

Determinants of Female Labor Force Participation for Economic Development

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Abstract

The paper sheds a light on the significance of female labor force participation in economic upstream. Policy framework for women upgradation (educationally and economically) lacks in Pakistan leading to worsening of gender disparity. The time series data for Pakistan on employment in different sectors (services, industry and agriculture), contributing family worker rate, unemployment, school enrollment and female representation in national assembly are taken as regressors whereas female labor force participation is an explained variable and ARDL is run to find long run relationship of the time series. The alarming situation is observed as female labor force participation is declining trend in Pakistan. According of Global Gender Gap Report, it is observed that economies with higher HDI have shown less gender disparity on global gender gap index. The economies with poor economies have more gender disparity. The literature informs that women contribution facilitates economic growth and the living standards improves. However, in Pakistan the declining trend of school enrollment, FLFP, employment in agriculture sector evokes a thought of rapid policy development to build infrastructure for facilitating role of women in an economy.

Introduction

Pakistan has high population growth with 115.88 million males and 109.32 million females. Economic development is associated with participatory role of females. Modernization theorists of development explain that development is positively associated with female labor force participation. The progressions in occupational structure of females changes the household income and style of living. Pakistani women are more engaged in subsistence activities and subsistence activities engagement is the highest in low-income countries. Female participation in labor force markets help to reduce the burden of unpaid work and enable to work equally with men and share the economic burden of household (World bank, 2023).

Unfortunately, female labor force participation (FLFP) have alarming statistics in Pakistan. The labor force female was reported 20.16 percent in 2021; this is the lowest in the world. Economies where women are provided with equal opportunities of education and health are far better in HDI and GDP per capita in comparison to economies where women do not play active role in labor force sector. Exemplary, Iceland has the highest female labor force participation (42 percent females are at managerial positions and its HDI is 0.949 however, Pakistan's merely 20 percent female is in workforce, and its HDI is 0.544 percent). According to Agricultural Development Bank survey, the labor force participation lags as only 25 percent of women with a university degree in Pakistan are working (Tanaka, 2016).

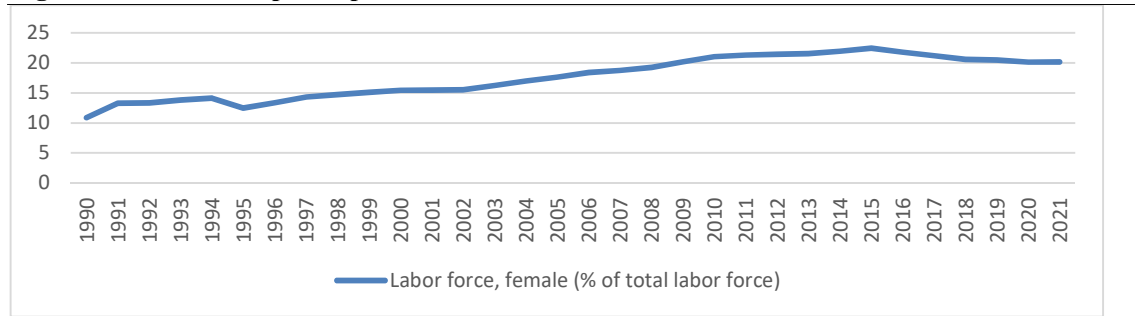
Pakistan is blessed with large labor force and it stands among top 10 largest labor forces in the whole world. However, issues are present with labor force such as skill gaps, in appropriation of trained workers and lack of women contribution. The employment to population ratio differs within different provinces such as in Sindh the female and male dispersion is wide as males are 67.9 percent employed whereas females are only 14.2 percent employed. In Punjab there are 64.4 percent males employed whereas 24 percent females employed. The lowest employment to population ratio is for Baluchistan where 11.3 percent females are employed and 61.6 percent males are employed (Global gender gap report, 2023).

Literature informs that the gender equality can raise Pakistan GDP by 60 percent. There is a huge impact of women employability on the living standards. Pakistan is alarmingly second

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worst country in gender parity. Women are noticed with lower standards not only in economic participation, however education, health and political empowerment indicators on Global Gender Report also show worsening status of Pakistani females. The global gender gap report ranked Pakistan as the second worst country and at current rate; it will take 132 years to reach full parity. Further examining global gender gap the economic participation of women is ranked at 145, health ranking is 143 however educational attainment is 135 whereas political participation is ranked at 85. Besides this, the gender pay gap is the highest in Pakistan with 34 percent and this hampers women to exhibit full potential (Global gender gap report, 2023). The trend of labor force participation shows that it is not above 20 percent however it is on declining trend since 2015. The boost is required in women employability to boost the economic development (World bank, 2023).

