Gender Inequality and Trade Liberalization:
A Case Study of Pakistan

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Abstract

The main focus of this study is to explore the impact of trade liberalization on gender inequalities in Pakistan. The overall gender inequality based on three dimensions, including labor market, education and health facilities are analyzed in this paper using data from 1973 to 2005. Exports and imports to GDP ratio, per capita GDP, and number of girls' school to number of boys' school ratio are identified as important determinants of overall gender inequality in Pakistan and gender inequality in labor market of Pakistan. Further, gender inequality in education attainment is explained by per capita GDP, number of girls' school to number of boys' school ratio and number of female teachers per school.

1- Intoduction

The issue of gender inequality has received special significance in the past two decades, particularly after the mandates given by the United Nations, including the Beijing Platform for Action and as part of the Millennium Development Goals (MDGs). Despite greater international awareness about gender issues, it is a sad reality that no country has yet managed to significantly eliminate the gender gap from their respective societies (Saadia and Augusto, 2005). One has to concede, however that achieving gender equality in any society is a slow process, since it challenges deeply entrenched prejudices as well as biases in human attitudes.

Gender inequality in Pakistan can be observed in several sectors, including employment through segregation in labor markets, division of labor between paid and unpaid work, distribution of resources within households, access to public services such as education and health, and also within the power structure of the country (including the representation of women in policy making). According to Nilufer and Korkuk (2004), gender is the basis for the most pervasive and basic division of labor in most societies. This is the division between "productive" and "reproductive" activities. The productive activities refer to income-generating work, which is mainly dominated by men and the reproductive activities are largely unpaid domestic labor work including care and development of family, for which women are generally responsible. Thus, much of the work carried out by women remains invisible, as it is unpaid work. To some extent, in every society, and especially in developing countries, women are the deprived portion of the population. They are more likely to be more malnourished, less educated and comparatively underpaid, relative to their men folk.

The main focus of this study is the impact of trade liberalization on gender inequalities. Trade liberalization policies, like any other economic policy, are likely to have gender differentiated effects because of their different roles in both the market economy and in the household. Trade liberalization can change relative prices of goods, tariff revenues for the government as well as real incomes of different groups, depending on their consumption patterns. Changes in relative prices of goods can cause reallocation of factors of production among sectors, through modifying the incentives. Reduction in tariff revenues can change composition of government expenditures, especially the expenditures on the social sector, which has group-specific effects. Women are more vulnerable to reduction in social sector expenditures because of the biased intra-household allocation of resources.

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Creation of more earning opportunities and changing prices of different goods affects the purchasing power of households. This in turn can alter the allocation of resources within the household.

This report is divided into seven sections. After the br ief introduction in Section I, it presents a theoretical underpinning and review of literature in Section II. Section III discusses the theoretical framework. This is followed by Section IV and V, explaining the measurement of gender inequality and trends in gender inequality in Pakistan, respectively. The empirical results are presented in Section VI. Finally, Section VII offers the conclusions.

II. Theoretical Underpinning and Review of Literature

Theoretical underpinning of the impact of trade liberalization on gender inequality, specifically the gender wage gap, is based on two mainstream theories. The first is the distributive theorems of Heckscher-Ohlin-Samuelson, which are a part of international trade theory and the other is Gray Becker's theory of discrimination (Becker, 1971).

When a country moves from a state of autarky to a free trade economy, the transformation increases the mobility of factors of production such as capital and labour. The Hackscher-Ohlin-Samuelson theorems explain the distributive impact of the movement of labour across countries. Developing countries usually have comparative advantage in the production of goods that need intensive use of unskilled labour. The restricted environment obstructs the movement of unskilled labour to more lucrative countries. Trade liberalization increases the competition of unskilled workers among developing and developed countries which leads to improved wages for unskilled workers in developing countries and consequently reduces the wage gap. It may be noted that women workers generally comprise a disproportionately larger segment of the unskilled labour force in developing countries. Thus the fall in the wage gap between skilled and unskilled workers leads to a closing of the gender wage gap as well. In this sense, trade liberalization im pacts positively in developing countries and negatively in developed countries with respect to gender wage differences.

