

## **Inclusive Labor Markets and Poverty Reduction: An Empirical Analysis of South Asian Economies**

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**Abstract:** Gender disparity in employment is one of the most serious and grim challenge of the modern world including south Asian countries. Although south Asian economies have taken significant leaps towards economic development in recent decades yet its economic, political and social institutions still remain one of the less developed in terms of providing decent opportunities for its people. Our paper focuses on the drivers of gender parity in employment for which the ratio of female to male labor force participation rate has been used as a proxy over the period 1995 to 2015 using panel data and the drive towards more inclusive labor market in order to eradicate widespread poverty in south Asian region. Our results suggests that the ratio of female to male labor force participation is positively associated with level of economic freedom index, democracy, ICTs infrastructure, trade openness, GDP per capita growth rate and GDP per capita while democracy squared, quadratic GDP per capita and inflation tend to decrease gender equality in south Asian case. Although quadratic gdp per capita and quadratic democracy has negative impacts on the ratio, female to male employment policy recommendation has been proposed for making labor market flexible and inclusive. Our proposition is that in order to achieve inclusive growth and development more inclusive labor market institutions should be developed to alleviate poverty.

**Keywords:** level of economic freedom index, ICTs infrastructure, GDP per capita, institutionalized democracy, trade openness; south Asia  
**JEL Classification:** P33, B15, H54

### **1. Introduction**

The phenomenon of economic development as experienced during industrial revolution and in recent decades in east and south East Asia has comprised of two main transitional processes. The first one relates to the migration of workers from agriculture sector into the manufacturing and services sector. The second is that of urbanization which involves the migration from rural to urban areas. These Transitions are the result of mechanization of agriculture, increasing literacy rates, lower fertility rates and other social and economic factors that affect the participation of the general population in the labor markets. In south Asian context though the labor force participation of male has increased substantially; the women of

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the region lags behind in every field of work and therefore, in social and economic aspects it has profound impacts on poverty reduction in the region, achievement of sustained economic growth and development of a more plural and progressive economies. Women unemployment is of great concern in the developing south Asian countries because of highly exclusive and discriminating labor markets. Female education is still considered a taboo in major parts of these developing regions which has caused poverty in women and children to a greater magnitude and incurs substantial inefficiency costs and other socio economic challenges for society as a whole.

The importance of this socio-economic problem in the development process has produced an ample academic research to address this complex phenomenon. Esteve and Volart (2004) have shown that gender equality in labor market has positive effects on the economic growth of the country. Desai and Jain (1994) had explained that eliminating gender disparities in labor market empowers women which in turn gives women more decision making power in their lives.

An elaborate literature has emerged around the labor force participation of women and its complex connection with development. According to one hypothesis there is a U-shaped relationship between economic development and women's participation in the labor market although this relationship is controversial and can only be settled through empirical studies. Studies conducted at country levels has found that such a relationship exists in Pakistan (Mujahid *et al.*, 2013) while in Indian case it is not yet evident (Lahoti & Swaminathan, 2013; Rao *et al.*, 2010).

According to ILO statistics, the female labor force participation has remained comparatively stable in the past two decades at 52% globally. At country level, female labor force participation varies greatly across emerging economies and developing countries. In south Asian, North African and middle eastern countries only one-third of women are in the work force.

According to international labor organization (ILO), it has been estimated that working poor are seven times more than the ones without any work at all. There is a growing concern among the policy makers that joblessness is

becoming one of the biggest obstacles in putting a halt to the growth and development in the country.

On the contrary male labor force participation has fallen from 81% to 77% worldwide mainly because of higher education enrolment rates among male youth. Although there is an increase in women participation rate, gender disparity is still widespread especially in south Asia. In 2013, the women labor force participation rate in south Asia was 30.5% and this participation rate in the region has fallen mainly due to the situation in India. According to ILO the gender inequality is highest in south Asian regions especially in Afghanistan, Pakistan and India, and it is lowest in Nepal a case which is exception to the region.

Women's participation rate in the labor market in south Asia is somewhat showing odd trends with participation rates falling in India in the recent years, although the economic growth of India was high during the past two decades. Similarly, in the context of Bangladesh, Nepal and Pakistan, the female labor force participation rates have risen as compared to India, although human development has fallen in these countries. In contrast, the labor force participation of women in Sri Lanka is stagnant despite tremendous achievement in the levels of human development and achievement of high economic growth. The reason of the puzzle can be slower improvements in literacy, health and high population growth which offsets the positive impacts of economic growth.

