Impact of Female Labor Force Participation in the Economic Development of Pakistan

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ARTICLE DETAILS	ABSTRACT

Purpose

This paper tries to examine whether labor force participation of the female population affects the growth of the economy.

Methodology

The sampling data was collected from the world bank's website from 1971 to 2018. Johansen co-integration test and VECM model were used to examine the relationship between Female Labor Force Participation and Economic Development.

Findings

The result of the Johansen and Juselius Co-integration test showed the long-term relationship between Female Labor Force Participation and Economic Development. The finding also indicated that female labor force participation had a negative impact on GDP. The CUSUM stability test was used for the short-run stability adjustments. Results of the CUSUM stability test showed that the coefficients of ECM (-1) speed of adjustment were stable at a 5 percent significance level, there were no oscillations outside the critical level and the CUSUM curve was above the origin line which indicated the significance of our short-run dynamics.

Conclusion

The study concludes that female labor force participation has a significant negative impact on Pakistan's GDP, this is due to the societal and cultural norms as well as our religious dignity of women.

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1. Introduction

Pakistan is a developing country with almost half its population being female. But unfortunately, in Pakistan, women's life options are limited just to domestic responsibilities, and caretaking of children, her contribution in monetary terms, to the family is only by working informally like in the agricultural sector, in rural areas. Her ultimate aim in life is limited to marriage and childbearing. Therefore, a girl's education is regarded as unnecessary. Education is one of the most substantial factors that affect the growth and progress of an economy (Ashraf & Ali, 2018).

The labor force participation rate is one of the most important indices of economic growth and development. Even while economic progress is based on the efficient utilization of production components, the distribution of labor force factors, which is the most important of these variables, is plagued by gender disparity. Participation rates in the labor force, which are important economic preventive measures, are unevenly distributed among women around the world (Altuzarra et al., 2019). Women still participate in the labor market at a lower rate than men, particularly in developing nations, despite the fact that increased economic activity around the world has improved opportunities for engagement in school and employment (Omran & Bilan, 2022). Due to the fact that women make up half of the global population, they might also make up half of the labor force. Yet, women's participation in the labor force is much lower than men's, falling by over 27% across the board (Iftekhar, 2021).

Despite the fact that women make up the majority of the population in practically every country on the planet, female participation in the labor force has lagged behind men from the past to the present. Women who have been an effective component of production outside the labor market from the 1750s to the present have begun to work for pay in tandem with the Industrial Revolution. Women, on the other hand, have always been viewed as a cheap labor force since those days. Even though women's participation in the labor force has increased progressively from the past to the present, the rate of increase varies between countries and even between regions within the same country, depending on factors such as societal customs and religious beliefs, and level of wealth (Dogan, 2017).

According to the 2017 census of Pakistan, the estimated population of Pakistan is 212,742,631. The male population is 51.46%, whereas the female population is 48.54% of the total population. The life expectancy of males is 65.8 years whereas the life expectancy of women is 69.8 years. But the level of education in females is less than the male population. Out of the total female population, only 47% of women are literate while the percentage of literacy in males is 71%.

In developing countries, female education has a critical role in reducing poverty and promoting long-term progress. As a result, in order to achieve structural transformation and economic growth, special emphasis must be directed to the promotion of female education. Women's education also reduces population growth and fertility rates (Dauda, 2012). In recent years, huge cultural, social, and economic developments have occurred in North African and Middle Eastern countries, resulting in new opportunities for women in socioeconomic life. The participation of women in the labor force is determined by the status of women in a certain location. There are a variety of issues associated with the female labor force participation rate in developing countries, including multidimensional factors of that region (Aboohamidi, 2013).

How can we expect a country to grow with half of its population staying at home only to rise the upcoming generation and not using their ultimate potential? As the population of

women in Pakistan is 48.54%, so their economic contribution can make a great difference in GDP. Despite the rise in recent years, the labor force participation of females in Pakistan is still very low, and as compared to other countries with similar income levels it is well below. Even women with higher education levels lag the labor force participation. Only 25% of women with higher levels of education in Pakistan are working. This low level of participation of the female labor force is a major loss of productivity potential in Pakistan. Female participation in the workforce of the country is also important for empowering women in society, as independent working women are more confident in take household decision-making as compared to non-working women in the same vicinity (Ashraf & Ali, 2018).

When women seek education in various institutes, they take seats that are equal to men, now after the completion of their degree when these women are not doing jobs, they are doing two-way damage to the economy, as they are not only reserving the seats of male students, who for sure would-be seeking job after the degree, but also causing an economic pressure on the males (Ashraf & Ali, 2018; Sadaquat, 2011).

