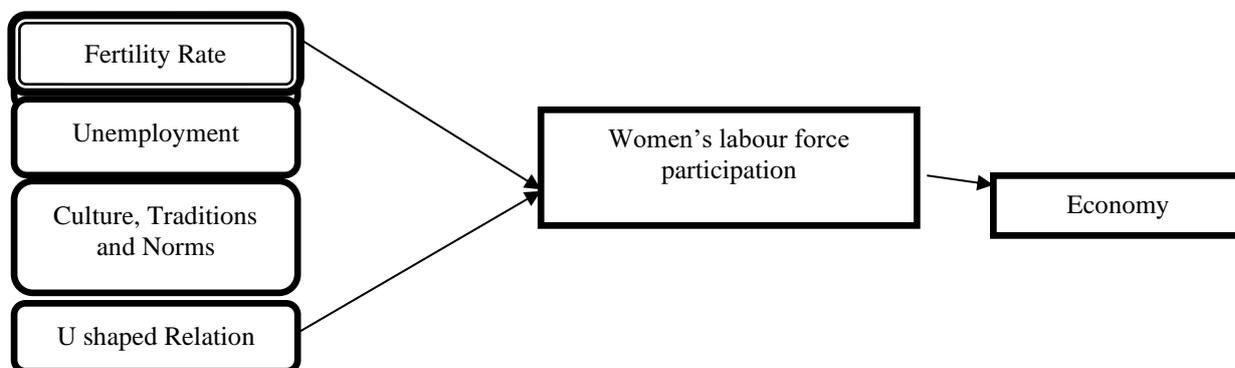
There is a high rate of women's participation in Japan due to the low fertility rate. The low fertility rate in Japan is the lack of childcare centers in Japan. Mothers also have to pay high costs to look after their children, so Japan has a low fertility rate and an increased participation rate in women (Usui and Palley 2008).

Many studies have examined the relationship between Women's labour force participation and fertility rate. There are two approaches towards this relationship between women's labour force participation and fertility rate. According to one method, there is a negative relationship between women's labour force participation and fertility. Because it becomes difficult for a woman to participate in the labour market and manage her children simultaneously (Rindfuss 1996, Ferrero and Rica 2003), another approach shows a positive relationship between women's labour force participation and fertility rate. Women who have high literacy rates and participate in the labour market have high fertility because they can earn enough and she can spend this income on their children (Stycos and Weller 1967, Narayan and Smyth 2006).

Data Collection Source

This study's data of 29 years will be used from 1993 to 2022. The data collection source is the Federal Bureau Of statistics, the Planning commission of Pakistan's webpage, the labour force survey of the previous years and the report Economic Survey of Pakistan from 2015 to 2022.

Variables:



Methodology and Specification

Regression analysis is a vital econometrics tool to estimate the relationship between two dependent and independent variables. There are two variables one is independent, and the other is dependent. The regression technique aims to find the relationship between the dependent and independent variables. Through regression analysis, it is also estimated to change in the dependent variable is due to the independent variables. The primary purpose of the regression analysis is to forecast, predict and understand the relationship between dependent and independent variables. In multiple regression analysis, two or more independent variables are used, which is the advanced form of simple regression. Here numerous regression models will be used for estimation.

The general equation of multiple regressions is given below.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k$$

Where $\beta_0, \beta_1, \beta_k$ are parameters while X_1, X_2, X_k are the independent variable.

The ordinary Least Square Method will investigate the relationship between different variables. OLS has been applied via the statistical package SPSS (Statistical Package for Social Sciences). The results we obtain using the SPSS are more reliable than any other software in the case of time series data.

By using the SPSS, the results obtain consist of three sections. From these sections, one area tells us about the t-values and p-values. Using these values makes it easy to determine the relationship between dependent and independent variables. Other regions tell us about other matters; by using these values, we can check the overall significance of the model.

To examine the impact of women's economic participation on the economy of Pakistan, three models will be developed covering the time series data from 1993 to 2022.

The general form of our model is as follows.

$$\text{Economy} = \beta_0 + \beta_1 \text{Agri} + \beta_2 \text{Mini} + \beta_3 \text{Manuf} + \beta_4 \text{Electri} + \beta_5 \text{Constru} + \beta_6 \text{Trad} + \beta_7 \text{Transp} + \beta_8 \text{finan} +$$

In this equation, the economy is used as the dependent variable. For estimation, four indicators of the economy will be used instead of the whole economy's GDP, Agriculture growth rate, Manufacturing growth rate and services growth rate. While on the right-hand side $\beta_0, \beta_1, \beta_3, \beta_8$ are the parameters and Agriculture, Mining, Manufacturing, and others are the indicators of independent variable women's economic participation. Limited indicators of women's economic participation will be used in our models because it is impossible to take all the hands of independent variables into one model.

Here three models will be developed. In all these models, the variables on the left are dependent variables, but all the variables on the right are independent.

