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GENDER INEQUALITY AND FACTORS AFFECTING WOMEN PARTICIPATION IN THE LABOUR MARKET: THE CASE OF PAKISTAN.

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Abstract

Labour force participation of females is considered most the important determinant of economic development for a country. The rising factor which affects the FLFP rate is the mobility of females which is a hurdle for the contribution of economic development. The study aims to determine the gender inequality of FLPR in Pakistan. Socio-economic and environmental factors explain the female Labour force participation rate. Time series data from 1991 to 2021 has been taken from WDI (World Development Indicators). The Autoregressive Distributed Lag model is applied to find the long-run effect of variables, namely GDP (gross domestic product, education of females, fertility rate and co2 emission and FLPR. The results show that there are long-run effects on FLPR. GDP and education have positive, while fertility rate and co2 emission have negatively affected FLPR. It suggests that this participation can be increased by providing education, training and health facilities in Pakistan. The recursive residual sum of square tests has been used to check the stability of ARDL.

Keywords: Labour Force, FLPR, Economic Development, Education, Health Facilities

Introduction

The labour force participation rate of a female is considered a highly significant factor in the economic development of a country. It is necessary for the equity and efficiency aspects of the country. But due to some cultural norms, it is not playing an important part in the Labour market. It is also observable in South Asian countries where the participation rate is not as high as their counterparts, showing the gender inequality in the Labour market.

Over the world, the female percentage is lower in Labour force participation which according to ILO (International Labour Organization) is 46 % of the female population than male. This indicates gender inequality Labour force participation of females. This gender gap is rising in low-middle-income countries because in these countries women are less probable to find a quality job than men.

In Pakistan, this rate is lesser than in other middle-income countries. This participation rate in South Asian countries was 21.99% (World Bank report). ILO (International Labour Organization) has defined FLFP, as the contribution of working women aged (15-64) (employed/unemployed) in the Labour market.

In developing countries, this rate is also smaller due to the structural change of economies. Women are considered the main part of the inclusive growth of developing countries if they participate in the Labour market. But gender disparity is considered a hurdle to economic development. So, the focus of countries especially developing countries on gender equality. Gender equality is the main goal of Sustainable development goals (SDGS). Through this goal, there can be achieved other goals like maternal health, child mortality, poverty eradication and access to education.

Factors affecting female Labour force participation, among which the most

important variable is education beyond the secondary level can be critical to improving employment. The wage difference between men and women is largest because of the lower percentage of professional and technical workers which is less than the world-level female Labour force participation rate. This situation affected Pakistan's ranking in terms of opportunities and economic participation in 2020.

The rising factor which affects the FLFP rate is the mobility of women which is a hurdle for the contribution of economic development. The world level data shows 50% participation of women as compared to men which are 80% (World Bank data). Similarly, this situation is also showing in Asian countries regarding the lower participation of females in the Labour market. There has been seen in five regions among seven regions, above 50% of women have age (15-64) lower participation rate in the Labour market.

The current analysis examines those variables that significantly affect whether or not women in Pakistan choose to participate in the workforce. By building on earlier research and identifying the variables influencing LFP in Pakistan, it is anticipated that this analysis will make a considerable impact on the economic perspective.

Research Question

How do socioeconomic, environmental factors and demographic variables affect FLFP in Pakistan and highlight gender inequality in the Labour market?

Study Objectives

Objectives of the study are to:

1. Analyze gender inequality and women's participation rate in the Labour market of Pakistan.
2. Determine Socioeconomic and environmental factors that affect FLPR in Pakistan.

Literature Review

Qadir and Afzal (2019) analyzed the cultural factors and their effect on working women's earnings. The objective of the analysis was to examine the cultural effect on the earnings of females in KPK. Primary data was used on 10 districts from KPK which were randomly selected in 2017. OLS regression analysis was applied to the variables. It was concluded from finding that one extra year of education of female had increased experience of female in earning. The other variables including, family size (significant), and marital status (insignificant) had negatively affected the earning of working women.