Second, Gray Backer's theory of discrimination provides some basis for the relationship between trade liberalization and the gender wage gap. According to Backer's theory, employers have a "taste of discrimination" and in a less competitive environment, it is easier for employers to sustain the costly discriminatory behavior. Trade liberalization increases competition; and thereby erodes the ability of firms to be able to maintain the costly discrimination, which leads to a reduction in gender wage gap. In other words, trade liberalization makes the "discrimination" activity much more expensive in effect.

A number of studies have attempted to test these theories empirically. Although it is very difficult to see a clear-cut answer in the existing literature, it does provide several important insights to the issue.The implications of trade on gender differences discussed in the literature primarily focus on the effects on employment opportunities for women workers and the wage difference between men and women employed workers. Whether change in output structure translates into changes in employment or in wages, or a mixture of both, will depend on the characteristics of the labour market. The extent to which women will be able to relocate from contracting sectors to expanding sectors will depend on the level of gender segmentation between sectors and occupations and the availability of training opportunities. Fontana (2003), in his review of literature pointed out that trade liberalization has led to the feminization of the manufacturing labor force in developing countries. Fontana concluded that employment effects of trade liberalization are most favorable for women workers, especially in developing countries, which specialize in the production of labor-intensive manufacturing. Empirically, a cross-country analysis of formal sector employment in manufacturing in developed and developing countries during 1960-1985 (Wood 1991) and until the mid 1990s (Sanding 1999) shows a strong relation between increased exports and increased female employment in manufacturing in developing countries. However, Matthias-Christian (2005) in a cross country analysis found that countries with higher gender wage inequality have higher exports of labor-intensive goods, which have comparative advantage.

The wage effects are the most studied aspect of the impact of trade liberalization. The literature mainly focuses on two different schools of thought. One is based on Baker's theory of discrimination that competitive

pressure will reduce the scope for employers to discriminate against women. The other is that the competition might reduce the bargaining power of female wage workers. Matthias-Christian (2005) found empirical evidence in case of developing countries.

Black-Brainerd (2002) tested Backer's theory of discrimination and found that increased competition through trade liberalization did contribute to relative improvement in female wages. This was found more in concentrated rather than competitive industries, suggesting that, at least in this sense, trade may benefit women by reducing the ability of firms to discriminate. Other studies, Tzannatos (1999), Oostendrop (2002) and Artecona-Cunningham (2002), found a similar relationship of a negative association between openness and the size of the gender wage gap in different occupational categories.

III Theoretical Framework

A number of factors which have been identified from the literature were used to determine the changes in gender inequality. Overall gender inequality along with its components such as gender inequality in labour market and education will be explained by its determinants such as income, imports, exports and educational facilities. This section reviews the theory of the direction such effects are likely to go in.

A rise in per capita income can be a major factor in reducing the extent of gender inequality for a variety of reasons. Internationally, there is a strong correlation between the level of per capita income and the equalization of economic opportunity between men and women. High income industrialized countries have less gender disparities.

Pasha (1999), argued that growth in per capita income enables households among other things to invest in devices which imply time and labor saving for women in the performance of domestic functions. In the specific context of Pakistan, where 70 percent of the population is living in rural areas, an income rise enables more households to improve their water supplies, methods of sanitation and technology used for cooking. The rapid installation of hand pumps in Punjab during the 1970s and the 1980s has probably implied significant time savings for women who used to walk hours to fetch water from far off areas.

According to Pasha (1994), female enrollment ratio in Pakistan responds strongly to growth in per capita income both for affordability reasons and because of underlying changes in household preferences. The economic position of women is likely to improve rapidly in fast growing economies. The implied growth in labor demand can contribute to breaking the shackles of gender discrimination in the labor market and lead to larger participation rates and higher wage rates for females.

