Impact of Social, Political and Economic Globalization on Gender Inequality Index in Pakistan: A Time Series Analysis

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ABSTRACT  
This study is designed to calculate the newly introduced Gender Inequality Index for Pakistan according to the formula mentioned in technical notes of United Nations Development Report (2010) and then finding the impact of Social, Political and Economic Globalization on Gender Inequality Index. Time series data from 1980 to 2014 is used for Gender Inequality Index, Social, Political and Economic Globalization. Johnsons Co-integration technique is applied to investigate the impact of social, economic and political globalization on gender inequality index in Pakistan. The results of study show negative and significant relationship between economic globalization, social globalization and gender inequality index, while a negative but insignificant relationship is found between political globalization and gender inequality index. The results of the study are consistent with various theoretical and empirical studies. The policies related to globalization promotion are recommended to enrich the country with development through gender balances. To increase impact of political globalization, Pakistan needs to put more emphasis in following the spirit of treaties which target gender disparity of which she is the signatory.

Key Words: Social, Political and Economic Globalization, Gender Inequality Index, Human Development Index, Co integration

JEL Classifications: D63, I24, F63, F6,

Introduction

Increased Gender Equality in an economy spurs economic development, is testified from economic development of developed countries historically and theoretically. Empirical support also provides spine to favor the relationship between increased Gender Equality and accelerated development. These countries engaged female population in economic activities and increased their growth rate. Klasen et al (2009) investigated the relationship between gender inequality and economic growth by using panel data for time period 1960 to 2000. They find that the cost of gender inequality in education and employment is hitting growth by 0.9 to 1.9 percentage point in south East Asia and 0.1 to 1.6 percentage point compared to East Asia. A way to attain Gender equality is to open and integrate to international markets. Becker (1957) opines that competition drives out all sorts of discriminations to survive in competitive world. Hecksher-Ohlin also contended it. Neumayer at el (2011) argue that trade and foreign direct investment by developed
countries in less developed countries cause higher social and economic rights for females. Arora (2011) developed relationship between increased level of openness and higher incomes of female population in different states of India. Tellez at el (2012) found that Mexico, after signing of the North American Free Trade Agreement (NAFTA) in 1992, experienced increased relative wages of females due to liberalization policies and enhanced bargaining power.

Women are less educated and receive less healthcare as compared to males around the world. (World Bank, 2000). Gender equality is important both for individuals and economic development (Klasan et al 2003). Gender Inequality is pervasive throughout the world in general and in developing world in particular. UNFPA\(^1\) (2009) defines gender Equality as when both sexes enjoy equally, power distribution, provision of equal opportunities in education, individual pursuits, financial autonomy, work sharing of household chores and children and violence free atmosphere in personal and professional life. The Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) defines\(^2\) discrimination against women as any constraint made due to their sex which deprives them of liberty in all walks of life and basic human rights. Peer countries of Pakistan, India, Afghanistan and Bangladesh are having 0.563, 0.693 and 0.507 respectively. Slovenia and Germany top the list, having 0.016 and 0.041 respectively. This gender gap is reflected in gender biased education, health, employment opportunities, social patterns, political practices, inheritance, property and legal rights. Gender Equality phenomenon earned many advocates and opponents. Advocates preach innumerable blessings of more Gender equality, e.g. Nikolas (2011), Dollar and Gatti (1999), Olsson (2014). Opponents portray it as to further deteriorate women status, e.g. Cagatory (2004) Bhandari (2004), Segunino (2000).

Gender Inequality, nowadays is among the most researched area because it is not only unjust but it also impede development. Many factors are responsible for this grim state of affairs but present study tries to focus on impact of globalization on gender inequality. Many studies have been done in this field. Neumayer (2011), Arora (2012), Abohamidi, et al. (2013), Naeem (2009), Sharif (2006), Black (2004), Ahmed (2006) and Saeed (2012) investigate gender inequality by taking variables of labour force participation rate, wage differentials, education, poverty and empowerment of women against globalization taking proxies like trade openness, foreign direct investment, remittances, and gross domestic product and other income variables to find impact of globalization on above mentioned aspects of gender inequality. So there exist a study gap of a comprehensive study which sums up all possibly relevant factors of gender Inequality and globalization, in this study gender inequality index and globalization indices are chosen in which nearly

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\(^1\) The United Nations Fund for Population Activities was established as a trust fund in 1967 and started financing population programs in 1969.
\(^2\)(Source: UN Division for the Advancement of Women.)
all relevant variables are included to measure the impact of globalization on gender inequality by taking time series data spanning from 1980 to 1914.