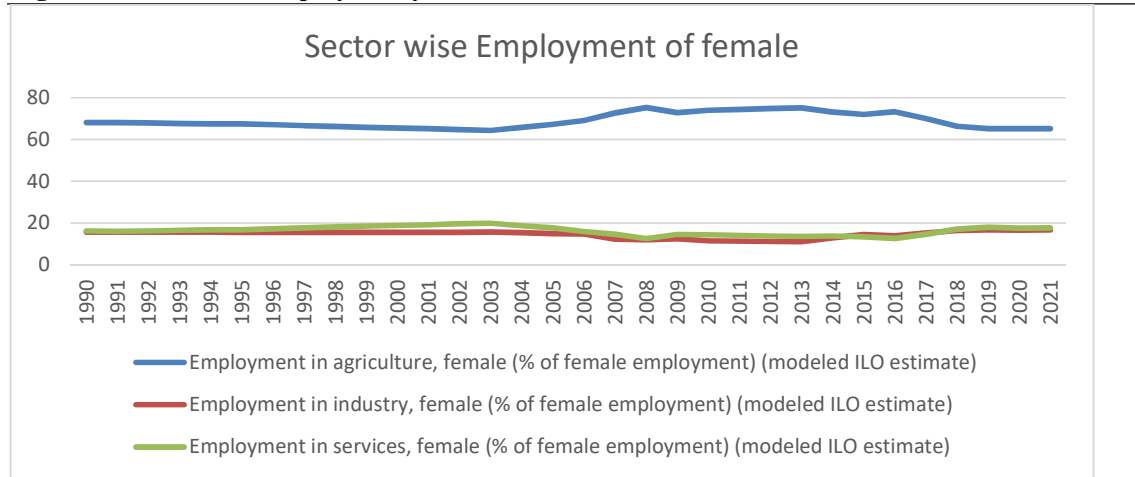
Figure 1: Labor force participation of females



Source: World Bank.

Sectoral working of women

Educational fundamental right to females is secured in Pakistan according to article thirty-seven of constitution however, gender disparities exist in educational sector. Educated women can provide better labor force, which is a way to economic development. However not very good statistics of women enrollment in primary and secondary education creates to deepen the disparities. Pakistani women are engaged in informal working where wages are neither good nor secure, the agricultural sector where 65 percent of women are working is also showing a declining trend in women employability due to uncertain wage pattern for women. Agriculture sector needs to give educational skills to women along with securing gender wage gap. However, in comparison to agriculture sector the services and industrial sectors need more women participation. As shown below in the figure the women participation in industry and service sector is not more than 20 percent each. There is a huge potential of women employability in these sectors. Literature explored that better level of education, household size along with family type and status of farmer can certainly increase labor force participation of women in agriculture (Fatima and Sultana, 2009).

Figure 2: Sector wise employability of females

Source: World Bank.

Managerial positions hold by women

In Pakistan, women are represented in national assembly as well as provincial assemblies by 20 and 18 percent respectively however women are not taking up managerial positions in Pakistan.

Literacy rate for females is merely standing at 61.5 percent for 15-24 years of females and it is lower in adult female at 46.49 percent. According to Global Gender Gap report, there are only 6 percent of firms which have females at managerial and decision-making posts, the value of leadership among women for leadership posts is only 4. The dominance of females in informal sector is due to their lesser training for leadership and managerial roles. 109.32 million females of Pakistan need to play an active role towards Pakistan economy.

Significance

The sustainable development agenda is followed in Pakistan and the gender equality is focused, the SDG 5 talks about ending all forms of discrimination. One of the main reasons the female labor force participation is lesser as per Agriculture Development Bank is the overall environment including inadequate rooms, washrooms and parking. In comparison to 2020, Pakistan's ranking has been dropped in economic participation and opportunities. This is integral to explore a sector that what are the important determinants of labor force participation of women so that women participation in economic activity is ensured.