Varol, F. (2017) analyzed determinants that affect the FLPR of Turkey. Primary data was taken for the analysis from 2007. A binary logit model was used for the analysis. It was found from the result that income and education had significantly affected FLPR. Marital status and family size of females had not significantly affected FLPR. Moreover, positive effects of age are seen till 30 and it hurts those above 30.

Touseef et al, (2002) highlighted entrepreneurs and middlemen of a cottage industry in Multan, Pakistan by collecting data through a field survey. The Study considered many working women in Multan who belonged to cloth embroidery. However, workers stated that the start was started as a hobby but owing to the poor economic condition it took place of full-time income to support families. For estimation simple, OLS was used that showed a positive effect on poverty and working hour.

Zaheer and Qaisar (2016) investigated socioeconomic and demographic factors that affected the LFPR of females in Pakistan. Data were from 1990 to 2013. OLS regression was used for the analysis. It was found from the results that the female population, unemployment rate and mortality rate had a significant effect on FLPR. The other variables such as the fertility rate and GDP growth rate

had an insignificant effect on the FLPR of Pakistan.

Masood et al (2011) analyzed (MICS) in 2007 and 2008 FLFP determining factors. Respondent education was as direct human capital. The Legit model used, however, a two-step procedure by Heckman (1979) to remove the selectivity bias problem. The Study concluded that lower levels of respondents' education, age square and household head education hurt FLFP. Family size, high levels of education and residence in urban areas were factors that encouraged FLFP. Meanwhile study concluded with the observation that women working as head, working under the supervision and or working independently may have better chances of earning than in the agricultural sector.

Ahmed and Masood (2009) studied FLPR by applying an econometric analysis in interstate variations in India. Data was collected from the union and estate territory of urban and rural areas in India. Data elaborated on responsible factors for the work participation of females using National Sample Survey Organization (NSSO) 61st around 2004 and 2005. Two separate regressions were used for cross-sectional data estimation. Age of children (0-4) hurt female work participation while other factors Muslim population, children, and education have no impact on female work participation.

Mano and Yamamura (2010) conducted a research where they highlighted how does education of husband and family size influence working married women in Japan. Japanese general social data (JGSS) was used for study over the period of 2000 and 2002 by using a two-step stratified sampling method, to check earnings and married female participation in the Labour force in Japan. Data were estimated by the type two Tobi model applying the FIML method to increase efficiency. Results showed that the education of the husband became a hindrance in the supply of women while the productivity

conditional rate was improved significantly with participation. The study also found the importance of family structure on FLPR. Father and father-in-law had a lower effect on FLPR than mother and mother-in-law. It was suggested from a study that information regarding husbands' human capital affected women's Labour supply.

Zandi et al (2012) shed light on Iran's economy by considering women-headed households regarding their participation in economic activities. Data were collected from expenditure and household income surveys in Iran. The regression model applied for analysis was the logistic regression. Results explained that education had significantly affected the employment of women-headed households. Married women were preferred over unmarried for employment purposes.

The analysis to determine FLPR in Pakistan by Martin, R. (2014). Time series data were taken to determine factors of FLPR, GDP and capital formation. It was shown from the results that GDP had a positive and significant influence on FLPR.

Gashi et al (2019) examined the determinants of FLPR in Kosovo. The analysis used multivariate analysis. Kosovo Labour Force Survey was used. The effect of socio-economic determinants on the Labour force participation rate of females was taken. Both demand and supply factors were used to examine the lower participation FLF in Kosovo. The findings estimated that marital status, demand in the Labour market, age, education, and household family member had significantly affected FLPR. It was concluded from the study that the importance of household level approach is, very small FLPR when considering other countries relating to FLPR.