Gender Inequality Index is developed by UNDP in 2010. Pakistan has gender inequality index (GII)\(^3\) value of 0.536, ranking it 121 out of 145 countries in the 2014 index (UNDP\(^4\) Report, 2014). Gender inequality index is developed by UNDP in 2010 but its time series data is not available for Pakistan so the most striking contribution of this study is that a formula is retrieved from UNDP technical notes and gender inequality index data is calculated by collecting the data of gender inequality index constellation variables and using Microsoft Excel for time period 1980 to 2014 for Pakistan. Secondly this study will analyse the impact of social, political and economic globalization on gender inequality from holistic view rather than focusing on different variables of gender inequality index individually. It is hoped that this study will contribute to breach this gap to some extent and a clearer and holistic picture will emerge to brighten the horizon.

**Literature Review**

There is enough literature available on phenomenon of globalization and gender inequality. It is interesting to notice that these two are portrayed as good and evil depending upon the Philosophical background of researcher and on the society structure and the stage of development of the country. A visit to literature review reveals that there is no dearth of advocates and opponents of impact of globalization on gender inequality, establishing their point of view empirically for female status uplift or deterioration of existing available status in particular and for employment generation and growth in general.

Black (2004) tried to test the Becker model for gender discrimination reduction due to globalization because it stated that concentrated industries exposed to globalization forces would have to leave the costly discrimination to cope with growing competition. The study focused on the gender wage differential between concentrated against competitive industries spanning from 1976 to 1993. Study concluded that increased trade increases wage inequality of less skilled workers but women were benefitted by the erosion of discriminatory powers of industries. Vicious circle between GII and economic development is elaborated by Ferrant (2011) who investigated the relationship between economic development and GII and brought evidence of existence of a vicious circle between GII and economic development. His analysis was on the impact of various aspects of GII on long term income. There exists a reciprocal relationship between income per capita and GII.

Brummet (2008) focused on the empirical determinants of economic growth, especially the impact of human capital. The study concludes that greater levels of

\(^3\) GII Stands for gender Inequality Index
\(^4\) United Nations Development Programme
female education have a positive impact on child education, health, and mortality rates. Another voice came from Bussmann (2009) who studied 134 countries to explore whether females are beneficiary or victim of trade openness. The study concludes that trade openness has different impact on women work life and welfare in developed and developing countries. Women professional lives and school enrolment improved while life expectancy showed no improvement. Dollar and Gatti (1999) brought the impact of civil rights, per capita income, religious and regional factors and investment in female education in picture on reducing gender disparity. They concluded that religious teachings effect gender inequality in different religions and regions while increase in per capita income improve gender equality. They also found that investment in female education accelerates economic growth. Social institutions play important role in reducing GII. Nikolas (2011) was also on positive side while discussing the role of social institutions in persisting gender inequality in developing countries. He studied the progress of globalization in hundred developing countries and found that globalization exerts positive pressure to reduce gender inequality.