Literature Review

Literacy rate and FLFP

Ehsan, (2015) has analyzed causal relation between growth and FLFP in case of Pakistan. The female labor force participating can increase new employees in the workforce and the study has also discussed the determinants of FLFP. For this purpose, the literacy is overvalued in determining FLFP. Multiple research papers show the direct relation between educational impacts on female labor force participation. Ince, (2010) has shown that schools improvements and educational reforms bring in new perspectives among women. The education of women is related with decreasing fertility and mortality rate, these women employability is thus affected by literacy rate.

School enrollment and FLFP

Faridi, Malik and Basit, (2009) explored that education plays a vital role in human capital formation, the data is collected through field survey from district Bahawalpur and the sample consisted of 164 females. The results indicate positive trend between education and FLFP. However, the basic education up to middle level has shown insignificant results whereas all other educational levels coefficients are positively related with FLFP. The spouse educational status positively affects FLFP.

Another study has explored a relationship between female workforce and female literacy rate and unemployment rate of females. The inclusion of females in the workforce is integral for socio economic development. The findings of the study suggest that if the women status in labor force participation isn't changed then the repercussions are unavoidable thus moderate and stable policy is required and practical steps must be taken by government.

Unemployment and FLFP

Sarfraz et al., (2021) explored that women are more likely to engage in decent labor market and they are concerned about payments. They want to be timely paid employees. The study suggested policy implications for better working opportunities. This is crucial for women that when they invest in education and in future, they find employment circumstances vulnerable. At micro level, there is a dire need to bring in awareness among male households that how they can behave to let women participate. The workers must not become a social stigma for the household. The employment status of women is vulnerable not only because of vulnerable working conditions, in addition the household head also play a role in determining the employment status.

Sarwar, and Abbasi, (2013) analyzed severe employment discrimination faced by women of Pakistan. Though the theoretical framework support positive relation of employment of women and economy, though the labor force participation in Pakistan is below when compared to international standards. The discrimination with women has various backgrounds including political, legal and cultural factors. The women labor force participation and employability is affected by media as well (Pimkina and De La Flor, 2020).

Sector wise employability of women

Yasmeen, (2011) explored that the least developed countries rely on agriculture sector and this is considered as internal driver of growth. The biggest proportion of labor force in Pakistan is engaged with agriculture directly or indirectly. The negligence of policy makers has caused the women to leave agriculture sector gradually as the country is deprived to yield ripe benefits of efforts of women. The women can get livelihood however, women are deprived due to lack of supportive policies in employability. The rising population food demands require the services of women in agriculture sector.

Data and Methodology

The data has been collected from World Bank data indicators. The secondary data constitute the period of 1990-2021. The definition of selected indicators is mentioned below:

Variables Description

Variable	Definition	Source
Labor force female	Female labor force as a percentage of the total show the extent to which women are active in the labor force. Labor force comprises people ages 15 and older who supply labor for the production of goods and services during a specified period.	World Bank
Literacy rate, youth female	Youth literacy rate is the percentage of people ages 15-24 who can both read and write with understanding a short simple statement about their everyday life.	World Bank
Proportion of seats held by women in national parliaments	Women in parliaments are the percentage of parliamentary seats in a single or lower chamber held by women.	World Bank
Employment in services, female	Employment is defined as persons of working age who were engaged in any activity to produce goods or provide services for	World Bank

	pay or profit, whether at work during the reference period or not at work due to temporary absence from a job, or to working-time arrangement. The services sector consists of wholesale and retail trade and restaurants and hotels; transport, storage, and communications; financing, insurance, real estate, and business services; and community, social, and personal services.	
Employment in industry, female	Employment is defined as persons of working age who were engaged in any activity to produce goods or provide services for pay or profit, whether at work during the reference period or not at work due to temporary absence from a job, or to working-time arrangement. The industry sector consists of mining and quarrying, manufacturing, construction, and public utilities (electricity, gas, and water).	World Bank
Employment in agriculture, female	Employment is defined as persons of working age who were engaged in any activity to produce goods or provide services for pay or profit, whether at work during the reference period or not at work due to temporary absence from a job, or to working-time arrangement. The agriculture sector consists of activities in agriculture, hunting, forestry and fishing.	World Bank
Unemployment, female	Unemployment refers to the share of the labor force that is without work but available for and seeking employment.	World Bank
Contributing family workers, female	Contributing family workers are those workers who hold "self-employment jobs" as own-account workers in a market-oriented establishment operated by a related person living in the same household.	World Bank
School enrollment, primary (gross), (GPI)	Gender parity index for gross enrollment ratio in primary education is the ratio of girls to boys enrolled at primary level in public and private schools.	World Bank
School enrollment, secondary (gross), (GPI)	Gender parity index for gross enrollment ratio in secondary education is the ratio of girls to boys enrolled at primary level in public and private schools.	World Bank