Mujahid (2014) highlighted the determinants of FLPR: A Microanalysis of Pakistan. A Labour Force Survey was used from 2005 to 2006. Socioeconomic and demographic variables were used for the

female Labour force participation rate. A probity model was applied for analysis. Results showed more years of age have more chances of participation in the Labour market, and the education of females, significantly and positively affected FLPR. It was suggested, a higher education level of females will be helpful to enhance FLPR.

For children below 10, the husband's education is affected negatively.

Ejaz (2011) examined a cross-sectional study of Pakistan in rural and urban areas based on PSLM, 2004-05). Data were collected by the Federal Bureau of Statistics. It described the personal and family characteristics of women aged 15 to 49. IV technique was applied for the endogeneity of data. A probity regression model was applied. There was an inverse U-shaped link between FLPR and the age of females. The econometric analysis described different characteristics related to women's empowerment, personality and family nature. Independent variables such as gender, number of household appliances used, house size, education level, age, marital status, per capita income, and female-headed households. It was found that women who were married had less response to participation in the Labour market. Young age women had more response towards the Labour market, but less response after age 42. Living in joint families improved women's prospects of participating in economic activity. Owning property has had a significant negative effect on this participation.

Kiani (2013) identified the determinants of FLPR. Considered variables were FLP, female and male earners, household expenditures, male and female head of household, and female and male literacy rate. The Labour Force Survey and Household Integrated Economic Survey were used, and the Tobi model was applied. Results of the analysis showed education and household spending were positively associated with women's

Labour market participation. It was also shown that household income negatively affected FLPR. Women with solid economic backgrounds are less likely to join the workforce. Results further explained that all things being equal, a woman's chances of becoming a paid and productive member of society increase with education, and that the more educated the woman, the greater the improvement. Focusing on women's education is therefore not only important for the increase of working women but also an investment in achieving higher GDP.

Rami (2018) examined 27% of female presence and 79.9% of male presence in the Indian Labour force. The results from 1990 to 2016 showed that GDP per capita (PPP), and tertiary level had affected women's Labour market participation in India. It was shown to be an important factor. It was suggested that there is a need for a comprehensive approach to more participation of women, focused on their holistic development.

Özsoy and Atlama (2010) examined the reasons for the decline in female employment in Turkey. Structural changes from agriculture to industry, migration to cities, economic constraints, and family characteristics had been considered as reasons for the decline. Other variables were: Increased enrollment at all school levels lower youth Labour market entry, cultural values of women's employment in the market, educational attainment, Labour market conditions, wage inequality and social factors security Exclusion. It was explained that parenting was important for socioeconomic development. Some progress had been made, including the education level of 4,444 women, changes in social attitudes towards working women, women's late marriage, lower fertility rates, and microfinance opportunities.

Methodology and Data Sources

Data Sources

Annually time series data is taken from 1991 to 2021 for this analysis. The source of

the data of all variables is WDI (World Development Indicator). The main independent and dependent variables are Labour force participation of females, GDP (growth rate), education of females, fertility rate and CO₂ emission. Views version 10 is used for the analysis.

The model

$$FLFPrate = \beta + \beta_1 GGr + \beta_2 Education + \beta_3 Fr + \beta_4 CO_2 \text{ emission} + u_t \quad (1)$$

Where

FLFPrate: Labour force participation rate of female

GGr: GDP (growth rate)

Education: school enrollment of female (tertiary)

Fr: Fertility rate

CO₂ emission

Methodology

Using time series analysis, the study investigates those aspects that influence female participation in the Labour market of Pakistan.

ARDL Bound Test

ARDL Bound Test is applied when some variables are at level and some are at the first difference, then this approach is used to check the long-run relationship between variables. Pesaro et al., 1999 and Pesaro, Shin, & Smith, 2001 introduced this concept. The value of F-stat is compared with critical values of the lower and upper bound to see the long-run association between variables. This association exists if the F stat is more than the upper bound values.