Zahid et al (2011,) analysed the effect of trade openness, investment, labour force growth and gender Inequality on Gross Domestic Product/capita by taking data from 1972 to 2009. They conclude that there is significant and positive effect on Gross Domestic Product of labour force growth, investment and trade openness while gender inequality has negative and significant effect. Sharif (2009) investigated the effects of gender disparity in education on rural poverty. Study results concludes that enrolment ratio female-male, literacy ratio female-male , total years of schooling Female-male ratio, of earners female- male ratio and level of household heads education are significantly and inversely related to rural poverty. The results also suggest that house hold size and female-male ratio have strong and positive relationship with rural poverty. Sajid (2014) in her research paper investigated the impact of social, political and economic factors on gender equality in education and employment in Pakistan from 1980 to 2012. She concludes that GDP per capita, FDI and Urbanization are the most significant contributors of improving the level of gender equality in education and employment in Pakistan, while information and communication technologies and Law and order situation also affects the status of women in both sectors. Hyder (2006) also supported liberalization by investigating the effect of trade liberalization on three dimensions of gender inequality work force participation, health and education taking data from 1973 -2005. He concludes that gender inequality decreases with increased trade liberalization. Aboohamidi, et al( 2013) came up with cocktail results and studied the rate of female labour force participation in Pakistan and in some Middle East and North African countries and found that literacy rate and urbanization have positive and significant effects while per capita Gross domestic product and foreign direct investment have negative and significant effects. School enrolment and trade openness have no effect on female labour force participation rate.
Now the other side of the story is told by Cagatory (2004) who tried to focus on economic policies through gender lens and emphasize the importance of gender equality for inclusive development. This study based on supposition that there exists trickle down effects of growth but economies do not show signs of sustained growth instead it worsen off the condition of inequality. Some women gain and some lose. Export orientation enabled women to get paid work but burden of reproductive work does not reduce. While Bhandari (2004) was also on same frequency who attempted to measure globalization by using data from a wide spectrum of countries, industrialized, transition and developing at the criterion of their interconnectedness. Study analysed influence of economic integration, personnel contacts, political engagement and technology. By regressing globalization indices with key indicators from Indian manufacturing sector indicated no significant effect of globalization rather its policy implementation that caused industrial boom.

After reviewing all these studies it is evident that a relationship exists between globalization and gender inequality reduction but it varies from country to country and their stage of development. This study targets to explore this relationship. To make this study more specific and defining, all the three dimensions, economic, social and political globalization indices are used to achieve the target. The hypothesis, based on theory and previous studies, are formulated that all dimensions of globalization have positive impact on gender inequality index. The study gap, after reviewing all literature, found the absence of overall conception of relationship of GII and globalization and tried to find it.

**Theoretical Framework**

The provide rationale of impact of economic globalization on GII is The Becker Theory of discrimination\(^5\) (1957). It argues that in the long run, increase in competition in the product market will lessen discrimination. He emphasizes that some employers have “taste for discrimination” for which they are ready to pay high costs. They will hire few female workers less than optimum and hire more male workers at high wages to satisfy their discriminatory taste and forego some profit to continue this practice. Not only gender inequality keep growth dragging in countries which practice it but it is also costly. With increased trade and interconnectedness among all spheres of different economies will gradually wipe out costly practice of inequality and discrimination to cope with the competitive world or will be replaced by non-discriminatory firms.

The Heckscher–Ohlin\(^6\) model (H–O model) propounded by Eli Heckscher and Ohlin describes that countries export those products which are made by using

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\(^5\) Gary Becker argues that competition reduces discrimination. He received Nobel Prize on extending the domain of Microeconomics in 1992.

\(^6\) The seminal work is published in 1919 in a Swedish paper later translated in English in1950

\(^7\) Student of Heckscher, book published in 1933.
their abundant and cheap factors of production and import those products which are made by the use of the scarce factors. So the remuneration of unskilled workers will increase in comparison to skilled ones and there is a tendency of prices to equalize. Samuelson\textsuperscript{8} also argues in the same direction developing countries usually have a comparative advantage in the production of low skilled labour goods which means that the female workers, who are in general have relatively poor education and skill, get gain from export oriented development and this results to bridge the gender inequality gap. So the theoretical linkages between increased trade among countries and gender inequality reduction derive support from these theories.

As for as, social and political globalization matters their roots are embedded in social constructionist and postmodern school of thought. Cushman (1990) claims that cultural concepts and configuration of individuals are framed by the economic and political aspirations of that particular age and region. All cultures are constructed and deeply different from each other but culture change slowly by sharing knowledge, values, practices and institutional structures. Foucault (1979) pleaded that all knowledge which is created, is to serve the power hierarchies. He is of the opinion that modern societies exert themselves on others according to their favoured ideals and this assertion comes from communications. In this globalized world social and political communication ways are tools to promote the social political and economic ideals and objectives of materially andtechnologically superior economies, so different ideals, aspirations, conceptions are constructed to serve the interest of these economies.