In this paper, we would bring into light the different sets of factors that may affect the participation of the female labor force in Pakistan, including male dominance, societal and religious norms, gender inequality at the workplace, early marriage, and children, due to which most women have to leave their studies, job environment and security, etc. This paper would also uncover the gender-biased societal behavior toward female education. It is very sad that the number of educational infrastructures for females, whether it is primary schools, secondary schools, arts, science and commerce colleges, or universities in all four provinces of Pakistan is shockingly very less than male education institutions. Increasing female schooling increases their earning capabilities and also helps them in getting employment, changing the attitude of society toward women's traditional role in the economy.

In this research, we measure the impact of female education on female participation in the economy. We also explore the effects of female education on fertility rates. Increasing the female education level reduces the population growth by increasing the age of marriage which intern reduces the fertility rates. We then examine the impact of all the above-discussed variables on the development of Pakistan's economy.

This comprehensive introduction has been followed by a literature review in section 2. Section 3 presents the data and methodology along with the model and hypothesis in sub-sections 3.1 & 3.2 respectively. The estimation result is discussed in section 4. Section 6 concludes the study followed by Limitation & direction for future research in Section 7 and policy implication in Section 8. References are attached at the end of the paper.

2. Literature Review

In developing countries like Pakistan, female labor force participation is extremely low. One of the reasons behind this low labor force participation of the female population is the low literacy rate of females. In Pakistan, millions of women do not finish school because they are forced mostly by society and their circumstances to focus on household, caregiving, and childbearing responsibilities. Interviewing women between the ages of 21 and 45 in two neighborhoods with widely varying incomes, Khan (2022) examined the patterns of women's employment and work in Lahore. The results highlighted class, age, home obligations, education, skills, and the working environment as the determinants of female labor force participation. According to the study, household duties and child care make married women less likely to engage in paid jobs. Conversely, a rise in school

enrollment and higher education is positively correlated with a rise in labor force participation. The family social status, income levels, and personality traits that influence women's career decisions are further examined in this research paper. Using data from Pakistan's 2017–2018 labor force survey, Iftekhar (2021) studied the impact of primary, secondary, and university education on female labor force participation. Results support the notion that factors such as household size, child care, mobility, education, income, and industry of employment have a significant impact on women's participation in the labor force. The report recommends social protection measures for women, safer mobility, and better working conditions.

In order to evaluate the impact of elements at the household and individual levels, particularly education, Sarfraz (2021) examined the information from the Pakistani Labor Force Survey conducted in 2018. The results show that education is crucial in preparing women for greater employment chances; educated women are more likely to participate in respectable labor market activities like employment as well as employers. Conversely, women with low levels of education and illiteracy tend to work in vulnerable positions. Alaoui (2015) Using the data over the period of 1960-2012, evaluated the economic impact of female education on economic growth. By examining four different countries having the same religious and cultural values and norms, concluded that female tertiary education, female labor force participation, and institutional capital have a constructive influence on economic progress. Whereas, primary and secondary school enrollment has an inverse impact on economic growth.

Sandra (2008) in his research on different groups of countries, concluded that a higher level of investments in women's education can increase the GDP growth by 0.2 percent each year. Whereas, reducing gender inequality, especially in jobs can lift the per capita income by almost 14 to 20 percent. Similarly, Brempong (2006) taking the panel data of African countries over the duration of 1960-2000 and using a modified neoclassical growth equation investigated that all education levels have a significant positive effect on the per capita income growth rate, in African countries. 1 percent upsurge in the average years of higher education level increases the per capita income growth rate by 0.09 percent. Likewise, Herz (2004) examined that the countries with low girl enrollment rates, often consider the cost of educating the female population higher and merits more distant and uncertain. Their research demonstrated that investing in girls' education delivers a high return on economic growth. Consistently, Shoaib (2012) aiming to understand the impact of literacy the on empowerment of women, conducted a survey of 113 women from four villages of Chiniot. The results of the elaborated survey showed a positive influence of female education on their empowerment at the household level. The study also concluded that investment in women's empowerment is imperative for improving economic, political, and social conditions in Pakistan.