There is considerable evidence that females dominate certain export industries that are relatively labor intensive, such as textiles and clothing. Usually, these are sectors that employ a larger number of workers and provide relatively low wages (Seguino, 2000). Yet it is unclear whether females in developing economies are working in these sectors due to a lack of other job opportunities or by choice. Nevertheless, the employment patterns do indicate considerable job segregation in most economies (Busse, Spielmann, 2005). Availability of educational facilities such as female teachers and schools are important determinants that helped in reducing the educational gender inequality.

IV Measurement of Gender Inequality

United Nations Development Program (UNDP, 1995) introduced a Gender Development Index (GDI) which was constructed to evaluate cross-country differences in gender inequality. This gender sensitive index uses the same three sectors as those used in the Human Development Index (HDI), i.e., income, education and health. For gender sensitive adjustment in HDI, they use a weighting formula that expresses a moderate aversion to inequality, setting the weighting parameter of aversion equal to 2, which is essentially a harmonic mean of the male and female values. In this paper, we will be using similar methodology to form a time variant GDI. The main objective of this study is to evaluate the effects of trade liberalization on gender inequality thus measured. Thus, we have used other labor market indicators to construct a gender inequality index rather than directly using gender wage differences, which was not possible due to data limitations in Pakistan.

The following eight indicators were used to construct the composite index of gender inequality, which include both demand and supply side indicators such as; primary enrolment, secondary enrollment, adult literacy rate, number of employed teachers, crude death rate, life expectancy, mortality rate in 1–4 years old and labour force participation rate. For a particular indicator i, the index is constructed as follows:

$$I_i = \left[\frac{S_W}{100} + \frac{S_M}{R_i} \right]^{-1} \qquad (1)$$

where S_W = share in the relevant population of women and S_M = share in the relevant population of men ($S_W + S_M = 1$), R_i is the ratio of the magnitude of the indicator for men to the magnitude for women. The ratio is expressed as a percentage. In the case of perfect equality $I_i = 100$. If $R_i > 100$ percent then $I_i > 100$. Alternatively, if $R_i < 100$ percent then $I_i < 100$. The higher the magnitude of I_i, the greater the gender inequality. However, the index is relatively insensitive to large values of R_i and, therefore, reflects moderate aversion to inequality.

Using these individual indices, we have constructed three sectoral indices. These are the Educational Attainment Index, Survival Index and Labor Participation Index. Then using the equal weighting scheme, a Composite Inequality Index has been formed. Because of the different number of indicators within each sub-category, the overall weights in the composite index are as follows: primary enrollment 1/12, secondary enrollment 1/12, adult literacy 1/12, employed teachers 1/12, crude death rate 1/9, life expectancy 1/9, mortality rate in 1-4 years old 1/9, and labor force participation 1/3.

All three dimensions of gender inequality used in the composite index are important in determining the gender differences in the country. Access to better education is no doubt the most fundamental prerequisite to achieve equality between men and women in all spheres of society. Introduction to current knowledge, techniques as well as professional and managerial education will allow women to get into the competition with men for well-paid and skilled jobs in the formal sector. Without comparable quality education and training, it would be impossible for women to understand and fight for their rights or participate in the political process and be a part of power structure of the country which in turn would make them part of the policy making process. In the present study, gender disparities in educational attainment are captured using data on literacy rates, enrolment rates for primary and secondary education and number of employed teachers. In this way, we are able to illustrate not only the current levels of women empowerment through education, but also the potential for future generations of women in the country. Employed female teachers play an important role in increasing female enrolment in conservative South Asian societies where social and cultural norms make it difficult to have equal opportunities for both males and females. The number of employed females versus male teachers matter in Pakistan because in large sections of the country, especially in backward rural areas, only female teachers are allowed to be employed in girl schools.

V Trends of Gender Inequality in Pakistan

The magnitude of the inequality indexes as computed by the authors are given in Table 1.