**Theoretical Channel Diagram**

The following diagrams are an effort to show relationship of three aspects of Globalization in reducing gender inequality. The first diagram shows salient factors which stimulate awareness and employment through Information flows both electronic and print, Tourism via social interaction generates employment in country, Cultural proximity via multinational firms chains bring with them employment and cultural intermixing leading to decrease in gender Inequality slowly. Foreign population plays very critical role in influencing gender status in host country. This is according to the theories of Foucault (1979) and Cushman (1990) that different ideals of social, political and economic realms are constructed and diffuse in other cultures via different modes of communications to cater the pursuits of power centres. H-O Theorem and Becker model also works through increased competition due to continuous development in technology, knowledge, and transportation and communication methodology.

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\textsuperscript{8} Paul A Samuelson expanded H-O Model later in 1949, 1953, 1954.

The next diagram is also an endeavour to show channels to reduce gender inequality keeping in view the theories powering economic globalization case. It effects mainly by Foreign Direct Investment, Trade openness and foreign remittances. All three factors bring employment opportunities for women which in turn increase their education and health investment due to expected income generated by them because of productive engagement of women. Awareness plays the role of second prong in all dimension.

**Measurement of Variables, Data and Methodology**

Dependent variable of this study is Gender Inequality Index which is introduced by UNDP report in 2010, so data is not available for Pakistan so the formula of Gender Inequality Index (GII) calculation is retrieved from Technical notes of UNDP report and time series data is calculated from 1980 to 2014. Following is the procedure of calculation according to UNDP formula. To calculate GII three dimensions are included:

a) Reproductive health dimension is captured by two key variables, maternal mortality ratio and adolescent fertility rate. Data is obtained from WDI.

b) Empowerment dimension is measured by two variables, percentage of parliamentary participation with respect to man and second variable is secondary school enrolment female and male. Data is obtained from WDI and Barro Lee respectively.

c) Third dimension is economic empowerment which is measured by Labour Force Participation rate Female. Data is pursued from WDI.

**Steps to calculate GII**

There are 5 steps to calculate GII.

**Step 1**: Treating zeroes and the extreme values, as geometric means cannot be calculated for zero so a minimum value of 0.1 percent is assigned for all components. As higher maternal mortality ratio indicates poor maternal health, so maximum value of maternal mortality is truncated at 1000/100000 and
minimum value at 10/100000 because in countries MMR exceed 1000 have similar inability to provide conducive environment for improving MMR. Countries whose MMR is less than 10 are performing equally at same level.

**Step 2.** Summing up across dimensions within each gender group by taking geometric means.

For females aggregation formula is

\[
G_F = \sqrt[3]{\frac{10}{\text{MMR} \cdot \text{ABR}}} \cdot (PR_F \cdot SE_F)^{\frac{1}{2}} \cdot LFPR_F
\]

Formula for males is

\[
G_M = \sqrt[3]{1 \cdot (PR_M \cdot SE_M)^{\frac{1}{2}}} \cdot LFPR_M
\]

The rescaling by 0.1 of MMR is needed to adjust truncation of MMR data minimum at 10.

**Step 3.** Summing up across gender groups, using a harmonic mean.

To generate an equally distributed gender index

\[
HARM(G_F, G_M) = \left[\frac{(G_F)^{-1} + (G_M)^{-1}}{2}\right]^{-1}
\]

Using harmonic means within of geometric means between female and male and adjusting for relation between dimensions.

**Step 4.** Calculating the geometric mean of the arithmetic means for each indicator.

The reference standard for computing inequality is obtained by aggregating female and male indices using equal weights (thus treating the genders equally) and aggregating the indices across dimensions

\[
G_{\bar{F},\bar{M}} = \sqrt[3]{\frac{10}{\text{MMR} \cdot \text{ABR}}} + 1
\]

\[
\text{Health} = \sqrt{\frac{10}{\text{MMR} \cdot \text{ABR}}} + 1
\]

\[
\text{Empowerment} = \left(\sqrt{PR_F \cdot SE_F} + \sqrt{PR_M \cdot SE_M}\right) / 2
\]

\[
\text{LFPR} = \frac{LFPR_F + LFPR_M}{2}
\]

An average of female and male indices cannot be used to explain health but as half the distance from the norms established for the reproductive indicators, fewer maternal deaths and fewer adolescent pregnancies.