The link between female workforce involvement and economic advancement depends upon a different set of social, environmental, cultural as well as economic political factors. Altuzarra (2019) studied the relationship between the female labor force and economic development in 28 European countries over the period of 1990-2016 and confirmed a positive relationship (although not statistically significant) between women's education and female labor force sharing. Also, it has been found that there is an inverse relation exists between the fertility rate and participation of the female labor force. Extending the same idea, Martin (2003) in the cross-sectional study, discover that the fertility rate is negatively correlated to GDP per capita and there is a substantial negative association between female education and fertility rate, on the other hand, male education is positively linked with fertility rate. It is also found that the average duration of a male's schooling is

often significantly related to subsequent growth. In addition, Hill (1995) Examining different regions across the world, explained that the beneficial effects of women's education cannot always be measured by the market. As the increase in female education level improves family health, increases life expectancy in the population, and also enhances productivity.

Klasen (2002) using panel data examined the long-term effects of gender disparity in education on economic advancement. The study concluded that the reason behind the difference in growth rates among the different Asian, African, and Middle East countries, is due to the differences in level of gender inequality especially in education between these regions. Consistently, Braunstein (2018), using panel statistics of 18 Latin American countries during the time period of 1990 to 2010, indicated social expenditure, earnings, and public outlay as a vital factor in gender-balancing effects in the employment market. Whereas, other factors such as the balance of trade, GDP growth, and economic structure has a comparatively less significant impact on gendered employment and unemployment rates.

Waytek (2013) presented the findings that the reason behind the low female labor force participation is the unpaid work done by women. Also, those who are hired in waged work are mostly in the unceremonious sector and among the deprived. The existence of noteworthy income differential, distortion, and discrimination, also restricts the participation of the female labor force. Sadaqat (2011) using a grounded theory approach, recruited 84 married women from South Asian backgrounds for interviews. Their study contributed to a new understanding of economic abuse by presenting a typology of strategies used by females to deal with economic abuse. Berument (2006) studied the impact of exogenous shifts in income and monetary policy on employment rates. The effect of different levels of education on male, female and on overall unemployment rates are also assessed. The result indicated that interbank interest rates shocks and money, although, do not have a long-term impact on employment, income, prices, and unemployment shocks do have significant and persistent effects on unemployment.

For the promotion of working women in Pakistan, the government must take the initiative and hold seminars to motivate women to start their own domestic businesses or work at a suitable place. With more working women comes the need for more security and increased responsibility, therefore relevant departments will have to ensure the security of working women by all means so that they can continue their jobs with a positive attitude without any threat. Ashraf (2018) following the methodology of the UNDP gender inequality index and using the societal, financial, and political position of women constructed a comprehensive index to evaluate women's status in Pakistan. The study reveals that in Pakistan economic deprivation and financial growth have a significant negative relation with the gender disparity index. It is also found that the increasing level of globalization decreases women's status in Pakistan. Goldin (2006) describing the four phases of the emerging modern economic role of women indicated that the first three phases were evolutionary whereas, the last was revolutionary. Horizon, identity, and decision-making are the three aspects that distinguish the evolutionary phase from the revolutionary phase. The connection between the advancement of contemporary labor economics and the truth of women's altering role are coincided by birth cohort or period.

Rehman (2007) investigated the impact of female participation in agriculture activities on women's empowerment, by conducting a farm-level survey. Collecting data from 200 women in two different areas of Bangladesh, the research presented that women's empowerment is positively and significantly related to education, training, as well as their

acquaintance, and involvement in agriculture programs. Whereas, the factors such as age, size of family, size of farm, annual family income, and area under agriculture show no substantial connection with women's empowerment. Traditionally, the status of a Pakistani woman is defined by her family. There is a wide difference exist amongst women and men in health, literacy, job chances, salaries, own private security, possession over the capital, and involvement in politics. Rabia (2019) attempted to investigate the opinion of men and women on gender disparity in Pakistan. Results found that 63% of people think that women are not treated justly. While, 71% of the view that there is a prejudice among men and women in education. Whereas, 57% of people are of the view that in Pakistan parents give less importance to their daughters as compared to their sons. Similarly, Zarar (2017) in order to analyze the causes of gender discrimination in Quetta, collected data by distributing questionnaires among the literate respondents while illiterate male and female respondents were interviewed. The results reveal that there exists gender discrimination among all classes and levels in Balochistan, though their type varies. The research found that girls are not permitted to pursue education and they do not have good healthcare facilities and their decisions are controlled by men in Balochistan.