Table 1: Magnitude of Gender Inequality Index for Pakistan

Year	Education Attainment Index	Survival Index	Participation Index	Composite Gender Inequality Index
1973	148.82	100.30	196.67	148.60
1974	149.06	100.20	198.13	149.13
1975	146.35	100.10	197.88	148.11
1976	146.05	100.00	194.03	146.69
1977	145.95	99.92	189.87	145.25
1978	144.24	99.95	186.14	143.44
1979	145.16	99.98	182.63	142.59
1980	143.26	99.92	181.94	141.70

Year	Education Attainment Index	Survival Index	Participation Index	Composite Gender Inequality Index
1981	141.04	99.86	181.29	140.73
1982	138.52	99.80	182.25	140.19
1983	141.52	99.75	183.87	141.71
1984	140.88	99.69	185.58	142.05
1985	140.33	99.76	187.31	142.47
1986	139.12	99.76	185.14	141.34
1987	138.30	99.74	177.84	138.63
1988	136.87	99.72	181.67	139.42
1989	136.81	99.67	179.63	138.70
1990	137.59	99.68	177.45	138.24
1991	137.86	99.59	173.63	137.03
1992	138.42	99.68	170.29	136.13
1993	136.22	99.65	172.11	135.99
1994	131.02	99.62	171.51	134.05
1995	129.65	100.08	176.20	135.31
1996	129.50	100.23	176.02	135.25
1997	127.10	99.50	171.20	132.60
1998	125.06	99.50	171.12	131.89
1999	126.86	99.47	171.04	132.46
2000	125.64	99.50	170.98	132.04
2001	114.44	99.46	168.94	127.61
2002	113.70	99.46	169.60	127.59
2003	113.58	99.44	169.41	127.48
2004	113.22	99.44	166.03	126.23
2005	112.30	99.44	165.92	125.89

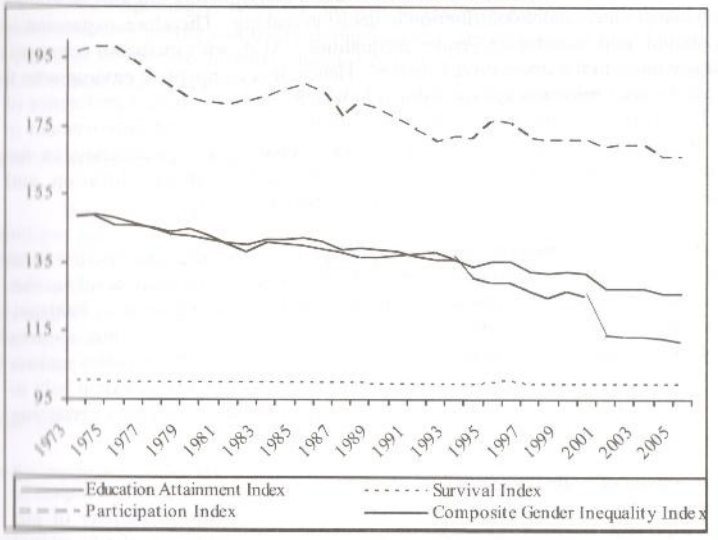
Another fundamental issue is the access to better health facilities. Women are more vulnerable to health-related issues, specially, those related to childbirth. According to the World Health Organization (WHO), 585,000 women die every year, (over 1,600 every day), from causes related to pregnancy and childbirth. It is difficult to assess the differences in the availability of the health facilities for men and women. Therefore, the literature mostly relies on outcome indicators like life expectancy and age-specific survival rates to evaluate performance and differences for men and women with regards to health facilities in a country. In this study, we incorporate three health indicators – life expectancy, crude death rate and child mortality rate in 1–4 years old to indicate gender differences. It is a known fact that women live longer, because they are less exposed to life-threatening activities. Therefore, a higher life expectancy alone would be a crude way to measure rate of access to better health facilities. But the potential impact of trade liberalization or other changes to be studied on the *change* in the relative life expectancy of women to men would be useful to study.

The presence of women in the workforce in quantitative terms is important for improving their economic position and lowering the disproportionate levels of poverty among women. Amartya Sen [1995] makes a compelling case that societies need to see women less as passive recipients of help and more as dynamic promoters of social transformation. Evidence suggests that education, employment and ownership rights to women have a powerful influence on their ability to control their environment and contribute to economic development. We have used the differences between men and women in labor participation to proxy for the unequal economic participation of women in economic development.

