THE IMPACT OF TRADE LIBERALIZATION, POPULATION GROWTH AND INCOME INEQUALITY ON POVERTY: A CASE STUDY OF PAKISTAN

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ABSTRACT

This paper is an attempt to check the impact of income inequality, population growth and trade liberalization on poverty in Pakistan. Human Development Index (HDI) is used as dependent variable and Gini coefficient, population growth rate, political stability (dummy variable) trade liberalization and lagged HDI as independent variables. The results suggest that income inequality and population growth has positive relation with poverty while trade liberalization has negative relation with poverty. If Pakistan wants to reduce poverty then there is a need to control population growth and income inequality gap. On the other hand there is a dire need for globalization and trade liberalization.

JEL CLASSIFICATION & KEYWORDS

■ O40 ■ M89 ■ POVERTY ■ HDI ■ INCOME INEQUALITY ■ TRADE LIBERALIZATION ■ POPULATION GROWTH

INTRODUCTION

The basic purpose of this paper is to examine the causes that decrease poverty. Poverty reduction, trade liberalization, control at population and distribution of income equally are the major economic goals of every country. Every country wants to get rid of poverty because poverty means low income, low education, low health and powerlessness. Trade liberalization means the removal or reduction of restrictions and barriers on exchange of goods among different nations. It includes the removal or reduction of both tariff and non-tariff obstacles while income inequality describes how income is distributed among resident of an area. High level of inequality indicates that a small number of people receive most of the total income and the most of people receive only a small portion of total income. Inequality can be measured as follows: (1) Coefficient of variation (2) Decile ratio (3) Gini coefficient.

There are many economists who favor globalization and trade liberalization. They favor economic growth, distribution of income equally and globalization as they think that these variables can reduce poverty and country can make progress by reducing poverty. There are number of existing studies that support our point of view about poverty reduction i.e. globalization, trade openness, controlled population growth and income equality reduce poverty like Winters (2000) points out that trade liberalization and openness plays vital role in poverty reduction and development. Open economies always give better results in poverty reduction than close ones. Trade liberalization is beneficial for different classes of the society like consumers, producers and it raises the earning of workers. However, the poor cannot take much advantage from the opportunities that trade liberalization creates because they have lack of skills and capital while Low (2001) views that globalization is the process in which communication between people of different nations increases. It is also globalization that

political, social, geographical constraint becomes less valuable. It creates the chances for economic growth and progress of the country. In this way globalization reduces poverty. Therefore, policy makers should make such type of policies that encourage globalization so that positive fruits can be gained from globalization and poverty reduction may possible.

Our findings are parallel to Deolalikar (2002) who says economic growth has positive effect on poverty reduction and income inequality has negative effect on economic growth in Thailand. Although income inequality has negative effect on economic growth yet it works to reduce the rate of poverty. Lower income students should be given opportunities for education so that they can reduce income gap after getting education. There is also need for investment in historical and disadvantages area of the Thailand so that income inequality gap can be reduced. On the other hand, Dhongde (2002) is in a view that economic growth reduces poverty. According to him this poverty reduction is not only on the basis of headcount ratio but also reduction in poverty gap and society enjoys all luxuries equally. For reduction in poverty there is not only a single variable i.e. economic growth but distribution of income equally plays very important role in poverty reduction. However, most important factor is economic growth that is the source of poverty reduction in India. Thrilwall (2008) considers trade liberalization as the key for economic growth. But the impact of trade liberalization on poor developing countries with different aspects like poverty reduction, income distribution and economic growth are not gained as they are expected. Trade liberalization increases the export performance but it is necessary for a poor country to protect its own industry so that it can make progress as poor countries export primary commodities and their cost in the international markt is less while their imports are final goods and in this way they bear loss from trade.

Our paper is closely related to Alvan (2009) who views that income inequality is effected with different variables like globalization, inflation, economic growth, human development etc. Human Development and income inequality has negative relation with one another. High human development means there is equal distribution of income and vice versa. Alvan took the sample of nintey countries to check the relation between human development and income distribution. He suggested that human development should be given first periority in development programme in developing countries as it is necessary for the progress of a country. The paper is also related to Shahzad Hussain (2009) literature who says that globilization and trade liberalization has positive effect on the distribution of income in developing countries like Pakistan. Income inequality can be lessened through foreign investment. However, foreign capital (Investment, remittances) effects the distribution of income negatively within the country. Foreign direct investment has also positive impact on the income distribution of Pakistan. If

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Pakistan wants to make progress there is need to invite foreign investors. If we follow the Islamic views about poverty reduction and distribution of income, here is Hossein Meisami (2011) who points out that Islam lays great stress on poverty reduction and distrbution of income equally among the people of the society. Islam stresses on the importance of human capital components like education and health. Human capital components are playing vital role in poverty reduction and distribution of income equally in Muslim Countries. The reason for current situation of the Muslim countries is that they are not following the true teachings of Islam.

Objectives

The main objectives of this paper are:

1. To find the relationship between trade liberalization and poverty.

2. To find the relationship between income inequality and poverty.

3. To find the relationship between population growth and poverty.

In order to obtain the above objectives we can make the following hypotheses.

Hypotheses

H1: Trade Liberalization reduces poverty.

H2: Income inequality increases poverty.

H3: High population growth increases poverty.