The youth bulge in South Asian countries is of major concern for policy makers and it is one of the most challenging tasks to provide sound economic opportunities for the youth. In order to accommodate this youth bulge, the government must work towards more inclusive labor markets. South Asian nations have a demographic dividend that should be steered towards enhancing growth by creating for them opportunities like quality education, employment, work-life balance, life-long learning and child investment. This demographic dividend has been for the most part missed due to the practice of child marriage, high dropout rates from schools, child illness and death, maternal morbidity, informal work, insecurity and displacement, insecure old age. This demographic transition if remain continued then by 2030, especially youth female population among the general population could make an important proportion of the labor force.

Thus, the present situation would then require an absorbing labor market and in order to move towards inclusive and flexible labor market more laws needs to be enacted and enforced that prohibits discrimination on gender basis, domestic violence and other rigid social practices in the society.

According to UNESCO an estimated figure of 16.3 million young girls are denied access to secondary education, similarly half of the young girls in south Asia are subjected to early marriage before the age of 18. Over 22% female youth in South Asia become pregnant before the age of 18, which according to World Bank costs almost 30% of GDP over their lifetime.

In low income countries (LIC), people normally find jobs in low productive activities, where the wages are low and people find it is quite difficult to sustain their basic necessities of life and therefore, are trapped in what is called vulnerable poor by World Bank. Technology has a fine character in creating better and productive jobs for the people. This would provide individuals with healthier working environment and it has positive relationship with gender equality. Gender equality in the labor market is very important for achieving sustainable economic growth and development.

Taking into account the convoluted nature of female labor force participation, it is imperative to study this socio-economic factor at micro, macro and household levels. Thus macroeconomic conditions as well as job opportunities on micro level and costless search for the job should be explained (Quisumbing, 2003). At the macro level it has been found that if employment and educational opportunities are provided to women, it would certainly decrease household poverty along with resources in women's hand has shown positive implications regarding human capital. At the household level, important factors such as level of education, economic status, number of children and the labor market status of the spouses need critical scrutiny. Although the outcomes of economic growth are not always positively related with increase in gender equality yet there are many positive dimensions, if that growth is inclusive in nature.

Gender inequality in term of opportunities and the exclusion of female workforce in economic activities has produced many challenges for the developing world in general and in South Asia in particular. This is because

exclusion of women from availing economic opportunities has long lasting negative effects on both economic development and eradication of poverty. One of the main themes of millennium development goals (MDGs) is empowering women and achieving gender equality. The focus on increasing gender equality in South Asia is significant for at least two reasons. First employment opportunities for women are crucial in the fight against poverty because it has direct as well as indirect impact on the welfare of women, children and household. Indirectly it generates more plural and sustainable growth for society as a whole.

The promotion of gender equality is crucial component of human development and inclusive economic growth strategy. Analysis of the historical data concludes that there is a statistically positive relation between gender parity in education and development process. Many studies have shown that there is a positive association between gender equality and economic growth measured by GDP per capita.

According to the World Bank study, equal access for employment is necessary for inclusive growth because gender equality in a broader sense means women empowerment, fairness in incomes, equity, enhancing productivity levels, minimization of efficiency losses as well as it is an opportunity that will help in broadening base of taxpayers and generate more resources for social protection systems. It has also been observed that gender equality gives women space in decision making, innovation, generates competition and expansion of entrepreneurial activities.

The growth, employment, and poverty nexus for south Asian nations has always been confusing and has never been straightforward. For example, in case of Pakistan in the periods of high economic growth, poverty has both declined in 1980's and has increased in 1960's. In the periods of low economic growth poverty has sharply increased in 1990's and declined in the 70's. The inclusiveness of growth is quiet essential for ensuring better standard of living and high economic growth. Gender disparities such as no provision of rights to the labor, poor labor organization, poor utilization of the remittances, no mechanism related to skill development, no regulation of microfinance to the poor in order to start their own businesses etc. have adversely affected the labor market which in turn has plagued the economies of south Asia.

South Asian labor markets are characterized by large informal sector and a small salaried or formal sector. Persistent gender inequality in south Asia can be attributed to rigid social norms cultural factors and biased labor market institutions. The labor markets in these countries are permeated with discrimination, violation of basic human rights, and lack of decent work environment, child labor and unfair compensating procedures. Informal and marginalized employed workers face difficulties on multiple platforms.