The results given in Table 1, demonstrate a decline in overall gender inequality in Pakistan. Looking at components, gender inequality is most pronounced in labor force participation rates. While the female labor force participation rate has more than doubled during the past 31 years, from 7¼ percent in 1972-73 to nearly 16 percent in 2004-05, it is still very low compared to male participation, which was at almost 69 percent in 2005. Education

attainment index has also improved from 148.8 to 112.3 over the sample period from 1973-2005. Currently, the literacy rate is about 45 percent for females and about 68 percent for males. Female school enrollment rates are about 76 percent for primary and about 27 percent for secondary education, which were 26 percent and 8 percent in 1972-73 respectively. The male-to-female teacher ratio[2] has improved from 2.4 in 1972-73 to 1.03 in 2003-04, which shows that there are almost equal number of male and female teachers in primary, secondary and vocational schools. However, the low level of female enrollment relative to male enrollment impedes the entry of women in the economic labor force and leads to a concentration of females in the unskilled labor force. The survival index doesn't show any significant inequality between men and women, or much movement in the relative positions of men and women over time

Chart 1: Gender Inequality Indices for Pakistan



Gender inequality appears to be declining sharply during the 1970s, with an improvement in female enrollment rates and a drop in male labor force participation rate. The first half of the 1980s shows an increase in gender inequality that is mainly attributed to a decline in the labor force participation rate for both males and females, in an era of high unemployment in the country. Augusto and Zahidi (2005) have argued that women are more concentrated in unskilled labor force, so they are more affected by the high unemployment rate in the country. Later, during the 1990s, the high enrollment rates helped resume the decline in gender inequality index. The data shows a drop in male to female teacher ratio from 1.8 to 1.1 and simultaneously an increase of primary female enrollment rates from 68 percent to 77 percent in 2001 Thus, the accompanying sharp decline of about 4.5 percentage points in the composite gender inequality index in 2001 helps to illustrate the fact that female teachers are essential to any initiative to increase female enrollment in Pakistan.

VI Empirical Results

The overall gender inequality based on three dimensions, including labour market, education and health facilities are analyzed in this paper using Pakistan's data from 1973 to 2005 period. In line with the literature, exports and imports to GDP ratio have been used to capture trade liberalization and the degree of openness of the economy.

Overall Gender Inequality

The estimated equation of the determinants of overall gender inequality is reported below (Eq-2).

[2] Details regarding data is given in the appendix

$$Log(GDI) = 6.296 - 0.123Log(PCY)^{*} - 0.08\left(\frac{M}{Y}\right)^{**} - 1.518\left(\frac{X}{Y}\right)^{*} - 0.125\left(\frac{SF_{-1}}{SM_{-1}}\right)^{*} \quad (2)$$

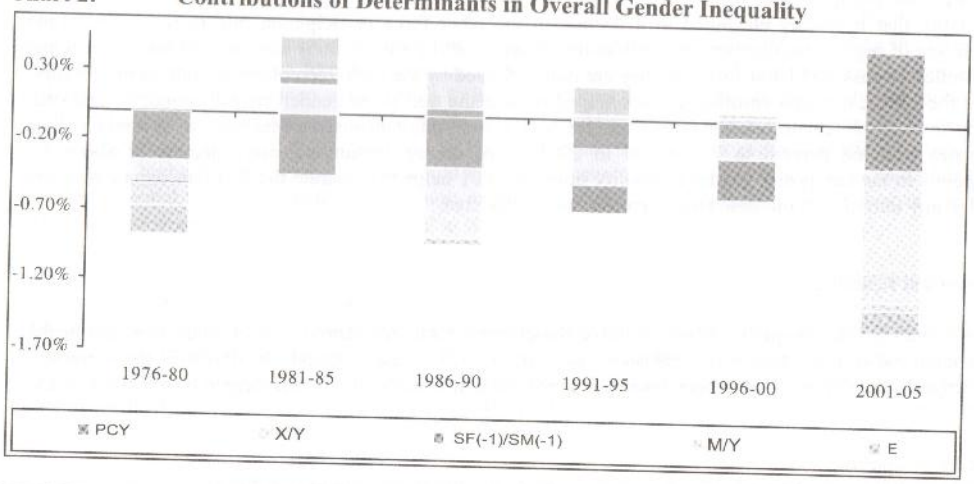
where GDI is Gender Inequality Index, PCY is Per Capita Income, M is imports, X is Exports, Y is Gross Domestic Product (GDP), SF is primary and secondary girls schools and SM is primary and secondary boys schools[1].