Deutsch (2018) in her study on Gender inequality and Workplace organization, evaluated the theoretical and empirical evidence on gender inequality and provided social, interpersonal, and organizational mechanisms for reducing gender inequality. It has been concluded that the connection of gender with ethnicity also means turning a reflexive eye toward the assumption of equality. Extending this by taking into account, the 2030 Agenda for Sustainable Development which aims for all-encompassing and impartial quality education and life-long education opportunities for all, Esteves (2018) indicated gender parity as a tool to improve education quality and get a balanced society. After reviewing the literature, it has been identified that economic development is strongly influenced by female labor force participation. Although, there are numerous studies that evaluated the relation no single study discussed its association or link with female education. As discussed earlier that one of the reasons behind this low labor force participation of the female population is the low literacy rate of females. In Pakistan, millions of women do not finish school because they are forced mostly by society and their circumstances to focus on household, caregiving and childbearing responsibilities. Therefore, it is imperative to analyze the complete nexus between economic growth, female labor force participation, and female education.

3. Methodology
Data was collected from the World Bank database. Data was collected over the period of 47 years from 1971-2018. Data after 2018 was not included in the study due to the availability constraint of some variables and the presence of outliers due to the occurrence of COVID-19. To test the order of integration of the variables the Augmented Dickey-Fuller Test has been employed (Omran, 2022). At first, we checked the stationarity at level, as all the variables were nonstationary at level with both constant and constant & trend, we further proceeded to check the unit root at first difference. Results in Table 2 show that all the variables are stationary at first differences at both constant and constant and trend which indicates the possibility of long-run relationship among variables therefore we proceed next to test the co-integration.

For the purpose of lag order selection, the Schwarz Information criterion, the sequential modified LR test statistic, Hannan-Quinn Information Criterion, and the Final prediction error were used. The results of the lag selection criterion presented in Table 3 suggest that optimal lag is one. Therefore, we further proceeded to Johansen and Juselius Co-integration test. The result of the Johansen and Juselius Co-integration test has been

presented in Table 4. Both the Trace test and Max-Eigen value results show that there is only one co-integrating vector at a 5% significance level. Therefore, we run the vector error correction (VECM) model to capture short- and long-run associations. As Johansen's co-integration test shows that we have only one co-integrating equation for the VECM model. Therefore, we estimate the LGDP regression to examine the long-run and short-run relationships and to know which ones are statistically significant (Omran, 2022).

Further, Diagnostics tests including the Jarque-Bera test, White Heteroskedasticity test, and Breusch-Godfrey serial correlation LM test are applied to check the stability of the model. The result of the Jarque-Bera test confirms that the series is normally distributed. The White Heteroskedasticity test also proves no presence of heteroskedasticity. The result of the Breusch-Godfrey serial correlation LM test approves that there is no serial correlation. The CUSUM stability test was used for the short-run stability adjustments. Results of the CUSUM stability test showed that the coefficients of ECM (-1) speed of adjustment are stable at a 5 percent significance level, there are no oscillations outside the critical level and the CUSUM curve is above the origin line which indicates the significance of short-run dynamics.

3.1. Model

$$LGDP = \beta_0 + \beta_1\ FL + \beta_2\ PSE + \beta_3\ SSE + \beta_4\ TSE + \mu \text{--}(1)$$

LGDP: Log of annual Gross Domestic Product
FL: Female Labor Force participation ratio
PSE: Female Primary School Enrollment ratio
SSE: Female Secondary School Enrollment ratio
TSE: Female Tertiary School Enrollment ratio
β_0:   Intercept
$\beta_1 - \beta_4$:   coefficients to determine
μ: Error term
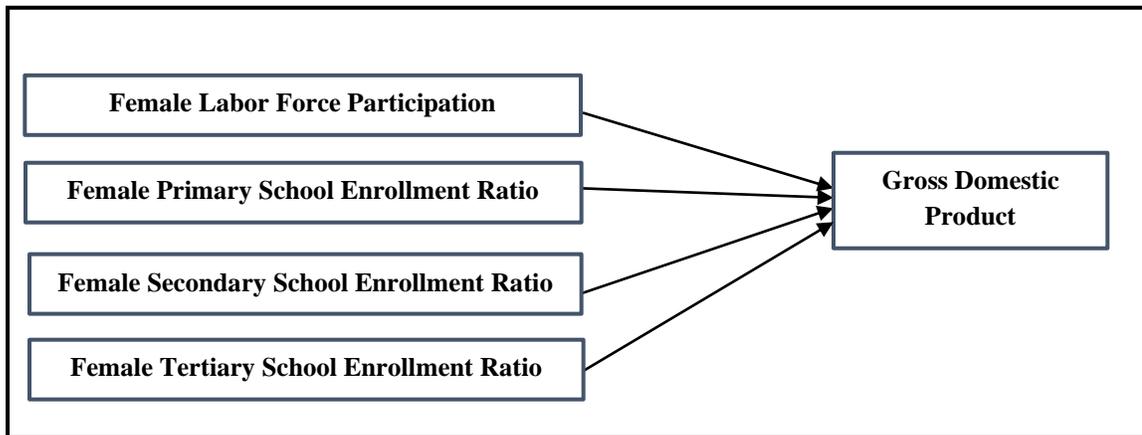
Figure.1. Theoretical Framework
Author's own elaboration