The aim of this paper is to shed light on this important economic and development problem. The focus will be on productive employment because it is the important link towards achieving economic growth and poverty eradication. The difference in the labor market outcomes which produces losers and winners is probably a matter of access to productive employment and unequal shares of the poor in the labor market process.

This study tries to empirically find the main drivers of gender parity in employment. For gender parity, the ratio of female to male labor force participation rate is used as a proxy using cross sectional data from 1995 to 2015 for five south Asian countries. Any change in the ratio of the female to male labor force participation will show either decrease or increase in gender equity in employment. In order to bring focus towards some of the mostly studied facts, some key factors which are associated with the labor force participation rate of women are increases in the education levels of women, the rise of urban areas because it provides access to formal employment, skill accumulation, more tolerable environment to women because of diversity and also cities and urban places produce better and innovative ideas.

Similarly, GDP per capita has weak U-shaped relationship with women employment participation rate as has been hypothesized and more economic liberalization has somehow mixed results for female participation in labor market. The level of economic freedom and index value of south Asian countries have also been included in the model because we are interested whether female labor force participation increases or decreases with changes in the level of economic freedom. Similarly, we are also interested in the impact of legislations such as laws that prohibit gender discrimination and domestic violence, on the inclusion of women labor in labor markets. It is because several studies have highlighted that existence

of social norms, violation of basic human rights in workplace, unfair compensation in employment, early child marriages and domestic violence have excluded female worker from labor market.

The purpose of this paper is to analyze the effect of labor market institutions, economic growth and development on gender equality. This paper also examines the impact of infrastructure, institutionalized democracy, economic freedom, educational attainment, urbanization rate and laws regarding women's rights on the inclusion of women in labor markets. As there is wide spread poverty among south Asian women so, we try to connect the inclusive and flexible labor markets with poverty reduction. Our hypothesis is that in these developing south Asian countries poverty can be effectively reduced and eradicated through making labor markets more flexible, responsive and inclusive in order to create equal opportunity and decent work for all.

Given the huge population share of women in developing south Asian countries and rapid economic growth which has helped millions of people to break the shackles of poverty however, this economic growth has also been accompanied by inequality and employment vulnerability. These challenges are particularly persistent in the labor markets. As is evident from many empirical studies labor markets play very significant role in the economic development of a nation. The international labor organization has developed a policy framework for making labor markets more inclusive. This frame work is based on three pronged approach. The rationale for this approach is that employment plays very significant role in economic and social system. It is Labor market that converts economic growth in well-being of the population; therefore, it is imperative that these markets work correctly and flexibly. In this regard this paper studies the empirical trends of the poor and vulnerable population especially women and young people participation rates in the labor market of India, Pakistan, Nepal, Sri Lanka and Bangladesh.

This paper also attempts to provide empirical evidence that would be helpful in devising strategies for reducing the level of poverty, in expanding and creating jobs and opportunities. Similarly, the promotion of inclusive labor markets is a global agenda and is crucial in lifting millions of people from poverty in to decent and standard life. Also the involvement of female

workforce in economic activity is the best strategy for eradicating poverty and therefore it is on the top of global development agendas of achieving sustainable economic and social development. The significance of inclusive labor markets in the fight against poverty is well documented and it is the way to include half of the world population in decent work and economic opportunities.

## **2. Literature review**

To study gender inequality in labor market outcomes, it can be approached theoretically from two broad aspects. One is individual choice and the other is about structural constraint. Although the differences between the two approaches have converged overtime but still some differences remain.

Individual choice model is the neo-classical approach which attempts to explain gender and labor markets. One possible explanation by (Polachek, 2004) is that gender disparities in labor markets are because of the difference in investments on human capital on gender basis where woman is considered for biological reproduction and are restricted to participate in the labor market. For example, it is widely stated that in reality there is no such thing in customs and laws that restricts women from working but if there are less prospects of job opportunities in labor markets for women; then certainly households and parents will invest only in male children's education as they can access better opportunities and can give positive returns.