**Step 5.** Calculating gender inequality index.

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9 The data of GII of Pakistan from 1980 to 2014 is calculated by retrieving formula from UNDP 2010.
Comparing the equally distributed gender index to the reference standard give the GII.

\[
GII = 1 - \frac{\text{HARM}(G_F, G_M)}{G_{F,M}}
\]

According to KOF Index economic globalization comprised of actual flows which are categorized into (a) foreign direct investment (percent of GDP) (b) trade (percent of GDP) (c) Portfolio investment (percent of GDP) (d) Income payments to foreign nationals (percent of GDP). Restrictions consists of (a) hidden import barriers (b) Mean tariff rate (c) Taxes on international trade (percent of current Revenue) (d) Capital accounts restrictions.

Social globalization has three sub-indices. (a) Data on personal contact consists of (1) telephone traffic Transfers (percent of GDP) (2) International tourism (3) Foreign population (percent of total population (4) international letters (per capita). Second Sub index consists of (1) internet users (per1000 people) (2) television (per 1000 people) (3) trade in newspapers (percent of GDP). Third sub index is cultural proximity comprised by (1) number of MacDonald’s restaurants (per capita) (2) number of Ikea (per capita) (3) trade in books (percent of GDP). Political globalization is manifested by (1) number of embassies, (2) membership in international organizations (3) participation in UN Security Council Mission (4) International treaties. Data is collected from KOF index of Globalization.

Model Specification

From the above discussion the following model is conceptualized to test the hypothesis like impact of economic, political, social globalization and Human development index on gender inequality index. It assumes following mathematical form.

Model \[ \text{GII} = \beta_0 + \beta_1 \text{GLO}_{ecot} + \beta_2 \text{GLO}_{polt} + \beta_3 \text{GLO}_{soit} + \beta_4 \text{HDI} + \mu_t \]

Data of social, political and economic Globalization is collected from KOF index of Globalization. HDI data is taken from UNDP and GII is calculated according to UNDP report (2010).

Results and Discussions

After reviewing literature and collecting relevant data and calculating GII according to the formula developed by UNDP, empirical testing starts with Augmented Dickey Fuller test of Stationarity. All variables are found I(1) so Johnsons Cointegration was applied to find the relationship among dependent variable (GII) and independent variables (SGO, PGO, EGO, HDI). following tables show ADF test and long run relationship.

A time series is stationary if its mean and variance are constant over time and the value of co variance between the two time periods depend on lag or gap.
between the time periods. A time series is non stationary if it’s mean and variance is time variant. If the time series are non-stationary, regression would be spurious so first we check stationarity by applying ADF test on all variables. The results of ADF test show that all variables are non-stationary at levels and stationary at first difference which signals towards Johansen Co-integration test to find the existence of long run relationship among variables.

**TABLE 2 UNIT root Test of Augmented Dickey-Fuller**

<table>
<thead>
<tr>
<th>Variable</th>
<th>At Level Intercept</th>
<th>At Level Trend &amp; Intercept</th>
<th>At First Differences Intercept</th>
<th>At First Differences Trend &amp; Intercept</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>GII</td>
<td>-0.642 (0.8478)</td>
<td>-2.324 (0.4102)</td>
<td>-6.541 (0.0000)**</td>
<td>-6.443 (0.0000)**</td>
<td>I(1)</td>
</tr>
<tr>
<td>EGO</td>
<td>-1.18569 (0.6692)</td>
<td>-2.2159 (0.4661)</td>
<td>-5.9820 (0.0000)**</td>
<td>-5.9347 (0.0001)**</td>
<td>I(1)</td>
</tr>
<tr>
<td>PGO</td>
<td>-1.341516 (0.8598)</td>
<td>-4.9004 (0.0004)**</td>
<td>-4.8207 (0.0025)**</td>
<td>I(1)</td>
<td></td>
</tr>
<tr>
<td>SGO</td>
<td>0.1925 (0.9681)</td>
<td>-2.4447 (0.3513)</td>
<td>-4.2531 (0.0021)**</td>
<td>-4.3037 (0.0091)**</td>
<td>I(1)</td>
</tr>
<tr>
<td>HDI</td>
<td>-1.0079 (0.7374)</td>
<td>1.1675 (0.8993)</td>
<td>-26.1835 (0.0001)**</td>
<td>-26.1019 (0.0000)**</td>
<td>I(1)</td>
</tr>
</tbody>
</table>