Descriptive statistics

Descriptive statistics summarize the data in an organized way and relationships between variables in sample/population is analyzed. Before conducting research, the inferential statistical comparisons help to understand the distribution of data. The skewness and kurtosis are discussed in the table below for each variable, the skewness equal to zero symbolized normally distributed variable. The kurtosis discussed below explains the peak of distribution. The positive kurtosis value means that the distribution is more peaked than normal. However, the negative kurtosis means that the peak is flatter than normal. In order to understand the central tendency, the mean, median and mode are used. Standard deviation is the measurement of the distance from the mean value. The spread in the values of data set are explained by the standard deviation. the table below explains minimum and maximum values of each variable to understand the low outlier limit and high outlier limit.

Table 1 - Descriptive Statistics										
	female worker	enroll. primary	enroll. Secondary	seats	agri	in services	in industry	%of females agri	%of female Manuf	%of female Services
Median	18.7	60.6	58.62	72.49	3.78	20	67.6			
Standard Deviation	3.2	6.3	1.57	5.6	0.47	6.9	3.6	2.7	1.7	1.99
Kurtosis	3.05	3.05	0.39	1.74	-1.06	4.4	1.8	1.9	2.4	2.68
Skewness	0.85	-0.84	0.392	-0.32	0.19	-1.84	0.56	-0.17	-0.9	1.18
Maximum	22.2	67.1	16.28	65.1	4.69	22.2	75.6	19.9	16.8	6.15
Minimum	10.2	43.2	4.77	46.7	2.93	2.03	64.1	12.6	11.1	0.25

(Source: Author's own compilation on Eviews)

Unit root tests/Stationarity Check

Stationary tests are applied on the variables to understand that if the variables are stationary. Stationarity means that statistical properties of the time series are similar and these properties do not change over time. It is mandatory to have a stationary series so that multiple statistical tests are run on it. If there are no trend or any seasonal effects on the time series then the series is said to be stationary. Thus, the stationary tests are applied. Different time series stationary tests are present however the most commonly used tests are Augmented Dickey Fuller tests, Dickey Fuller tests and Phillips Perron tests, as these tests have been used to understand the stationarity of the series. The ADF test does account for the serial correlation of errors and thus lagged values of independent variables are added whereas the DF test does not account for serial correlation of errors. Phillips Perron test also accounts for the serial correlation of errors however it is a non-parametric unit root test. In order to better understand the ADF test and DF test the equations are mentioned as below:

Augmented Dickey Fuller test equation is $y_t = c + B_t + a y_{t-1} + \phi \Delta y_{t-1} + e_t$ whereas the Dickey Fuller test is when error term is not correlated and it can be written as $\Delta y_t = \delta y_{t-1} + u_t$

Phillips Perron test is represented in equation form as $\Delta y_t = u_1 + u_1 t + \Psi y_{t-1} + e_t$.

Optimal Lag Selection

The lag selection criteria's are AIC and SIC. The lags amount may vary and prolong due to specification error. If there exists no specification error then small number of lags will also help. The lag length is explained through iterative process than how many terms back the AR process a researcher want to test the serial correlation. The Akaike Criteria and SC which are widely used lag selection criteria's do check that if a particular model with specific p, d and q parameters are the good statistical fit as the autocorrelation function ACF postulates the p lags of autoregressive term whereas partial autocorrelation function postulates q lags of error term. The maximum number of lags are selections and performance of model is analyzed such as lags may be ranging from p= 0, 1, ... p max. The optimal model is the one, which minimizes

the lag selection criteria, and the most commonly used lag selection criteria are Akaike, Schwarz-Bayesian and Hannan Quinn.