Neo-classical economics has helped in recognizing gender discrimination but failed to recognize its determinants. For feminist economists such as (Figart, 2005), gender discrimination is more than a dummy variable as treated in empirical analysis. She has explained that gender discrimination is more than inequality in wages; it is about access to better opportunities, resources and compensations for women workforce. Prakash and Eastin (2013) has found "S- shaped" relationship between gender disparity and level of economic development. According to their study there are three stages; in the first stage of development the equality of both genders increases initially and then declines as income rises further because the norms and deep rooted social values related to gender discrimination resist to give way to nascent social institutions and therefore, discourage women labor force participation rate by decreasing the opportunity cost of leaving

market, in the final stage however, as women population attains more education and society as whole becomes aware of basic human rights through higher literacy levels, social rigidity fades away; in the final stage, the level of economic development accompanied by technological advancement increases gender parity and more women enters formal and high paid jobs. This has certainly positive consequences for both sustained economic growth and poverty reduction.

By the same virtue Gelleny and Richards (2007) emphasized that globalization has positive impacts on female labor force participation rate because international trade and foreign direct investment both increased economic and employment opportunities especially for women because foreign firm can be more flexible in hiring women. However, in the long run it has been found that foreign direct investment can also generate an increase in gender inequality because sometimes foreign firm mostly offers technical expertise to male workers if there is vast gender gap in education levels of the two genders. One aspect of globalization is that it decreases state revenue and in turn it's potential to provide social security of which women are the primary beneficiaries, therefore, globalization can adversely impact gender equality. The importance of gender equality in labor market is crucial in two broad aspects one is regarding social status and the other is empowering women economically as strategy to reduce poverty in the region.

Hilary (2004) argued that well-judged labor market policies can play a vital role in the eradication of poverty. In this research paper the rights of the workers are crucial for making labor markets more inclusive. Proper technical assistance, better working conditions, health of worker, better human rights and strengthening of the legal system which results in absolute removal of human right violation are a necessary part of the inclusive labor market.

Rodgers (1999) examined that promoting gender equality requires insurance of better working environment for women and protecting their rights in the working place. Women should be treated equally as men in the work place.

Huynh and Kapsos (2013) concluded that the existence of vulnerable and

informal jobs which are the determinants of the poor work and security of the jobs are specifically related with economic class. According to them, the poor and middle class in developing Asia face series barriers in accessing quality jobs and furthermore gender inequalities in terms of acquiring quality jobs are more prevalent with female worker than their male counter parts regardless of the economic class. Similarly, for youth who are poor or near poor there are stark challenges in acquiring education and access to productive employment.

Rubery (2015) examined the impacts of regulation in labor market on different type of contracts. The paper concluded that coverage of the non-standard contracts such as care work in case of women should be enhanced in developing and developed countries alike. Employer should be made accountable for suppressing voice and rights of the workers in employment and enacting regulation that put restraints on the employer ability of hiring and firing worker.

### **3. Data**

To empirically examine the determinants of the labor force participation of women in labor markets we have used econometric model which has ten independent variables and our dependent variable is the ratio of female to male labor force participation (used as a proxy for inclusive labor markets). To empirically study the key drivers of ratio of female to male labor force participation time span is taken from 1995 to 2015 of five south Asian nations. Thus, the ratio tells the gender gap in employment and the increase or decrease in the indicator explains the level of gender equality and inclusiveness of labor markets. Moreover, since south Asian labor markets are segmented and exclude mostly women from formal employment therefore, we have included variables that affect labor market institutions which need improvements and regulations in order to move towards more inclusive labor markets.

#### **3.1 Variables Selection**

We have selected eleven independent variables among which five Variable are control variables. We want to control for level of economic development on gender equality, Inflation, population growth, GDP per

capita growth so that the impact of economic ups and downs can be separated, and the impact of globalization. Because we want to empirically evaluate the impact of democracy, ICTs and the level of economic freedom on the participation of women in labor markets. As our hypothesis indicates, labor markets are governed by social and economic institutions which can either inclusive or exclusive. As we know, South Asian labor markets are highly discriminative which excludes mostly women, youth and minorities from participating in formal employment. Therefore, we have included Democracy, level of economic freedom index and ICTs which have the potential to change these labor market institutions in the favor of every one.

The Level of Economic Freedom index calculates ten (10) important components of economic freedom and every component is scaled from 0 to 100. These components are then calculated from many sub variables equally weighted and then aggregated to compute the score of each country. The Data for the level of economic freedom has been taken from [www.freetheworld.com](http://www.freetheworld.com) for five south Asian nations from 1995-2015.