Models #1:

$$\text{Manufacturing Growth Rate} = \beta_0 + \beta_1 \text{Manuf} + \beta_2 \text{Electri} + \beta_3 \text{Constru} + \beta_4 \text{trad} + \beta_5 \text{Mini. equ (1)}$$

Manufacturing growth rate = (Manufacturing), (Electricity, Gas and water), (Construction), (Wholesale retail and trade), (Mining and Quarrying)

In this model, the Manufacturing growth rate is our dependent variable. At the same time, women's participation in Manufacturing, Electricity, Gas and Water, Construction, wholesale retail and trade, mining and quarrying are used as independent variables.

Model# 2:

$$\text{Services growth rate} = \beta_0 + \beta_1 \text{Agri} + \beta_2 \text{Manuf} + \beta_3 \text{Mini} + \beta_4 \text{Finan} + \beta_5 \text{Constr} + \beta_6 \text{trad. equ (2)}$$

Services growth rate = (Agriculture Forestry and Fishing), (Manufacturing), (Mining and Quarrying), (Finance Insurance and real estate), (Construction), (Wholesales retail and trade)

The services growth rate is used as the dependent variable in this third model. In contrast, women's participation in Agriculture, Forestry and fishing, Manufacturing, Mining and Quarrying, Finance Insurance and real estate, Construction, wholesale, retail and trade are used as independent variables in this model.

Model # 3:

Agriculture Growth Rate = $\beta_0 + \beta_1 \text{ Agri} + \beta_2 \text{ Finan} + \beta_3 \text{ Constr} + \beta_4 \text{ trad} + \beta_5 \text{ transp} + \beta_6 \text{ S\&P services}$. Equ (3)

Agriculture = Agriculture Forestry and Fishing), (Finance Insurance and real estate), (Construction), (Wholesales retail and trade), (transport), (Community, social and personal Services)

In this model, the agriculture growth rate is used as the dependent variable and women's participation in Agriculture, forestry and fishing, Finance insurance and real estate, Construction, Wholesales retail and trade, community social and personal and transport is used as the independent variable.

Interpretations of the results

SPSS will be applied to get results. Two sections of the results will be obtained. The interpretation of these results can be made in the following ways.

P-Value Analysis

P value is used to determine the level of significance. If the p-value of the independent is below .05, it shows that the independent variable is highly significant and rejects the null hypothesis and supports the alternate view. If the p-value is more than .05, the independent variable becomes insignificant.

Durbin Watson Test:

Durbin Watson test is used to measure autocorrelation. The range of the Durbin-Watson test is from 0-4. A positive serial correlation exists if the value of the Durbin-Watson test is less than two. If the test value is two, no serial correlation exists; if the value is above two, a negative serial correlation exists.

T-value:

Like the p-value, the t-value is also used to measure the level of significance of the independent variable. The range of the t-value is 1.28 to 636.62.

F- Statistics:

The t value is used to measure the level of significance of each independent variable. Similarly, F statistics are used to measure the significance level of the whole applied model. If the value of F is above 3, it shows that our model is highly significant.

Results and Discussion

The data collected from the respondents were analyzed using P-value, T-value, and standard F-statistics through the SPSS package. The tables were interpreted in light of the objectives framed. The details of these tables are as follows:

Table: 5.1 *Regression Analysis of Manufacturing Growth Rate*

Regressor	Coefficient	Standard Error	T-Ratio	P-value
Mining	3.153	0.712	4.43	0
Construction	2.332	0.793	2.942	0.007
Manufacturing	0.582	0.139	4.194	0
Trade	2.615	0.768	3.405	0.002
Electricity	5.756	1.34	4.294	0
R-value	0.937	R Square		0.847
F Statistics	144.281	Durbin Watson Statistics		1.633

Table: 5.2: *Regression Analysis of Services Growth Rate*

Regressor	Coefficient	Standard Error	T-Ratio	P-value
Trade	1.223	.334	3.663	.001
Manufacturing	.303	.093	3.256	.004
Finance	.287	.541	2.530	.031
Mining	.086	.307	.279	.783
Construction	-1.759	.546	-3.222	.004
R-value	0.931	R Square		0.812
F Statistics	199.685	Durbin Watson Statistics		1.110

Table: 5.3 *Regression Analysis of Agriculture Growth Rate*

Regressor	Coefficient	Standard Error	T-Ratio	P-value
Agriculture	.173	.059	2.918	.008
Construction	.587	.189	3.102	.005
Finance	-.382	.823	-.464	.647
Trade	1.364	.393	3.469	.002
Social Services	.073	.023	3.111	.005
R-value	0.952	R Square		.8072
F Statistics	126.901	Durbin Watson Statistics		1.365

Conclusion

After processing collected data, results have been obtained from the above three tables and show a significant relationship between women's economic participation and economic growth. But at the same time, there are many factors in Pakistan which become a hurdle in the involvement of women in the labour market. There is no doubt that the participation of women in the agriculture sector becomes the cause of improving economic growth. In the scenario of Pakistan, agriculture is the most critical sector of the economy, but the major problem faced by women is that they work without any remuneration. Similarly, some other factors also become a hurdle in the participation of women in the formal sector of economy, and the impact of these factors is increasing day by day due to ineffective policies of the Government. Here I will give some recommendations to improve women's labour force participation in modern sectors of the economy to increase the country's economic growth.