Cointegration tests

Cointegration is a technique to find correlation between time series in the long run. It is to analyze long run parameters and the error correction term in cointegration determine the speed of adjustment towards equilibrium in the long-run. It depends on the result of the unit root tests that which cointegration test has to be applied on the parameters to estimate the parameters. Cointegration also checks that if the variable moves in the similar direction or the different one. Cointegration tests have also been applied on the test. This test is done to analyze the correlation between time series in the long-run.

Other diagnostic tests applied on the model

Diagnostic Check	Check for	Hypothesis
Bruesch Pagan Godfrey Test	If the error term has equal variance-homoskedasticity	H_0 = the error variances are all equal. H_1 = the error variances are not all equal.
Jarque Bera Test	Normal distribution of errors	H_0 = data is following a normal distribution H_1 = data is following a normal distribution
Bruesch Godfrey IM test	Serial correlation	H_0 = there exists no serial correlation H_1 = there exists serial correlation
Ramsey Reset Test	Functional form of model	H_0 = Model has correct/linear specification. H_1 = Model does not have correct/linear specification.

Results and Discussions

Unit Root Results

The unit root tests have shown that there is some variable stationary at level whereas the remaining are I(1). Thus the stationary tests revealed that there is mix stationary of variable as some variables are stationary at I(0) whereas other are of integration level I(1). The results of unit root tests have been shown below:

Table- Unit Root Tests

Variable	ADF		DF		Phillips Perron	
	Level	First difference	Level	First difference	Level	First difference
Labor force, female	<u>-1.100317</u>	<u>-5.668136</u>	<u>0.009710</u>	<u>-2.887504</u>	<u>-2.079091</u>	<u>-5.56805</u>
Contributing family workers	<u>-1.918294...</u>	<u>-5.664916</u>	<u>-1.859520</u>	<u>-5.7599...</u>	<u>-2.064829</u>	<u>-5.66627</u>
Employment in agriculture	<u>-1.556198</u>	<u>-3.592651</u>	<u>-1.602350</u>	<u>-3.651518</u>	<u>-1.373896</u>	<u>-3.54232</u>
Employment in industry	<u>-2.540978</u>	<u>-4.128406</u>	<u>-2.391693</u>		<u>-1.441284</u>	<u>-4.23544</u>
Employment in services	<u>-1.771042</u>	<u>-3.701063</u>	<u>-1.813145</u>	<u>-3.764252</u>	<u>-1.504163</u>	<u>-3.71148</u>
Labor force, female	<u>-1.100317</u>	<u>-5.668136</u>	<u>0.009710</u>	<u>-2.887504</u>	<u>-2.079091</u>	<u>-5.56805</u>

Literacy rate youth female	<u>-2.408468</u>	<u>-6.155693</u>	<u>-1.486737</u>	<u>-5.359601</u>	<u>-2.408468</u>	<u>-7.54663</u>
Proportion of seats held by women in national parliaments	<u>-2.471147</u>	<u>-5.301408</u>	<u>-1.373589</u>	<u>-5.369505</u>	<u>-2.682285</u>	<u>-5.29914</u>
School enrollment, primary	<u>-2.695756</u>	<u>-5.618851</u>	<u>-0.842535</u>	<u>-4.025588</u>	<u>-2.680446</u>	<u>-5.71897</u>
School enrollment, secondary	<u>-2.976387</u>		<u>-0.838122</u>	<u>-4.506200</u>	<u>-3.437726</u>	
Unemployment, female	<u>-0.665425</u>	<u>-7.443250</u>	<u>-0.666024</u>	<u>-7.542624</u>	<u>-0.344426</u>	<u>-7.44484</u>

(Source: Author's own compilation on Eviews)

Lag selection Results

The optimal lag selection criteria has also been applied. The Akaike information criterion has shown the least value at two (2) lags. Thus, the optimal selection of lags was done at two. As it is known that, the criterion, which represents the lowest value in the model, is considered as the optimal lag selection criteria model. In this, the AIC is used to compare different models and determined that the model with lag 2 is the best fit for the data. The model with lag 1 was giving the higher AIC value as compare to model with lag 2. As it can be seen from the below results that Akaike AIC value is 4.887686 as compare to Schwartz SC value of 5.868 the AIC value is the lowest thus AIC criterion has been used for the lag selection.