GDP (US 2010) is used to control for the level of economic development. It has been assumed that with increase in the level of economic development women labor force participation initially declines up to a threshold and then rises again. Therefore, we have included square of GDP to measure the hypothesis by Boserup's (1970) that gender parity in employment and economic development has U-shape relation. The source of data is World Bank Indicators. For measuring macroeconomic stability, inflation rate is used. The data set is taken from World Development Indicators (WDI).

The measure for democracy has been taken from polity IV project, where the country's level of democracy is scaled on a 21-point spectrum, giving -10 to fully institutionalized authoritarian regimes and +10 to institutionalized democratic governments (center for international development and conflict management, university of Maryland).

To account for demographic factor one indicator has been included: total population growth rate. Higher growth rate of total population has adverse impact on gender parity in employment. Data Source is World

## Development Indicators (WDI).

It has been assumed that openness to trade has positive impacts on employment opportunities as well as labor force participation rate of women there by increasing gender parity. We have taken the exports of goods and services as percent of GDP for trade openness. The higher the volume of exports relative to the imports the more it will create economic opportunities for people.

The study have included two indicators of ICTs, mobile phone subscriptions & fixed telephone lines (per 100 people) as explanatory variables. The GDP per capita growth is included separately from GDP per capita and its quadratic form in order to control for the economic shocks that may impact gender parity in employment, for a more accurate picture of the model.

### 3.2 The Econometric Methodology

The relationship that we want to estimate is based on the above review and the framework we have described. We have chosen ordinary least square regression model with fixed effects. Our econometric model is as follow:

$$\log GE_{it} = \alpha_i + \beta_1(gdp_{it}) + \beta_2 \log(gdp_{it})^2 + \beta_3(mbc_{it}) + \beta_4(tlphn_{it}) + \beta_5(lef_{it}) + \beta_6(democ_{it}) + \beta_7(democ_{it})^2 + \beta_8(X_{it}) + \varepsilon_{it} \quad (1)$$

Where,

GDP per capita and its square are for economic development

Mobile phone subscriptions: per 100 people and fixed telephone lines are for ICTs infrastructure

$X_{it}$  : is for the list of controlled variables which includes inflation, population growth rate, gdp per capita growth rate, and trade openness for which we want separate the impact on gender equality.

GE: is the measure of gender parity at a time t of country i and the ratio of female to male labor force participation rate has been used as a proxy. “ $\alpha$ ”

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shows fixed effects that reflect time differences across country.

$\beta_1$  is the elasticity of Ratio of female to male labor force participation to gdp and  $\beta_2$  is the elasticity of ratio of female to male labor force participation to square of GDP per capita in order to reflect the U-shape relationship.  $\beta_3, \beta_4$  shows the elasticity of gender equality to mobile phones and telephone lines (ICTs infrastructure) and  $\beta_5$  is the elasticity of the gender equality to level of economic freedom,  $\beta_6, \beta_7$  are the elasticity of the gender equality to democracy and its quadratic term. X is control variables that affect the female participation in labor market it include gdp per capita growth rate, population growth rate, inflation and trade openness.

The source of the data is the online database of world development indicators and international labor organization (ILO).

#### **4. Estimation of the model and Result analysis**

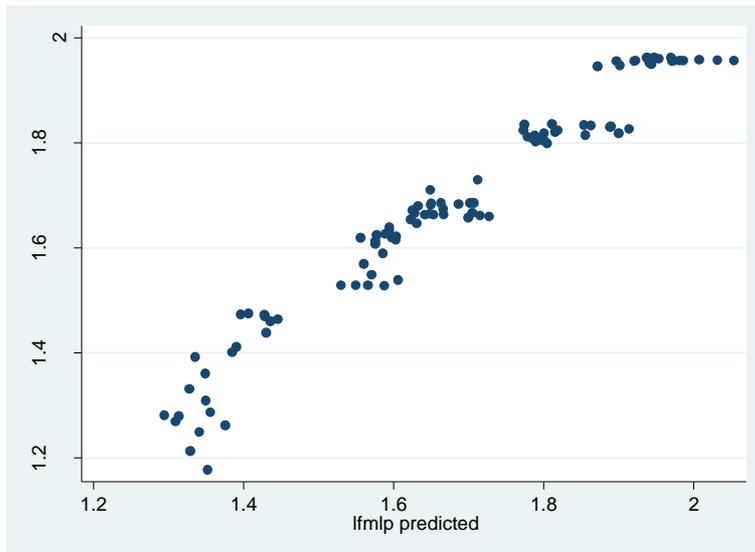
The following Table 1 shows the main descriptive statistics prior to the transformation of the data to logarithmic form for five south Asian nations from 1995 to 2015.