Stationary can be seen through different tests which confirm the integration order at level or different differences. ADF test confirms the stationary of variables. To analyse long-run and short-run relationships using a single equation is given:

$$\Delta FLFPR_t = \beta_0 + \sum_{i=1}^q \beta_i \Delta FLFPR_{t-i} + \sum_{i=0}^q \theta_i \Delta gdp_{t-i} + \sum_{i=0}^q \gamma_i \Delta edit_{t-i} + \sum_{i=0}^q \mu_i \Delta FR_{t-i} + \sum_{i=0}^q \omega_i \Delta CO_2 \text{ (emission)}_{t-i} + \rho_1 FLFPR_t + \rho_2 gdp_t + \rho_3 edu_t + \rho_4 FR_t + \rho_5 CO_2 \text{ (emission)}_t + U_t \quad (2)$$

Where q shows the maximum number of lags in the ARDL model, determined through (the SBC) criterion. The first difference operator is shown by Δ.

$$\Delta FLFPR_t = \beta_0 + \sum_{i=1}^q \beta_i FLFPR_{t-i} + \sum_{i=0}^p \theta_i gdp_{t-i} + \sum_{i=0}^q \gamma_i edu_{t-i} + \sum_{i=0}^s \mu_i FR_{t-i} + \sum_{i=0}^x \omega_i CO2 (emission)_{t-i} + U_t \tag{3}$$

While the short-run estimation is determined by Error Correction Model. ECT_{t-1} explains lagged error correction term in the given equation as:

$$\Delta FLFPR_t = \beta_0 + \sum_{k=1}^q \beta_{1k} \Delta FLFPR_{t-k} + \sum_{k=0}^q \theta_{2k} \Delta gdp_{t-k} + \sum_{k=0}^q \gamma_{3k} \Delta edit_{t-k} + \sum_{k=0}^q \mu_{4k} \Delta FR_{t-k} + \sum_{i=0}^q \omega_{5k} \Delta CO2 (emission)_{t-k} + \kappa_1 ECT_{t-1} + v_t \tag{4}$$

Additionally, it is anticipated that the lag error term will be statistically significant, representing a long-term association. The ECT coefficient also defines how quickly short-run equilibrium shifts to long-run equilibrium. In other words, we can say that it shows the speed of adjustment. The cumulative sum of recursive residuals is used as stability analyses to confirm the estimated ARDL model goodness of fit (Durbin, Brown & Evans, 1975). We can conclude that the ARDL model estimated is stable because the results of the two tests reveal that they are projected to remain under the 5% level of significance.

Results

Table 1 Summary Statistics

Variable	FLFPR	GDPG	LFET	LCO2	FR
Mean	19.32	2.23	1.58	-0.35	4.7
Median	19.68	1.9	1.5	-0.34	4.52
Maximum	25.09	5.16	2.49	-0.08	6.3
Minimum	12.87	0.031	0.17	-0.68	3.34
Std. Dev.	3.89	1.58	0.58	0.15	0.88

Stationary test

ADF test is applied for this analysis. This test confirms the order of integration for further ARDL model.

Table 2 Unit root test

Variable	Level	1 st difference	Stationary
FLFPR	-1.196415	-4.6410 *	I(1)
GDP (growth rate)	-3.3016*	I(0)
education(tertiary)	-5.6210*	I(0)
Fertility rate	-1.193411	-2.115757 *	I(1)
lco2	-3.8893*	I(0)

***Indicates significance at 5%**

Female Labour force participation rate and fertility rate are stationary at first difference. On the other hand, GDP growth rate, education (tertiary) and co2 emission are stationary at level.

The bound test explains in this analysis that there is an association between series. F-stat is larger than the critical value of the upper bound and significant at the 5% level. For optimal lag selection, the Schwartz criterion has been chosen.