Table- Lag selection criteria

Test	FLFP	Contr. workers	Prop. in assemblies	School enroll. primary	School enroll. secondary	Emp. agri.	Emp. services	Emp. industry	Unempl.	Lit rate
Akaike AIC	1.42	4.6	2.2	1.1	1.7	4.3	6.0	3.4	2.7	3.6
Schwarz SC	2.49	5.7	3.2	2.1	2.8	5.4	7.08	4.6	3.9	4.9

(Source: Author's own compilation on Eviews)

ARDL Cointegration tests

In light of the above-mentioned unit root results, this is analyzed that ARDL cointegration method is applied on these parameters to estimate the long run relationships. The ARDL cointegration technique is used to determine the short and long run coefficients. The short run and long run relationships are analyzed and F bound test have also been analyzed to understand that if there exists a long run relationship or not.

Table- ARDL Short run Cointegration Results

Variables	Coefficients	P value
Labor force participation	0.7221**	0.0038
Employment in agriculture	-1.163**	0.0378
Employment in industry	-0.2828**	0.023
Employment in services	-1.066*	0.061
Contributing family workers	0.018	0.394
Unemployment of females	-0.154*	0.0736
Proportion of seats held by women	0.1150***	0.0006
School enrollment primary	-3.420*	0.091

School enrollment secondary	21.83***	0.0004
Literacy rate youth female	0.034*	0.0735
ECM	-0.062***	0.0021

Table- ARDL Long run Cointegration Results

Variables	Coefficients	P value
Labor force participation	0.432**	0.0029
Employment in agriculture	-1.021**	0.0410
Employment in industry	-0.312**	0.0012
Employment in services	-1.027*	0.0719
Contributing family workers	0.029	0.209
Unemployment of females	-0.097*	0.0891
Proportion of seats held by women	0.123***	0.0021
School enrollment primary	-2.897	0.102
School enrollment secondary	15.324***	0.0021
Literacy rate youth female	1.0987*	0.0082

Asterisk denote significance as * is significant at 10 percent, ** is significant at 5 percent and *** is significant at 1 percent.

The error correction for this model is 6 percent, which means that the deviation comes back to equilibrium by 6 percent. The tests can be interpreted for each variable separately as one unit increase in employment in agriculture the labor force participation decreased by 1.16 unit. One unit increase in employment in industry is negatively linked with labor force participation as the labor force participation decreased by 0.28 unit. The one unit increase in services will cause a decrease in labor force participation by 1.06. The contributing family workers are positively linked with labor force participation as one unit increased in contributing family workers the labor force participation increases by 0.018 unit; however, this is insignificant among all other variables. The unemployment of females is also inverse linked with labor force participation, as one unit increase in unemployment of female is decreases labor force participation by 0.154 unit. The statistically significant results have been analyzed in case of proportion of seats helps by women in national parliaments as one unit increase in proportion of seats help by women increases the labor force participation by 0.1150 unit. The literacy rate of youth females is also positively linked with labor force participation as one unit increase in literacy rate leads to an increase of 0.034 unit in labor force participation.

F-Bound Test

An augmented autoregressive distributive lag is computed by F statistics as well as if the test falls below the lower bound this can be concluded that there is no cointegration in the long run however if the F statistic exceeds the upper bound then this can be said that there is a cointegration. In this case, the F test shows that there exists long run relationships between the variables. ARDL checks the long run cointegration among variables and the error correction model as shown above represents the significant negative value which means that the model comes back to adjustment process with 6 percent. In this model, the F bound tests show that there exists a long run cointegration between the variables. This is also known as error correction model as the adjustment speed in this process is quite high that is 73 percent. Because the F bound test value is higher than all values of I (0) and I (I) thus it can be said that the variables are cointegrated in the long run.

Table- F Bound Test for Long run relationship

F bound Test				
	Value	Significance	I(0)	I(1)
F statistic K	7.302870	10%	1.92	2.89
		5%	2.17	3.21
		2.5%	2.43	3.51
		1%	2.73	3.9

(Source: Author's own compilation on Eviews)

Diagnostic Tests**Table- Diagnostic Tests Values**

Diagnostic Check	Value	P statistic	Results
Bruesch Pagan Godfrey Test	0.36	1.000	H_0 of the error variances are all equal is accepted
Jarque Bera Test	0.261	0.877	H_0 of data is following a normal distribution is accepted.
Bruesch Godfrey IM test	0.1335	0.0014	H_0 of no correlation is accepted.
Ramsey Reset Test	Tstat=1.45 Fstat=2.11	1.840	H_0 of correct/linear specification is accepted.