3.2. Hypothesis

H_1: Female labor force participation ratio has a positive impact on GDP
H_2: Female primary school enrollment ratio a positive impact on GDP
H_3: Female secondary school enrollment ratio a positive impact on GDP
H_4: Female tertiary school enrollment ratio a positive impact on GDP

4. Results and Discussions

Descriptive statistics result shows that the distribution of all the variables is positively skewed. While the mean of Female Labor Force Participation, Female Primary School Enrollment, Female Secondary School Enrollment, and Female Tertiary School Enrollment are 16.804, 50.438, 17.395, and 3.100 respectively. A scatter plot indicate the positive and negative correlation between dependent and explanatory variables.

Table.1. Descriptive Statistics

	PSE	SSE	TSE	FL
Mean	50.438	17.395	3.100	16.804
Standard Error	2.749	1.353	0.419	0.484
Median	39.907	15.447	1.460	16.729
Standard Deviation	19.048	9.376	2.909	3.354
Sample Variance	362.828	87.920	8.465	11.250
Kurtosis	-1.310	-0.489	0.137	0.525
Skewness	0.590	0.904	1.299	0.741
Range	59.179	32.379	9.077	15.382
Minimum	26.931	6.768	0.890	12.217
Maximum	86.111	39.147	9.967	27.6

Source: Author's own elaboration
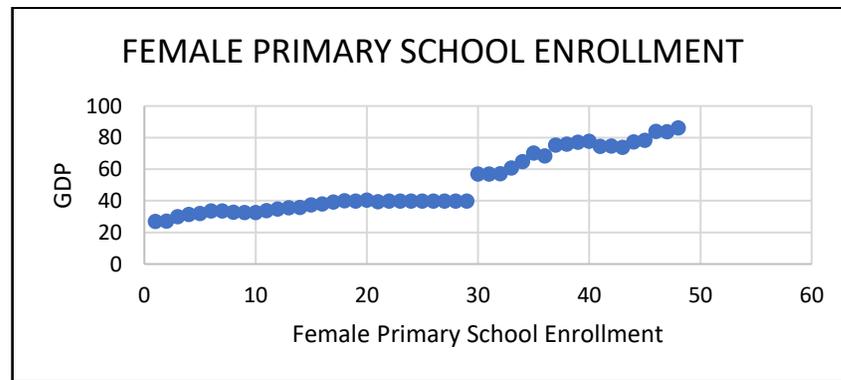
Figure.2. Scatter Plot
Source: Author's own elaboration
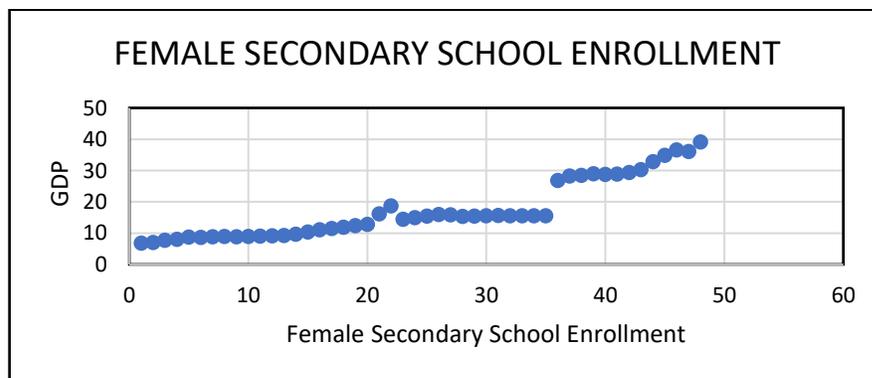
Figure.3. FEMALE SECONDARY SCHOOL ENROLLMENT
Source: Author's own elaboration