**TABLE 3 LONG RUN RESULTS**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>1.2153***</td>
<td>0.0404</td>
<td>30.019</td>
<td>0.0000</td>
</tr>
<tr>
<td>EGO</td>
<td>-0.5162**</td>
<td>0.1915</td>
<td>-2.6955</td>
<td>0.0114</td>
</tr>
<tr>
<td>PGO</td>
<td>-0.0574</td>
<td>0.0579</td>
<td>-0.9918</td>
<td>0.3292</td>
</tr>
<tr>
<td>SGO</td>
<td>-0.6995***</td>
<td>0.0985</td>
<td>-7.0962</td>
<td>0.0000</td>
</tr>
<tr>
<td>HDI</td>
<td>-0.2496**</td>
<td>0.1071</td>
<td>-2.3304</td>
<td>0.0267</td>
</tr>
</tbody>
</table>

**Diagnostics**

<table>
<thead>
<tr>
<th>R-squared</th>
<th>F-statistic</th>
<th>Prob (F-statistic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.9632</td>
<td>196.652</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Social globalization has significant coefficient at 1% level and carries negative sign which show strong impact and relationship between social globalization and gender inequality index. HDI also has significant and negative impact at 5% significance level confirming reciprocal and significant relationship between the two. Political globalization also has negative relationship with GII but
its coefficient is insignificant showing that due to impracticality of Pakistan in pursuing the targets set by various treaties to increase gender equality. Economic globalization also cast significant and negative impact as hypothesized. The goodness of fit is shown by the value of $R^2$ and Adjusted $R^2$ which oscillates between 0 and 1. The values of $R^2$ and Adjusted $R^2$ near to 1 indicates that model is good fit and this model is good fit explaining 96% variations in dependent variable GII. F Statistics reflects joint effect of independent variables on dependent variable. The probability of F Statistics is less than 0.05 showing significant impact of all independent variables.

Table 4 Short Run ECM Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-0.0056**</td>
<td>0.0023</td>
<td>-2.4248</td>
<td>0.0232</td>
</tr>
<tr>
<td>DGII(-1)</td>
<td>0.3558***</td>
<td>0.0819</td>
<td>4.3425</td>
<td>0.0002</td>
</tr>
<tr>
<td>DGII(-2)</td>
<td>0.0281</td>
<td>0.0789</td>
<td>0.3564</td>
<td>0.7246</td>
</tr>
<tr>
<td>DPGO</td>
<td>-0.0368</td>
<td>0.0617</td>
<td>-0.5962</td>
<td>0.5566</td>
</tr>
<tr>
<td>DEGO</td>
<td>-0.2957***</td>
<td>0.1029</td>
<td>-2.8727</td>
<td>0.0084</td>
</tr>
<tr>
<td>DSGO</td>
<td>0.2967***</td>
<td>0.1042</td>
<td>2.8474</td>
<td>0.0089</td>
</tr>
<tr>
<td>DHDI</td>
<td>-0.1477***</td>
<td>0.0390</td>
<td>-3.7844</td>
<td>0.0009</td>
</tr>
<tr>
<td>ECM1(-1)</td>
<td>-1.1165***</td>
<td>0.0919</td>
<td>-12.1372</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Diagnostics

<table>
<thead>
<tr>
<th>R-squared</th>
<th>F-statistic</th>
<th>Prob(F-statistic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.8627</td>
<td>21.5571</td>
<td>0.00000</td>
</tr>
<tr>
<td>0.8227</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Short run ECM results show error term ECM1 is negative and highly significant at 1% level. ECM shows the adjustment speed to correct the disequilibrium in the short run to long run equilibrium. Coefficient of ECM1 is negative and significant (1.11) speed of correction of disequilibrium in short run to long run equilibrium.