Bruesch Pagan Godfrey Heteroskedasticity test:

Bruesch Pagan Godfrey heteroskedasticity test is applied to diagnose the variance of error term that if it is normally distributed or not. The Bruesch Pagan results for this model is 1 as the probably value of chi square is 1.000 which fails to reject the null hypothesis of homoskedasticity as if p value of chi square is more less than 0.05 then there exists heteroskedasticity. In this model as the p value is greater than 0.05 and it is 1.000 thus the error term is homoscedastic.

Jarque Bera Test:

The Jarque Bera test explains the normality of error term. If the Jarque Bera probability is greater than 0.05 then the null hypothesis is accepted than the residuals are normally distributed. However, the alternative hypothesis explains that residuals are not normally distributed. In this case the Jarque Bera probability value is 0.87 which shows that the null hypothesis is accepted and we conclude that residuals are normally distributed.

Breusch Godfrey serial correlation LM test:

Breusch Godfrey serial correlation states the null hypothesis of no serial correlation. Because the estimation value of BG diagnostic test also known as LM test has p value 0.0014 which means that the null of no serial correlation is accepted. The model is not serially correlated.

Ramsey Reset Test for Functional Form:

The functional form is checked by Ramsey Reset test and the misspecification is diagnosed. If the probability value of Ramsey Reset test is more than 0.05 then there is no misspecification however it turns out sufficient then the misspecification exists. The t statistic and F statistic

for this model turns out to be 0.1840 and 0.1840 respectively rejecting the misspecification. Thus, the model is correctly specified.

Discussions

The relationships of agriculture employment with labor force participation is inverse, according to literature there are three possible reasons for it i.e.

- Agriculture employment of women in Pakistan is decreasing by the time as it was more in 1990s as compare to 2000 and due to this decreasing trend, it has the inverse relation of this with labor force participation.
- Moreover, the females are not paid enough and rural and urban wages are different in Pakistan due to which the women are less participating in labor force participation now.
- Thirdly, the rapid economic growth and negative perception about agriculture has caused the female employees to stop working in agriculture field (Ali and Jamil, 2023).

The reason of negative relation of services/industry with labor force participation is that females are lesser in formal employment. As it is discussed above in introduction that female labor force participation is below as compare to other economies. The high level of education does not ensure labor force participation in Pakistani women. However, the secondary school enrollment is positively and significant linked with labor force participation (Amir, et al., 2018)..

Family friendly policies help to encourage women labor force participation. The contributing female workers is inversely related with dependent variable because of the wage setup and the non-market time cause the lesser contributing of female workers.

Female labor force participation is vulnerable due to miscellaneous issues ranging from unhealthy working conditions, lack of supportive policies and decreasing trend of paid employability in agricultures sector. Pakistan is an agrarian economy and in order to meet the rising food demand the women need to enter in the mainstream of employability in agriculture. However, the timely payments and backup of policy framework may help the increase labor force participation rate. Pakistan's FLFP is alarmingly low in South Asian and globally (Majid and Siegmann, 2021).

The low FLFP is a serious issue, which is tried to be, captured through the above-mentioned variables however, the rate of unemployment is consistent among women both in rural and urban surroundings whereas poverty is also rising. The rising rate of inflation with cause the living standards do decrease further if women do not contribute in the economic activity. The improvements are required in employment sector no matter agriculture, services of industry by improving secure and better job statuses. The sectors need to be more organized with respect to employability status of women. The literature has suggested an influential role of political parties, NGOs, and government organizations as if they want to enhance the status of women then the women potential can be absorbed in different statuses of jobs (Sadaqat and Sheikh, 2011).

Conclusion

The working environment is not favorable for women, as the unpaid work and lack of urban female participation in labor force have caused huge declining trend in FLFP. Rural women were actively participating in agriculture a few years back however, the women in agriculture are also contributing lesser by each passing year due to unsupportive environment. Women work is not acknowledged. Thus, from literature and results it can be said that rural women are less participating because of unpaid work and lack of skills given to them however the urban women is also not satisfied from the working environment due to which the contributing family workers is in inverse relation with FLFP.

Policy Implementation

Women are needed to be included in decision-making as there is positive relation of proportion of seats hold by women in parliament with women labor force participation. More the women in leadership places more is the tendency of women to come out for work.