Table 3 Lag Selection

Lags	LogL	LR	FPE	AIC	S C	H Q
0	15.25	0.02	0.005	8.91	9.14	8.97
1	17.99	207.28	1.7	0.88	2.32	1.31
2	50.49	38.51*	1.23	0.33	2.97	1.12
3	91.70	33.64	7.0	0.87	2.97	0.26
4	155.32	28.24	2.27*	3.72*	1.31*	2.22*

Source: Author’s Estimation

Table 4 Long Run Results

Variables	Coefficients	Std	t-statistic	Prob .
GDP (growth rate)	0.3796	0.5682	0.6670	0.5407
Ln education (tertiary)	0.2018	0.3219	0.6269	0.5647
Lnco2	-0.6068	9.9295	-0.0611	0.9542
Fertility rate	-2.3815***	1.0973	-2.17034	0.0958
C	37.3603	11.6204	3.21505	0.0324

Source: Author's Estimation

The fertility rate is showing statistically significant as explained in the table, and the long-run effects of GDP, education, and CO2 emissions on FLPR are insignificant. In this case, education and GDP have a positive relationship while fertility rate and CO2 emissions have a negative relationship, suggesting that, a rise in FLPR is associated with rising GDP and education levels as well as a decline in fertility rate and CO2 emissions.

Following the ECT (-1), we estimate the final model (5). The SC was utilized to choose the o lag selection (SC). Table 5 includes the estimated outcomes.

Table 5. ARDL Model ECM Results

Regressors	Coefficient	Std	t-statistic
Δ GDP	0.1956	0.084	2.3185
Δ IEDU	0.7481	0.1210	6.1816
Δ ICO2	-11.1661	3.1641	-3.5290
Δ FERT	25.9701	5.6577	4.5902
$\epsilon(-1)$	-0.6124	0.1458	-4.2

R-squared=0.93 F-statistic = 3.8; DW= 2.99

Table6 LM Test (Serial Correlation)

F-stat	2.7	Prob F (1,3)	0.10
R square	12.8	Prob Chi-square (1)	0.0003

Based on the F statistic test, table 6 results demonstrate that there is no serial autocorrelation.

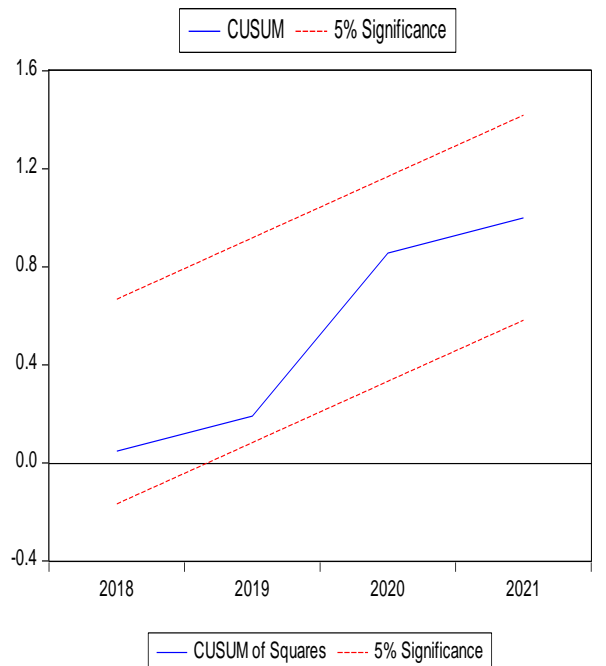
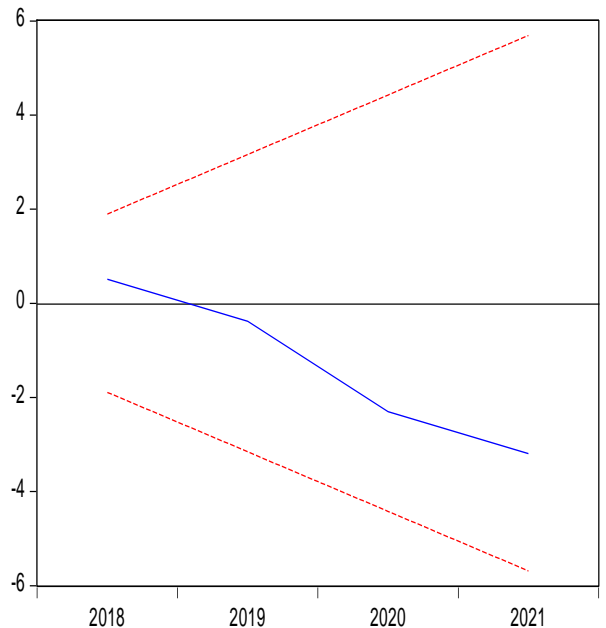
Table 7 Heteroskedasticity test