**Results Comparison with Previous Studies**

The relationship between dependent variable GII and independent variables show short run as well as long run association. The estimation results are consistent with theory and encouraging. Slope coefficient $\beta$ is rate of change and it is measured in the units of ratio meaning that units of dependent variable divided by units of independent variable. So the results are interpreted in this way. GII and economic globalization has negative and significant impact on GII meaning that on average 1 unit increase in economic globalization, which oscillates between 1 to 100, will cause GII to fall by 0.51 point, which assumes values from 0 to 1. The results are consistent with previous studies Black (2004), Hyder (2006), Sharif (2009) Rakesh (2012) and Olsson (2014). Economic
globalization works through foreign direct investment, cross border trade, remittances and trade restrictions. Becker model and H-O Theorem are also in compliance with that increased economic openness curtail costly discrimination against women and they will get employment which in turn increase their income resulting better standard of education, health and social status.

Social globalization also has negative and significant relationship which reinforces the idea that increased globalization will increase awareness about female education, health and employment so on average 1 unit increase in SGO, which also scales 1 to 100, will lead to 0.69 unit decline in GII. Increased interconnectedness among people and access to information through print and electronic media increase awareness about education, health, standard of living and legal rights which in turn reduce unjust practices ingrained in society. This dimension shows the most significant and reciprocal impact on GII. The results are consistent with Olsson (2014) and Nikolas (2011) Neumayer (2011) Niklas (2011).This result also reinforce the Cushman and Foucault philosophical underpinning that knowledge, norms, ideals and aspirations are archived by power relations and propelled through advance technology to masses to fulfil their goals.

Political globalization has negative and insignificant relationship with GII showing that direction of relationship is as theoretically expected but it is not casting its significant effect on GII. Same picture is painted by Bhandari (2004) and Lee (2000) and Dollar (1999). Pakistan is politically highly globalized, having insignificant effect on GII which can be explained by the under lying components of political globalization. Political globalization comprises of number of embassies and high commissions in Pakistan. She is signatory of many treaties and convention to reduce gender Inequality but she is unable to achieve proposed objectives of these treaties causing to this negative but insignificant value of coefficient. Pakistan rather resists the set targets of these treaties due to its social and religious beliefs so hampering gender Inequality reduction efforts.

Conclusion

This study is designed to evaluate the impact of Social, Political and economic globalization on gender inequality Index. It is evident from so many researches and speedy development of economies that gender equality have played a vital and significant role in economic development. According to Dollar and Gatti (1999) gender inequality is a distortionary tax on economy. Globalization forces are curtailing gender disparity practices. This study is an attempt to measure these effects. Data of selected variables are gathered from various sources except GII data which is generated according to prescribed formula in UNDP. Johansen co-integration test is employed to estimate hypothesized model. There is a vacuum and gap in literature on aggregate side of GII and globalization. This study is a humble endeavour to present GII and globalization in holistic way rather than focusing on specific dimension of GII. This study helped to paint a comprehensive
picture of GII and globalization relationship. It is hoped that this study will clear
the GII horizon to abandon inequality and sparing this half of population to
contribute in economic development at their potential.

The crux of the study is that globalization phenomenon has positive impact on
reducing GII. A liberalized regime on social, political and economic fronts is
needed to reduce GII and in turn increase Economic growth. Gender
discrimination drags growth. To apply suitable estimation technique stationarity of
selected variables are checked. Time series must be stationary to guard the
spurious regression therefore stationarity is checked by applying ADF test. All
variables are found integrated at I (1) directing towards Johnson co-integration
test. ECM is applied to check short run analysis. All the variables have negative
and significant coefficients in the long run except political globalization. The
coefficient of economic globalization which assumes values from 1 to 100,
indicates that on average 1 unit increase in economic globalization will cause GII
which is measured on 0 to 1 scale, to fall by 0.51 unit. It is to remind that 1
represent least globalization on index while 100 shows complete globalization. In
case of dependent variable gender inequality index it occupies 0 when there is
complete equality and takes value 1 when there is complete inequality. Coefficient
of social globalization is negative and significant depicting that on average 1 unit
increase in social globalization will cause GII to decline by 0.69 unit which is
highly desirable. Human development index also has negative and significant
coefficient, on average 1 unit increase in Human development index will decrease
GII by 0.24 while on average 1 unit increase in political globalization will
decrease GII by 0.05unit. This result might be the outcome of socio-religious
fabric of Pakistani society. In the time span for which this study is conducted
Pakistan has been experiencing great transformation in globalization phenomenon
arena and in the realm of gender equality.

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