It is evident from the equation that trade liberalization has had a significant impact in reducing gender inequality. Further, gender inequality is more sensitive to exports rather than imports. This is quite intuitive as export-oriented industries (especially the textile industry) absorb a higher proportion of female workers. Export expansion in a country like Pakistan will increase the earning opportunities in textile sector and thus lead to higher employment opportunities for women. This induces higher household income and consequently empowers women within the household. Working women usually have more contribution in decision making. Therefore, expansion in the earning opportunities for females should help in reducing gender inequalities. Also, with increased openness, export-oriented industries have to compete more in the international market. Hence, in a competitive environment it is difficult for an employer to sustain costly discrimination against women in which employers have a preference of male workers even at higher salary. Therefore, discrimination is reduced with the expansion and improvement in competitiveness of these industries. In a similar manner, increase in imports enhances competitiveness in the domestic economy which should help in reducing gender imbalances. Similarly, cultural diffusion and technological spillovers of international trade could also be a force in reducing gender inequality.

Per capita income helps to reduce the intra-household gender inequality. Often, females are the first to be affected by any reduction in household income; and as a consequence, households spend less on their development. Investment in human capital of females is not a priority in households in developing countries such as Pakistan. Therefore, with the increase in real income, resource allocation towards females increases which in turn, reduces gender inequality. Public policy also plays an important role in determining gender inequality. If the policy makers prioritize female education and supply educational facilities for their development, this will to a large extent help in reducing gender inequality. Therefore, establishing more schools for girls in relation to boys will help in reducing gender inequality.

Indicators utilized to capture the impact of trade liberalization on gender inequality are export and import to GDP ratio. Whereas real per capita income takes into account the income effect. The ratio of number of girl schools to the number of boy schools is used here to cover the aspect of inequality in the provision of educational facilities.

Chart 2: Contributions of Determinants in Overall Gender Inequality



[2] *, **, *** Indicates significance at 1%, 5%, and 10% levels, respectively.

The contributions of above-mentioned determinants individually to changes in gender inequality are analyzed in each five-year period since 1976 to 2005. The results are presented in Chart 3. On an annual average basis, overall gender inequality index decreased by 0.88 percent during 1976-80. Trade liberalization related variables such as export to GDP ratio and import to GDP ratio have contributed one third (0.30%) of this decline (0.88%). Both the variables, exports and imports-to-GDP ratio, of trade liberalization contributed 0.14 and 0.16 percent respectively of the total decrease of 0.88 percent. Decline in imports-to-GDP ratio from 1981-85 to 1996-00 increased the gender inequality. However, exports-to-GDP ratio helped in reducing gender inequality. Recently, during 2001-05, trade liberalization reduced the gender inequality by 1 percent

Not surprisingly, however, growth in real per capita income played an important role and contributed towards reducing gender inequality throughout the sample period. Another factor that caused an increase in gender inequality is the decline in ratio of number of girl schools to number of boy schools. Specifically, during 2001-05, a lack of educational institutions for girls as compared to boys increased the gender inequality by 0.52 percent.