FEMALE TERTIARY SCHOOL ENROLLMENT
GDP
15
10
5
0
0
10
20
30
40
50
60
Female Tertiary School Enrollment
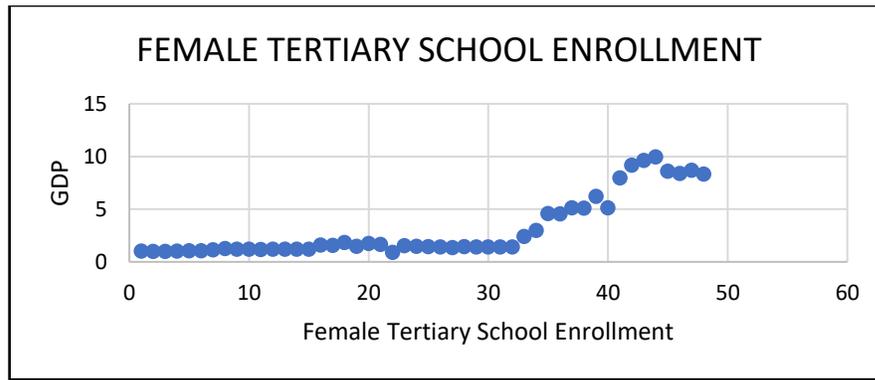
Figure.3. FEMALE TERTIARY SCHOOL ENROLLMENT
Source: Author's own elaboration

FEMALE LABOR FORCE PARTICIPATION
GDP
30
20
10
0
0
10
20
30
40
50
60
Female Labor Force Participation
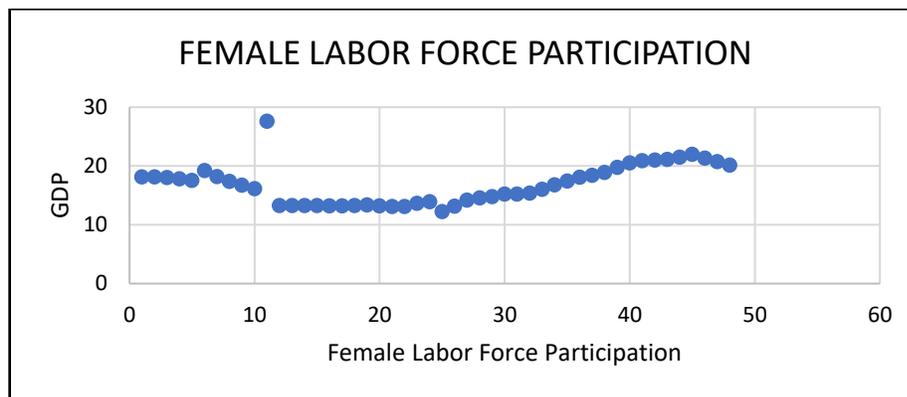
Figure.4. FEMALE LABOR FORCE PARTICIPATION
Source: Author's own elaboration

Table.2. Stationary Test Result

Augmented Dickey-Fuller Test

Variables	**Level**		**1st Difference**	
	Constant	**C& T**	**Constant**	**C & T**
GDP	-2.261 (0.189)	-1.973 (0.601)	-5.505 (0.000)	-6.230 (0.000)
FL	-1.692 (0.429)	-3.308 (0.077)	-7.505 (0.000)	-5.969 (0.000)
PSE	0.423 (0.982)	-1.578 (0.787)	-7.306 (0.000)	-7.403 (0.000)
SSE	0.826 (0.994)	-1.351 (0.862)	-6.365 (0.000)	-6.601 (0.000)
TSE	0.172 (0.968)	-1.459 (0.829)	-6.989 (0.000)	-7.167 (0.000)

Source: Author's own elaboration

Results of the ADF (Augmented Dickey-Fuller) Test have been presented in Table 2 which indicates that all the variables are non-stationary at level but stationary at the first difference at both constant and constant and trend which indicates the possibility of long-run relationship among variables (Omran, 2022). Table 3 shows the lag selection criterion for the VECM model. As we can see, the Schwarz Information criterion, the sequential modified LR test statistic, Hannan-Quinn Information Criterion, and the final prediction error suggest that optimal lag is one. The result of the Johansen and Juselius Co-integration test has been shown in Table 4. Both the Trace test and Max-Eigen value results show that

there is only one co-integrating vector at a 5% significance level. Therefore, we can run the vector error correction (VECM) model to capture short- and long-run associations. The Johansen co-integration test shows that we have only one co-integrating equation for the VECM model. Hence, we need to estimate the LGDP regression to examine the long-run and short-run relationships and know which ones are statistically significant (Omran, 2022).