F stat	0.2955	Prop F (22,4)	0.9734
R square	16.7151	Prop Chi-square (22)	0.7789

Breach-Pagan-Godfrey confirms that there is no heteroscedasticity as shown in table 7.

Stability tests were used in this respect. Figure 1 shows a graphic representation of these two tests.

Figure 1.



We can infer that FLPR is stable as the line of CUSUM and CUSUMSQ statistics just cross

over the significant value lines. ECT coefficient is negative and significant and shows a slow process of change with the short-run disequilibrium caused by the shock of the previous year gradually returning to long-run equilibrium. Results explain female Labour force participation rate in Pakistan is significantly affected by both education and fertility rates.

Conclusion and Policy Implications

This analysis considers those determinants that affected FLPR in Pakistan from 1991 to 2021. Applying the ARDL bounds test long run result of FLPR is estimated. Findings suggest that, over the long run, an increase in FLPR is linked with an increase in GDP and education level, a decrease in fertility rate and CO₂ emissions, and shows a significant association between FLPR and fertility rate. The study by Abdullah et al. (2013), which confirmed a link between factors and the Labour force of female workers, provides evidence in favour of this conclusion. It further concludes that education, GDP growth and CO₂ emission have insignificant effects on the female Labour force participation rate in the long run.

GDP coefficient (0.3796) explains the direct relationship with FLPR, suggesting that Pakistan's focus should be on the expansion of economy size. This participation of female workers can increase and minimize gender inequality, reducing poverty and income equality. The coefficient of education is also positive (0.2018) explaining that an increase in education particularly higher education (tertiary) can also enhance the participation of female workers.

There is also a need for the govt should focus on the job pieces of training workers (to enhance skills), which will be effective for an increase in productivity of the female worker. The coefficient fertility rate shows a lower female participation rate. Child facilitation centers are needed for increasing the participation rate of females in Pakistan. The

coefficient of CO₂ emission causes a lower female Labour force participation rate. This will be helpful for the policymakers of Pakistan to consider the CO₂ emission's impact on FLPR. This analysis provides a guideline for further research to include the environmental factor like other factors for FLPR which can also affect.

References

- Abdullah, N., Aznin, N., Bakar, A., & Abdullah, H. (2013). Fertility Model and Female Labour Force Participation in Selected ASEAN Countries. *Journal of Economics, Business and Management*, 1 (3), 291-294.
- Avazalipour, M. S. et al. (2012). The role of women in economic participation and employment: A logistic model for Iran. *International Journal of Contemporary Mathematical Sciences*, 6(11), 545-556.
- Azid, T. et al. (2001). Poverty, female Labour force participation, and cottage industry: a case study of cloth embroidery in rural Multan. *The Pakistan Development Review*, 1105-1118.
- Cavalcanti, T. V. & Tavares, J. (2008). Assessing the "Engines of Liberation": home appliances and female labour force participation. *The Review of Economics and Statistics*, 90(1), 81-88.
- Efobi, U. R., Tanankem, B. V., & Asongu, S. A. (2018). Female economic participation with information and communication technology advancement: Evidence from sub-Saharan Africa. *South African Journal of Economics*, 86(2), 231-246.
- Ejaz, M. (2007). Determinants of Female Labour Force Participation in Pakistan an Empirical Analysis of PSLM (2004-05) Micro Data. *The Lahore Journal of Economics*, 203.
- Faridi, M., Chaudhry, I., & Anwar, M. (2009). The Socio-Economic and Demographic Determinants of Women Work Participation in Pakistan: Evidence from Bahawalpur District. *South Asian Studies*:

- A Research Journal of South Asian Studies, 22831, 351–367.
- Faridi, M. Z. et al. (2015). Determinants of Female Employment Status in Pakistan: A Case of Sahiwal District. A Primary Data Analysis. *Journal of Business Economics and Information Technology*, 2(4), 428-442.
- Gashi, A., Rizvanolli, A., & Adnett, N. (2019). Bucking the trend: Female Labour market participation in Kosovo. *Croatian Economic Survey*, 21(2), 85-116.
- Kiani, A. Q. (2013). Determinants of Female Labour Force Participation. *ASEAN Marketing Journal*. 1-11.
- Mano, Y. & Yamamura, E. (2010). Effects of husband's education and family structure on Labour force participation and married Japanese women's earnings. *Japanese Economy*, 38(3), 71-9
- Martin, R. (2014). Regional economic resilience, hysteresis, and recessionary shocks. *Journal of Economic Geography*, lbr019.
- Masood, T. & Ahmad, M. (2009). An Econometric Analysis of Inter-State Variations in Women's Labour Force Participation in India.
- Mujahid, N. (2012). Determinants of Female Labour Force Participation: A Micro Analysis of Pakistan. *International Journal of Economics and Empirical Research*. 2014, 2(5), 211-220.
- Umbreen, F. & Kokab, A. (2013). Factors Affecting Women's Participation in Gujrat, Pakistan. *International Journal of Scientific & Engineering Research*, Volume 8, Issue 1, January-2017 789 ISSN 2229-5518.
- Özsoy, Ceyda and Sevilay Atlama (2010), An Analysis of Trends in Female Labour Force Participation in Turkey, Challenges for Analysis of the Economy, the Business and Social Progress, Reviewed Article.
- Pesaran, M. Hashem, Shin, Yongcheol and Smith Richard J. (2001) Bounds testing approaches to the analysis of the level relationship, *Journal of Applied Econometrics*, Volume16, Issue 3, PP 289-326.
- Pesaran, M. H., Shin, Y., (1999). An autoregressive distributed lag modelling approach to co-integration analysis. In S. Strom (ed.) *Econometrics and Economic Theory in the 20th Century: The Ragnar Frisch Centennial Symposium*. Ch. 11. Cambridge: Cambridge University Press.
- Qadir, F., & Afzal, M. (2019). Impact of Cultural Factors on Earnings of Working Women in Khyber Pakhtunkhwa, Pakistan. *European Online Journal of Natural and Social Sciences: Proceedings*, 8(1 (s)), pp. 92-105.
- Rami, G. (2018). Trends and Factors Affecting Female Labour Force Participation Rate in India. *Journal of Emerging Technologies and Innovative Research*. India. 5(11)
- Shaheen, S., Hussain Sial, M., & Sarwar Awan, M. (2011). Female Labour Force Participation in Pakistan: A Case of Punjab. *Journal of Social and Development Sciences*, 2(3), 1–47
- Sumule, F. & Syafitri, W. (2013). Analysis of factors affecting the participation of married women in the informal sector (Case Study on The Traders in Ketawang Gede Sub-district, Malang). *Jurnal Ilmiah Mahasiswa FEB*, 2(2).
- Varol, F. (2017). The determinants of Labour force participation of women in Turkey: A binary logit analysis. *Journal of History Culture and Art Research*, 6(2), 92-108.
- World Bank Data- International Labour Organization, ILOSTAT database. Data were retrieved in September 2019.
- Zaheer, R., & Qaiser, S. (2016). Factors That Affect the Participation of Female in Labour Force : A Macro Level Study of Pakistan. *IOSR Journal of Economics and Finance*, 7(2): 20–24. <https://doi.org/10.9790/5933-0702032024>