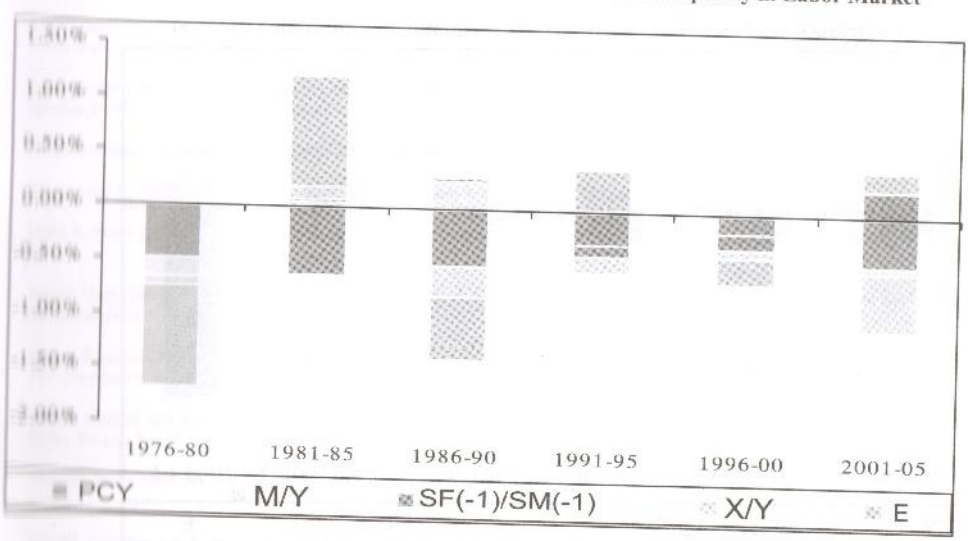
Gender Inequality in Labor Market

The expected reduction of distortions in commodity markets due to the process of trade liberalization would put pressure on entrepreneurs to employ additional units of labor, more on the basis of its marginal cost. Thus, increased competitiveness would be transferred into the factor markets. Therefore, trade liberalization should be able to bring increased competitiveness in the labor market and remove distortions and discrimination. The following equation supports this argument by demonstrating that trade liberalization has a significant impact in reducing gender inequality in the labor market as measured by differences in labor force participation rates of men and women:

$$Log(\text{LFPR}) = 7.00 - 0.174\,Log(\text{PCY})^{*} - 0.082\left(\frac{M}{Y}\right) - 0.852\left(\frac{X}{Y}\right)^{***} - 0.061\left(\frac{SF_{-1}}{SM_{-1}}\right)^{***} \quad (3)$$

Gender inequality in the labor market is denoted by LFPR with all other variables as defined earlier.

Chart 3: **Contributions of Determinants in Gender Inequality in Labor Market**



The contribution of determinants in annual average growth of LFPR is computed and shown in Chart 3. Gender inequality in labor market improved at an annual average rate of 1.7 percent during 1976-80. Growth in real per capita income contributed -0.49 percent, changes in imports-to-GDP ratio contributed -0.16%, and changes in export-to-GDP ratio contributed -0.08%, while changes in proportion of girl schools to boy schools contributed -0.02%, and unexplained variations contributed -0.93% to the overall reduction in gender inequality in labor force participation rates.

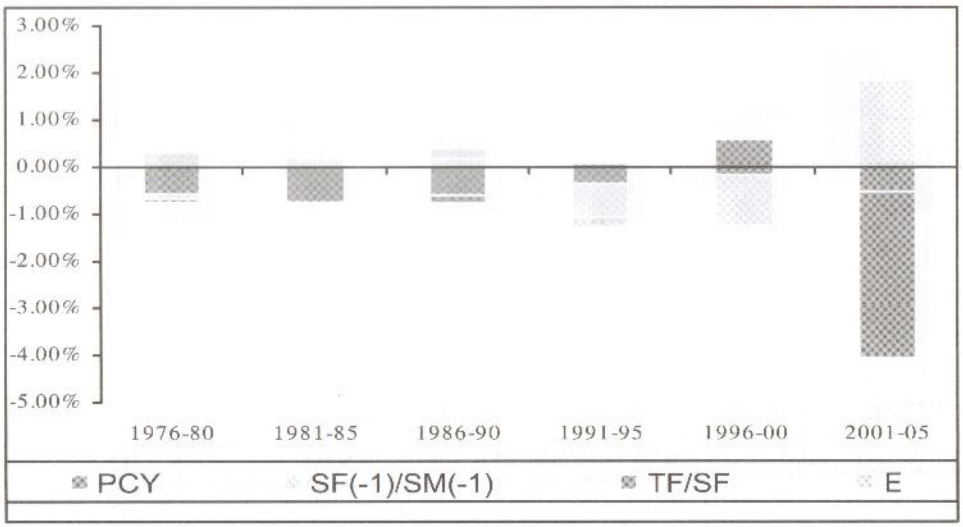
Positive growth in real per capita GDP during 1976 and 2005, has put pressure to reduce the gender inequality in the labor market which is depicted in Chart 3. The decline in exports-to-GDP ratio during 1981-85, however, has increased the gender inequality in the labor market. But recently, during the 2001-05 period, increase in share of export in GDP has contributed significantly towards reducing gender inequality in labor market.