The gender policy framework can cause to engage more females in education as well as employment. The reasons are required to be found that why there is lesser tendency of work in highly educated university women as well. More research is required to find decreasing trend of employment in highly educated women. The rural unpaid work is increasing, urban labor force participation in Pakistan is specifically low and this is not rising.

Limitations

There is less data available on personal indicators related to female willingness on work and the behavior of family. According to another survey rendered by ADB, there are 40 percent of women who claim that male family members do not permit them to work outside the home. However, 15 percent claim that they are not willing to work outside home on their own. Thus, there is a margin to introduce all such variables, which include women willingness, family environment, behavior of male counterparts, and much more. The variables including mobility challenges and harassment issues must also be added however, in Pakistan there is very lesser data available on such indicators as household women are reluctant to share personal information. Such variables can unveil better pattern of female labor force participation.

References

- Ali, S. A. & Jamil, R., (2023). Infrastructure development and female labor force participation in Pakistan. doi:10.21203/rs.3.rs-2413705/v1
- Amir, S., Kotikula, A., Pande, R. P., Bossavie, L. L., & Khadka, U. (2018). Female labor force participation in Pakistan. doi:10.1596/30197
- Ehsan, S. (2015). The effect of an increase in female labor force participation on GDP in Pakistan.
- Ejaz, M., (2007). Determinants of Female Labor Force Participation in Pakistan An Empirical Analysis of PSLM (2004-05) Micro Data. The Lahore Journal of Economics Special Edition (September 2007)
- Faridi, M., Malik, S., & Basit, A., B., (2009). Impact of Education on Female Labour Force Participation in Pakistan: Empirical Evidence from Primary Data Analysis. Pakistan Journal of Social Sciences (PJSS) Vol. 29, No. 1 (June 2009), pp. 127-140
- 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), 182-198. doi:10.1108/03068290910921253
- Global gender gap report 2022. (2023). World Economic Forum. Retrieved March 19, 2023, from https://www.weforum.org/reports/global-gender-gap-report-2022?DAG=3&gclid=CjwKCAjw5dqgBhBNEiwA7PryaCnpqfxEDzEv5YgXLRQizuBqH_mx dz_6YI3oPHv4HQ97gy9TckSFNRoCtEoQAvD_BwE
- Ince, M. (2010). How the education affects female labor force? Empirical evidence from Turkey, *Procedia - Social and Behavioral Sciences*.
- Junaid, N., Sultana, N., Jabeen, S., & Ali, J., (2020). Determinants of Female Labour Force Participation Rate in Pakistan.
- Majid, H., & Siegmann, (2021). The Effects of Growth on Women's Employment in Pakistan. *Tandfonline. Feminists economic*. 27(4).
- Pimkina, S., & De La Flor, L. (2020). Promoting female labor force participation. doi:10.1596/34953

- Sadaqat, M. & Sheikh, Q. (2011). Employment situation of women in Pakistan. *International Journal of Social Economics*. 38. 98-113. 10.1108/03068291111091981.
- Sarfraz, M., Andlib, Z., Kamran, M., Khan, N. M., and Bazkiaei, H.A., (2021). Pathways towards Women Empowerment and Determinants of Decent Work Deficit: A South Asian Perspective. *Adm. Sci.* 2021, 11(3), 80; <https://doi.org/10.3390/admsci11030080>
- Sarwar, F., & Abbasi, A. S., (2013). An In-Depth Analysis of Women's Labor Force Participation in Pakistan. *Middle-East Journal of Scientific Research* 15 (2): 208-215, 2013 ISSN 1990-9233 © IDOSI Publications, 2013 DOI: 10.5829/idosi.mejsr.2013.15.2.2367
- Tanaka, S. (2016, October 31). Policy brief on female labor force participation in Pakistan. Retrieved March 19, 2023, from <https://www.adb.org/publications/policy-brief-female-labor-force-participation-pakistan>
- World bank indicators, (2023). *Employment in agriculture, female (% of female employment) (modeled ILO estimate) (no date) Data*. Available at: <https://data.worldbank.org/indicator/SL.AGR.EMPL.FE.ZS> (Accessed: March 19, 2023).
- Yasmeen, G. (2011). Contribution of Pakistani women in agriculture” productivity and constraints. *Sarhad journal of agriculture*. 27.