Table.3.VAR Lag Order Selection Criteria

Lag	Log L	LR	FPE	AIC	SC	HQ
0	-506.4658	NA	8596.410	23.24845	23.45119	23.32364
1	-239.9410	460.3611*	0.147963*	12.27004*	13.48654*	12.72118*
2	-224.1083	23.74906	0.234918	12.68674	14.91698	13.51382
3	-208.4420	19.93892	0.404927	13.11100	16.35498	14.31402
4	-180.4655	29.24815	0.452964	12.97570	17.23343	14.55467

Source: Author's own elaboration

Table.4. Johansen Co-integration Test

Hypothesized No of CE(s)	Trace statistics	0.05 Critical Value	Prob.**	Max-Eigen value	Critical Value	Prob.**
None *	83.269	69.819	0.003	41.173	33.877	0.006
At most 1	42.096	47.856	0.156	19.583	27.584	0.371
At most 2	22.513	29.797	0.271	13.136	21.132	0.440
At most 3	9.378	15.495	0.332	8.342	14.265	0.345
At most 4	1.035	3.8412	0.309	1.035	3.842	0.309

Source: Author's own elaboration

Model Estimation Result in Table 5, indicates that female labor force participation has a negative impact on GDP. This result contradicts the findings of Altuzarra (2019) and Waytek (2013). The impact of female labor force participation is negative because of the societal and cultural norms as well as our religious dignity of women. In Islamic countries like Pakistan women went out to earn money only when there is a significant need in the family that's why when the country's GDP is high which means prosperity, the female labor force participation went down.

The impact of female primary school enrollment and female tertiary school enrollment is positive as female education contributes in country's growth by educating the next generation which cannot be ignored (Khan, 2022; Iftekhar, 2021; Sarfraz, 2021; Sandra, 2008; Brempong, 2006; Herz, 2004; & Shoaib, 2012), However, for secondary school enrollment, the impact is negative as in Pakistan majority of the women who work outside the house like in farms, fields, cottage industries, etc. are uneducated, and most girls even after getting secondary education do not pursue any job that is why in our country female secondary enrolment shows negative relation with GDP which is consistent with the study of (Alaoui, 2015; Khan, 2022; & Martin, 2003).

Table.5. Model Estimation Result

Variable	Coefficient	Standard error	t value
DFL (-1)	-0.0001	0.0032	-0.0343
DFL (-2)	-0.0008	0.0032	-0.2442
DPSE (-1)	0.0018	0.0036	0.4946
DPSE (-2)	0.0013	0.0029	0.4320

DSSE (-1)	-0.0097	0.0051	-1.9136
DSSE (-2)	-0.0010	0.0051	-0.1933
DTSE (-1)	0.0217	0.0211	1.0294
DTSE (-2)	0.0364	0.0175	2.0810
ECM (-1)	-0.0242	0.0138	-1.7489
R-square	0.2414	F-statistic	0.9545

Source: Author's own elaboration

Table.6. Diagnostics Tests

Jarque-Bera test for normality	$\varkappa 2$= 0.882114		**Probability=0.643356**	
White Test for Heteroskedasticity	F-statistic	0.894911	Probability. F (35,11)	0.6225
	Obs*R-squared	34.78410	Probability of $\varkappa 2$ (35)	0.4785
	Scaled explained SS	23.90220	Probability of $\varkappa 2$ (35)	0.9219
Breusch-Godfrey Serial Correlation LM Test	F-statistic	1.640383	Probability. F (2,37)	0.2077
	Obs*R-squared	3.828031	Probability of $\varkappa 2$ (2)	0.1475