Gender Inequality in Education Attainment

There are many economic and non-economic factors that explain the gender inequality in acquiring education. Since, low income groups have almost no resources to invest in human capital, therefore, there is no debate about allocation of resources between males and females to begin with. However, in the case of lower middle class groups, with fewer resources left over for human capital development, priority is usually given to male offspring. Therefore, it is expected that with the increase in income level, demand for education of girls should increase and growth in per capita income should reduce gender inequality in attainment of education. Lack of educational facilities for girls have a direct impact on gender inequality in education attainment and it creates supply bottlenecks as well. If fewer schools are built for girls and more are constructed for boys, then gender inequality in attaining education is the outcome of the discriminatory public policy. Therefore, ratio of schools for girls to boys is an important determinant in analyzing gender inequality in education. Another supply side factor that could explain gender inequality is the availability of number of female teachers per school. In most of the villages in Pakistan, girl schools are usually 'ghost schools' as they are there in terms of structure only[1]. The determinants of gender inequality in education attainment are shown in the Eq. 4, estimated below..

$$Log(EDUIN) = 7.264 - 0.207 * Log(PCY) - 0.026 * \left(\frac{TF}{SF}\right) - 0.431 * \left(\frac{SF_{-1}}{SM_{-1}}\right) \qquad (4)$$

Chart 4: Contributions of Determinants in Gender Inequality in Education Attinment



[4] Ghost school is a term to define a school where there is no staff and facilities except the building.

Growth in per capita income has enabled more households to provide education to females. Therefore, increase in per capita GDP played an important role in reducing gender inequality in attainment of education through the entire sample period (1973-05). Lagged ratio of girl schools to boy schools contributed towards reducing gender inequality in education attainment by 0.11, 0.71, and 1.06 percent during 1976-80, 1991-95, and 1996-00 respectively. However, decline lagged ratio of number of girl schools to number of boy schools during 1981-85, 1986-90 and 2001-05 increased inequality by 0.2, 0.19, and 1.8 percent respectively. Decline in the number of female teachers relative to female schools during 1981-85, 1991-95, and 1996-00 has further aggravated the gender imbalance in Pakistan. However, number of female teacher per female school has reduced gender inequality massively during 2001-05. Supply side factors, per-school female teachers and ratio of girl schools to boy school have remained quite important in explaining the variation in the inequality of educational attainment among girls and are quite representative of public policy priorities.

VII Conclusion

Discrimination against the female segment of the society has gained much importance in the agenda of development institutions and donor agencies, and with good reason. Prevailing cultural, traditional, and socio-economic rigidities in less developed societies create distortions that increase the bias against females. This paper hypothesized that the gender inequalities reduce or slowdown with the increase in level of development and outward orientation of the less developed economies. This argument was investigated, using Pakistan's data from 1973 to 2005. The constructed gender inequality index shows high degree of gender inequality in Pakistan, however, it has been falling quite significantly during the last 31 years. Empirical analysis has shown that variables related to trade liberalization, income and public policy has played an important role in explaining the changes of gender inequality.

The regression analysis illustrates that trade liberalization has a significant impact on reducing overall gender inequality specifically in the labor market. However, gender inequality in education attainment is explained primarily by the imbalance present in the provision of education facilities. Changes in per capita income along with the ratios of girls and boys schools and the number of female teachers to the number of schools have also played a vital role in reducing the gender inequality in Pakistan.

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