**Table 1: Descriptive Statistics**

Variables	Observations	Mean	Standard Deviation
Gender Parity in Employment	105	53.3250	23.4567
GDP per capita	105	1114.163	743.149
Mobile subscription	105	27.5162	32.5872
Telephone	105	3.3895	3.9185
Inflation	105	7.6853	3.7224
GDP growth	105	3.6747	2.1734
Population growth rate	105	1.5134	0.5493
Trade openness	105	18.5432	7.5563
Level of economic freedom	105	6.1152	0.3614
Democracy	105	5.7804	2.6493

The results of three post estimation tests are given in the last three rows of the Table given above. The test for multi collinearity in our case has value greater than 10 which is obvious because we have included two quadratic terms one is democracy squared and the other is GDP per capita squared. Since we have quadratic values in the model therefore we have VIF (Variance inflation Factor) slightly greater than 10 thus our model is correct. The last one is the joint F-test and the results show that indeed ICTs, democracy and level of economic freedom have significant impact on gender equality in employment in south Asian economies.

For a quick assessment of the model we had run scatter plot of the observed verses predicted values of the ratio of female to male labor force participation.

**Figure 1: Scatter Plot**

Source: Author's own formulating technique

On Y axis observed values are plotted while X axis shows predicted values of the gender equality. We should expect to observe a 45 degree relation in the data under study and thus in our case the model seems to be doing well in predicting the gender equality in employment.

Economic freedom is important ingredient for democratic development and making labor market more inclusive. In our estimated model the level of economic freedom has positive impact on gender equality in employment as well women rights. The coefficient associated with level of economic freedom has positive value and is statistically significant. Thus it supports our proposition that with the increase in the level of economic freedom gender equality increases in labor market. Similarly economic freedom is necessary for democratic development which in turn will include women and marginalized minorities in labor market. Therefore our hypothesis that with increase in the level of economic freedom labor market can be made inclusive. The positive impact of the level of economic freedom on women employment is because it addresses biasness of the social and economic institutions which impede women from participating in economic activities present in south Asian economies. Similarly, level of economic freedom

index uses those variables which are imperative for making inclusive labor markets.

Two indicators of ICTs, mobile phone subscriptions & fixed telephone lines (per 100 people) are used in this study. The coefficients associated with both indicators are positive and statistically significant at 5 % significance level. This shows that improvement in infrastructure has very significant impact on gender equality in south Asia since in these societies women are culturally bound and are restricted due many structural problems thus access to these facilities can be a blessing as they break barriers to information and labor market. These results also supports World Bank 2004 study “Gender equality and economic development: the role of information and communication technologies” which concludes that with the improvement in the level of ICTs Gender Equality can be increased in education and economic activities. Thus in south Asia the increase in the level of communication technologies women can participate in economic activities as well as access education and vocational skills.

**Table 2: Level of Communication Technologies**

Variables	Co-efficient
GDP per capita	0.0002 (10.39)
GDP per capita square	-0.912 (-23.03)
Mobile subscription	0.0014 (6.45)
Telephone	0.0104 (4.74)
Population growth	0.236 (-15.29)
Inflation	-0.0014 (-0.86)
Trade openness	0.0079 (8.08)
Democracy	0.0373 (5.68)
Democracy squared	-0.0036(-4.72)
Level of economic freedom	0.0983 (3.59)
GDP per capita growth	0.0027(0.987)
Constant	6.284 (25.94)
N	105
R-Squared	0.953
Adjusted R-Squared	0.947
RMSE	0.048

The coefficient associated with institutionalized democracy is positive and statistically significant at 5% significance level which means in south Asian

countries with the increase in the level of institutionalized democracy gender equality increases. These results are also in line with study Prakash and Eastin (2013). To check for nonlinear relation the coefficient associated with quadratic democracy is negative and statistically significant which means that increase in democracy up to certain level democracy tends to lower gender equality, holding other factors constant.