Source: Author's own elaboration

The Diagnostics test in Table 6 includes t Jarque-Bera test, the White Heteroskedasticity test, and Breusch-Godfrey serial correlation LM test. The probability of the Jarque-Bera test is 0.643 confirming the acceptance of the null hypothesis that the series is normally distributed. The White Heteroskedasticity test also proves no presence of heteroskedasticity. The result of the Breusch-Godfrey serial correlation LM test approves that there is no serial correlation. The CUSUM stability test was used for the short-run stability adjustments. Results of the CUSUM stability test showed that the coefficients of ECM (-1) speed of adjustment are stable at a 5 percent significance level, there are no oscillations outside the critical level and the CUSUM curve is above the origin line which indicates the significance of short-run dynamics.
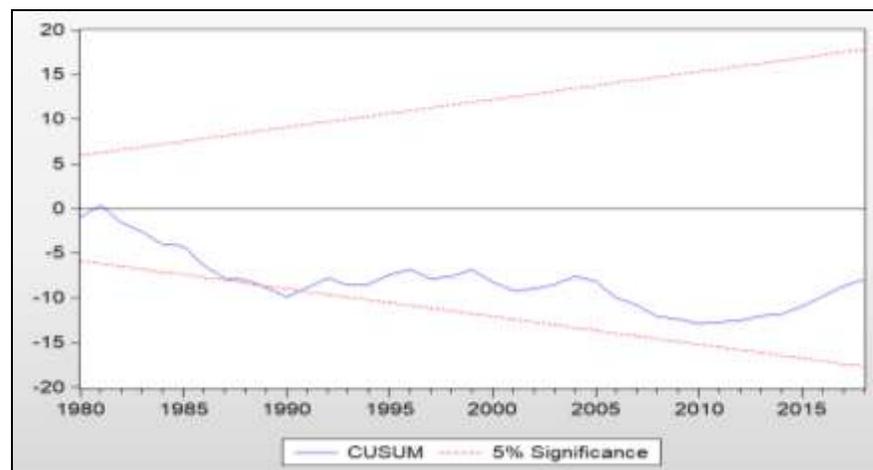
Figure.5. CUSUM PLOT
Source: Author's own elaboration
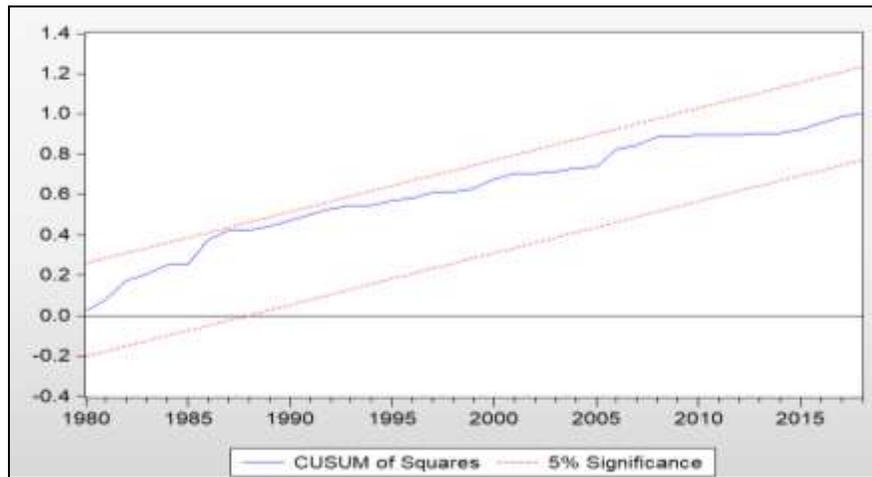
Figure.5. CUSUM Square
Source: Author's own elaboration

5. Conclusion

The study concludes that female labor force participation has a significant negative impact on Pakistan's GDP, this is due to the societal and cultural norms as well as our religious dignity of women. In Islamic countries like Pakistan women went out to earn money only when there is a significant need in the family otherwise a women's role in our society is to raise children and look after the house that's why when the country's GDP is high which means prosperity, the female labor force participation went down. In Pakistan, the majority of the women who work outside the house like in farms, fields, cottage industries, etc. are uneducated, and most girls even after getting secondary education do not pursue any job that is why our country's female secondary enrolment shows a negative relationship with GDP. However female education contributes to the country's growth by educating the next generation which cannot be ignored, as the impact of female primary school enrolment and female tertiary school enrolment is proved to be positive on GDP.

5.1. Limitation & Direction for Future Research:

Data was collected over the period of 47 years from 1971-2018. Data after 2018 have not been included in the study due to the availability constraints of some variables and the presence of outliers due to the occurrence of COVID-19. The research can be further extended with a longer period of time and can make comparisons to verify or disprove the consistency of the relationships. It is recommended to apply different quantitative methods of analysis to the same data. A similar analysis can be executed with different model specifications.

5.2. Policy Recommendations

Government should work to upsurge the literacy rate among women, especially in rural areas. Better working opportunities should be given to women with a secure environment and equal amount of payment as men. Governments and NGOs should arrange awareness programs to make women aware about their rights. Media should also work to change the primitive thinking of society towards women education and their role in society; they should also raise voice to reduce gender inequality. Women should be acknowledged for their work, as their participation in labor market is considered only a past time or hobby.

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