Policy Recommendations

The following policy will become the cause of increasing women's economic participation.

From the literature, it is clear that there is a direct and positive relationship between education and women's economic participation. As the literacy rate among women increases, their participation rate also increases. So the Government should make such policies which become the cause of improving the literacy rate among women. In our country, there is co-education in higher education institutions, and a significant segment of our society is not ready to educate their female children. Ultimately they cannot get higher education and cannot actively participate in the formal sector of the economy. So like schools and colleges, there should be separate universities for women so that parents can educate their female children without hesitation. So they can get higher education and play a role in economic development.

Vocational and educational institutions should also be established for adult women. In these institutions, different types of technical training are given to adults to enhance their skills. So they can participate in economic activities and earn their livelihood instead of burdening the economy and the whole country. The rate of women's participation is low in that households in which males have high income; a relaxed tax should be imposed on the payment of husbands whose wives do not participate in the labour market, and a subsidy should be given to those households in which both members participate in the labour market. In the remote areas of the country where there is a strong influence of the culture, traditions and norms on the life of people and women cannot move freely. They cannot come out of their home to participate in economic activities.

In these areas, the Government should focus on the cottage industry and give them loans at a low-interest rate to develop it. In this way, women in these areas earn their livelihoods and play a positive role in the country's economic development without coming out of their homes. The daycare Centre should be established for the small kids of working women. For this purpose owner of the firm should be bound to select the daycare Centre, and special tax exemption should be given to the owner who established the daycare Centre for the kids of working women.

References

- Ali, A., Fatima, N., Jalilov, S., Cuddy, S., Ahmad, M., Khaliq, T., Bashir, M., Hassan, A., & Naseer, M. (2022). Profitability analysis and extent of female labour participation in mung bean production in Punjab, Pakistan. Sustainable Development Investment Portfolio (SDIP) project. CSIRO, Australia.
- Amin, A., Ur Rehman, R., Ali, R., & Ntim, C. G. (2022). Does gender diversity on the board reduce agency cost? Evidence from Pakistan. *Gender in Management: An International Journal*, 37(2), 164-181.
- Argy. (2005). An Analysis of Joblessness in Australia. *Economic Papers*(Economic Society of Australia), March, Vol. 24. Issue 1, page 75-96.
- Baig, N., Khan, S., Bashir, I., & Ma, J. (2023). Does China Pakistan Economic Corridor become an avenue to achieve sustainable development goal no. 2 (food security) in Pakistan: Under the condition of COVID-19? *PLoS ONE*, 18(1), e0279520.
- Field, E., & Vyborny, K. (2022). Women's Mobility and Labor Supply: Experimental Evidence from Pakistan. *Asian Development Bank Economics Working Paper Series*(655).

- Javed, M. F., Jadoon, A. K., Malik, A., Sarwar, A., Ahmed, M., & Liaqat, S. (2022). Gender wage disparity and economic prosperity in Pakistan. *Cogent Economics & Finance*, 10(1), 2067021.
- Khalid, R., Raza, M., Sawangchai, A., & Somtawinongsai, C. (2022). The challenging factors affecting women entrepreneurial activities. *Journal of Liberty and International Affairs*, 8(1), 51.
- Khaskheli, M. B., Wang, S., Yan, X., & He, Y. (2023). Innovation of the Social Security, Legal Risks, Sustainable Management Practices and Employee Environmental Awareness in The China–Pakistan Economic Corridor. *Sustainability*, 15(2), 1021.
- Kumar, J., Xi, C., Imran, M., & Kumari, J. (2022). Cross border project in China-Pakistan economic corridor and its influence on women empowerment perspectives. *PLoS ONE*, 17(6), e0269025.
- Malik, R. A., Batool, H., & Afzal, M. (2023). Determinants Of Women Entrepreneurship Mindset In Achieving Sustainable Development: A Case Study Of Lahore, Pakistan. *Journal of Positive School Psychology*, 1665-1688.
- Moulabuksh, M., Zarar, R., & Shah, N. A. (2022). ISSUES OF FEMALE LABOURERS IN PAKISTAN. *Pakistan Journal of International Affairs*, 5(2).
- Oluwatosin, E. A. (2022). The Role of Female Human Capital in Sustainable Economic Development. *J. Glob. Econ. Bus. Financ*, 4, 28-33.
- Shaheen, N., Ahmad, N., & Hussain, S. (2022). Women Entrepreneurship and Empowerment in Pakistan: Gender, Culture, Education and Policy in Broader Perspective. *International Research Journal of Education & Social Sciences*, 1(1), 25-36.
- ul ain Rana, Q., Tarar, M. A., & Sultan, R. S. (2022). Gender Inequality in Pakistan: An Assessment. *Pakistan Social Sciences Review*, 6(2), 221-231.
- Zaman, S., uz Zaman, Q., Zhang, L., Wang, Z., & Jehan, N. (2022). Interaction between agricultural production, female employment, renewable energy, and environmental quality: Policy directions in context of developing economies. *Renewable Energy*, 186, 288-298.