The coefficient associated with inflation is negative and statistically insignificant. Thus as the level of inflation increases women employment falls in south Asian context although the coefficient is statistically insignificant contrary to the hypothesis that with the level of inflation and the decrease in purchasing power of male increases women labor participation. one possible explanation can be that in south Asian countries more women work due acute poverty especially in India, Nepal and Bangladesh therefore rising inflation can decrease their labor force participation.

The study have included GDP per capita growth rate along with GDP per capita in order to control for economic shocks that may impact gender equality. In our model the coefficient associated with GDP per capita growth is positive and statistically insignificant. The results do not change the argument that gender equality increases initially with economic development.

The estimated coefficient associated with trade openness is positive and statistically significant. Thus our results show that increasing Exports relative to imports increases gender parity in employment as well as more openness to international trade may empower women thus improving their labor market participation. Furthermore; it can also be due to the fact that south Asian countries' exports are labor intensive therefore more exports mean more employment.

The coefficient associated with population growth is negative and statistically significant. Thus our results indicate that increasing population decreases gender equality in employment. This can be true in the context of developing countries especially in south Asia because these countries are already experiencing population bulge which has raised socio-economic issues like poverty, Illiteracy, violence, exclusive labor markets and limited

economic opportunities for their citizen.

Given the model, the estimated coefficient associated with the GDP per capita is positive showing that with the increase in economic growth the labor force participation of women also increases. Thus gender equality increases with the level of economic development. To check for the U-shape relationship we have included quadratic GDP per capita and the coefficient associated with it is negative and statistically significant at 5 % significance level. Thus with increase in GDP per capita up to a certain threshold gender equality seems to be decreasing in our model. Thus our estimation does not support the hypothesis of U-shape relationship between economic growth and gender equality in south Asian context. The estimated coefficient may also suggest partial inclusive growth in these countries although the results statistically insignificant.

## **5. Conclusion and Policy Recommendations**

Our model estimates based on panel data for five south Asian countries from 1995 to 2015 suggests that democracy, ICTs infrastructure, GDP per capita growth , level of economic freedom index and level of economic development tends to increase the gender equality in employment while quadratic democracy, quadratic GDP per capita, population growth rate and inflation lowers gender parity in employment. Since our main variables have positive impacts on women labor force participation in labor market south Asian countries need more inclusive labor markets to economically and socially empower women population in order to eradicate poverty.

Democracy has very important role in promoting gender equality, human rights and equality for all in every sphere of life. Although in our model the quadratic democracy has negative relation with gender equality in south Asian case which may be due to the fact that south Asian countries are not institutionalized democracies which are permeated by high corruption level and political instability which in turn may discourage the birth of more plural institutions in labor markets. The governments of these countries need to promote democratic values and built more liberal and inclusive social, political and economic institutions, these south Asian countries need institutionalized democracy in order to achieve inclusive growth which is the best possible strategy for economic development and poverty reduction.

Level of economic freedom in south Asian countries is humiliating and as our study suggests economic freedom index has positive and significant impact on the labor market participation of women. Democratic regimes enable women to own and operate business with ease and protection, empowering women economically and in decision making process. These components play very significant role in plural labor market institutions and creates virtuous circle which in turn strengthen labor market outcomes and gives way to more inclusive economic growth. In short, inclusive labor markets are characterized by expanding formal sector and contraction of the informal sector. It is therefore, imperative to inject the economy with more investment in education, better and efficient regulation of the markets and creating sound legal system that prohibits corruption, domestic violence, discrimination against women and minorities and property.

Similarly, ICTs infrastructure availability tends to improve gender equality in employment and increase women access to labor markets reducing transaction costs and barriers to information both of these structural problems in labor markets has produced highly skewed outcomes. Since women in these south Asian economies are bound by age old social, cultural and occupational norms and cannot break these barriers instantly, mobile phones and telephone actually increase their proximity to labor markets as well as benefit from the speed and efficiency of these technologies.

Trade openness if regulated efficiently can bring more productive and innovative ideas and technology which society as a whole. The conclusion of our study is that inclusive labor markets are governed by plural social, economic and political institutions. To achieve plural and stable institutions south Asian nations needs institutionalized democracy, economic freedom, better infrastructure and sustained economic growth to enact more inclusive labor markets for inclusive economic growth and poverty alleviation.

On the basis of the conclusions, the study recommends the following suggestions:

- In the light of the study it is imperative that governments in these countries should promote democracy and create more plural institutions so that it benefits not only the elite but also women,

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youth and minorities who are otherwise discriminated and marginalized.