Methodology and Model

To study the impact of globalization in terms of trade liberalization, income distribution in terms of Gini coefficienct and population growth on human development index in Pakistan, time series econometric methodology has been employed. Initially, a famous technique i.e Augmented Dickey-fuller has been used to test the unit roots of the time series variables. This test has been employed in the levels and first differences with intercept, trend and both. If these time series are integrated of the same order, the co-integration process will be undertaken. However, if variables are not going to be integrated of the same order, OLS method based on the ADF test will be employed.

The Econometric model is:

$HDI = \alpha + \beta_1 TL + \beta_2 PR + \beta_3 Gini + \beta_4 PS + \beta_5 Hd5(-1) + \mu$

Where HDI is human development index measures poverty, TL is trade liberalization that is measured as the ratio of exports plus imports divided by GDP. Higher the ratio means more is the trade liberalization, PR is population growth rate, GINI is the measure of income inequality, PS is political stability (dummy variable) and we have defined political stability as democratic government and dictatorship as politically instability, HDI(-1) is lag value of HDI and µ is random error term. HDI (human development index) is taken as independent variable. HDI is a composite index comprised of three indices as: (a) life expectancy index (b) GDP index (c) education index.

Data and Empirical Evidence

In order to study the impact of trade liberalization, population growth and income inequality on poverty, the secondary data has been used for the analysis in the contex of Pakistan for the period 1981-2008. Data on population growth rate, trade liberalization, variables relating on HDI has been obtained from World Development Indicators (WDI) and Gini coefficient from Economic Survey of Pakistan. A unit root test has been performed to check the stationary of the

variables and we see all variables are stationary at first difference.

Table 1: Results of Augmented Dickey-Fuller Test at Level			
Variables	ADF (t critical) Value at 5% significance level	T-Value	Probability
HDI	2.99	1.89	0.32
GINI	1.95	0.42	0.51
POP GR	3.01	0.86	0.99
PL STB	2.97	1.46	0.53
TL	2.98	2.65	0.09
Source: Author			

Table 2 : Results of Augmented Dickey-Fuller Test at first difference			
variables	ADF (t critical) Value at 5% significance level	T-Value	Probability
HDI	2.99	3.07	0.039
GINI	1.95	6.49	0
POP GR	3.01	4.44	0.002
PL STB	2.98	4.89	0
TL	2.97	4.88	0
Source: Author			

The result of the above unit root tests reveal that all variables i.e. HDI, Gini coefficient, population growth rate, political stability, trade liberalization are non-stationary at level, 5% level of significance and are stationary on first difference. As all variables are integrated of level one I (1) so the appropriate technique for estimation is co-integration.

Table 3: Co-integrating Normalized Equation Results			
Variable	coefficient	Standard error	t-value
Political stability	-0.0017	0.0007	2.42
Trade Liberalization	0.12	0.017	7.05
Population growth rate	-0.0246	0.0024	10.2
Gini Coefficient	-0.0816	0.0123	6.63
HDI(-1)	0.4915	0.0452	10.87
C	0.661	0.0127	52
Source: Author			

Interpretation

$HDI = 0.6610 + 0.12TL - 0.0246PR - 0.0816Gini - 0.0017PS + 0.4915Hdi(-1) + \mu$

Coefficient of trade liberalization is 0.12 that means trade liberalization has a positive relation with HDI. $\beta_1=0.12$ means 1 unit increase in trade liberalization will raise HDI by 0.12 unit. Trade liberalization enhances human development index. It increases the availability of life saving drugs and better treatment facilities increase the life expectancy and GDP index increases via exports and education index rises via remittances. The $\beta_2= -0.0246$ means population growth rate has negative relation with HDI and increase in 1 unit population growth will decrease HDI (increase poverty) by 0.0246 unit. Political stability has negative sign that means stable government have negative impact as we have defined stability as democratic government. Gini coefficient ($\beta_3= -0.0816$) has negative sign mean income inequality reduces HDI i.e. increases poverty. Lag value of HDI has positive effect on present value of HDI.

Conclusion

Trade has always been considered a vital engine of economic growth and development of a poor country. Poor countries depend upon its securing adequate trade expansion. The objectives of this paper was to analyze the relationship among trade liberalization, population growth, and income inequality on poverty in Pakistan. The results reveal the reality that trade liberalization reduces poverty while population growth, income inequality increase poverty (negative relation with HDI). Government of Pakistan should follow the policy of trade liberalization because it increase HDI i.e reduce poverty. Government should take steps to reduce the income gap among the masses of the country because reduction in the gap mean increase in human development index or simple reduction in poverty that must be the aim of every government. Government should also take step for the cost-effective family planning and reproductive health policies that can promote greater demographic balance. Because high population mean low HDI or high level of poverty. To reduce poverty we have to adopt multi-dimensional policy both for short run as well as in the long run. In poverty reduction strategy macro and micro steps should involve. In macro steps we will make coherent fiscal, monetary and exchange rate policy because this will lead towards stable economy internally and externally. Fiscal authorities should follow strict fiscal discipline and keep the fiscal deficit within recommended boundaries. Monetary authorities should keep permanent check on financial and capital markets. Along with macro, micro policy will provide strong base for the growth of economy in the sector of education, health, food supplement program and integrated small works program. Such policies and program should be formulated which will directly and indirectly enhance the purchasing power of the poor sections of the society in Pakistan.

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