- South Asian countries need to promote women entrepreneurship along with male entrepreneurs so that this young and dynamic population could tap new opportunities. Therefore governments in these countries programs aimed at releasing women time from household chores to labor market opportunities by investing in infrastructure and transportation facilities. Governments should provide safe and clean working environment for business and worker and must opt strategies that provide equal opportunities for all.
- South Asian countries are experiencing population explosion and the region has one of the largest youth populations which will either prove a curse or a valuable asset depending on how government tackles it. In order to realize this dividend government in these countries need to provide basic education and market skills to the masses which can only be done through plural economic and political institutions to create more formal economy. Education for women should be prioritized as well as south Asian countries need to reform educational curricula for quality education and upgrading skills. Programs targeting especially poor women provide double dividend, it decreases inequality as well give access to more formal jobs thus breaking the poverty trap. By enacting legislation that include women in property rights and inheritance and property rights reforms will specifically benefit rural women.
- Policies should be designed to change and reform cultural norms and traditions in south Asia. Urbanization and education can make social rigid norms more flexible and including gender equality in educational curriculum will promote and improve women participation in labor markets.



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## Reference

- Boserup, M. 1970. "The Economics of Schlaraffenland — A Final Comment". *International Review for Social Sciences*, 23(1), 120-121.
- Desai, S. and Jain, D. 1994. "Maternal Employment and Changes in Family Dynamics: The Social Context of Women's Work in Rural South India". *Population and Development Review*, 20, 115-136.
- Esteve, B. and Volart. 2004. "Gender Discrimination and Growth: Theory and Evidence from India". Available at: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.196.7406&rep=rep1&type=pdf>
- Figart, D. M. 2005. "Gender as more than a dummy variable: Feminist approaches to discrimination". *Review of Social Economy*, 63(3), 509-536.
- Gelleny, R. and Richards, D. 2007. "Women's status and economic globalization", *International Studies Quarterly*, 51(4), 855-876.
- Hilary, G. 2004. "Does religion matter in corporate decision making in America?". *Journal of Financial Economics*, 93(3), 455-473.
- Huynh, P. and Kapsos, S. 2013. "Economic class and labour market inclusion: Poor and middle class workers in developing Asia and the Pacific". ILO Asia-Pacific Working Paper Series, Geneva, *International Labor Organization*.
- Lahoti, R. and Swaminathan, H. 2013. "Economic Development and Female Labor Force Participation in India". *IIM Bangalore Research Paper No. 414*, p. 47.
- Mujahid, S., Orsi, R. H., Vangay, P., Boor, K. J. and Wiedmann, M. 2013. "Refinement of the *Listeria monocytogenes*  $\sigma$ B regulon through quantitative proteomic analysis". *Microbiology*, 159(6), 1109-1119.
- Polachek, S. W. 2004. "How the human capital model explains why the gender wage gap narrowed". *Discussion Paper No. 1102*, April 2004

- 
- Prakash, A. and Eastin, J. 2013. "Economic development and gender equality: Is there a gender Kuznets curve?". *World Politics*, 65(1), 156-186.
- Quisumbing, A. R. 2003. "Resources at Marriage and Intrahousehold Allocation: Evidence from Bangladesh, Ethiopia, Indonesia, and South Africa". *Oxford Bulletin of Economics and Statistics*, 65(3), 283-327.
- Rao, S. K., Pavicevic, Z., Du, Z., Kim, J. G., Fan, M., Jiao, Y., ... & Nosrat, C. A. (2010). Pro-inflammatory genes as biomarkers and therapeutic targets in oral squamous cell carcinoma. *Journal of Biological Chemistry*, 285(42), 32512-32521.
- Richards, D., Gelleny. and Ronald. 2007. "Women's status and economic globalization". *International Studies Quarterly*, 51(4), 855-876.
- Rubery, J. 2011. "Towards a gendering of the labour market regulation debate". *Cambridge Journal of Economics*, 35(6), 1103-1126.
- Van der Meulen Rodgers, Y. 1999. "Protecting women and promoting equality in the labor market: Theory and evidence". *World Bank, Development Research Group, Poverty Reduction and Economic Management Network*.
- World Development Report. 2004. Available at: <https://openknowledge.worldbank.org/bitstream/.../WDR%202004%20-%20English.pdf>

