Impact of Trade Reforms on Poverty

USMAN QADIR, MUHAMMAD ALI KEMAL, and HASAN MOHAMMAD MOHSIN

1. INTRODUCTION

Trade plays a vital role in determining the growth process of any country. Trade liberalisation and openness of the economy are now almost universally accepted as the main ingredients of successful economic growth and welfare of the population. These are believed to be responsible for the exceptional growth of industrialised and newly industrialised countries. Many developing countries, under the auspices of the WTO are taking major steps to liberalise their trade regimes. However, in the short run, the impact of these policy changes is generally perceived to be painful for both the producers and the consumers; and especially so for the latter.

A key question here is the impact of trade reforms on poverty, which has persisted in most developing countries despite concerted efforts on many fronts to eradicate this social evil. Like many developing countries, Pakistan has undertaken far-reaching trade reforms aimed at creating an open international trading environment. Pakistan's dependence on international trade, as measured by the total trade to GDP ratio, has increased significantly from 13.3 percent in 1960-61, to 32.47 percent in 1992-93. As such, it is important to determine if there is a relationship between trade liberalisation and poverty alleviation; do trade reforms lead to reduction in country wide poverty levels or not.

The aim of this study is to examine the impact of trade reforms on poverty alleviation in Pakistan. It attempts to answer the question of whether openness of trade has led to a reduction in poverty or not. The study is organised as follows. Sections 2 and 3 provide a review of Pakistan's trade policies and literature on the estimation of poverty. Data and methodology used to examine the relationship between trade reforms and poverty are discussed in Section 4. Empirical findings of the study are analysed in Section 5 and in Section 6 the main conclusions of the study are presented.

2. AN ASSESMENT OF TRADE LIBERALISATION EFFORTS AND POVERTY LEVELS IN PAKISTAN

Since the time of independence in 1947, Pakistan has been struggling with a limited industrial base to achieve self-reliance and establish a foothold in the world-trading environment. Towards this end country placed emphasis on import substitution

Usman Qadir, Muhammad Ali Kemal, Hasan Mohammad Mohsin all works as Staff Economist at the Pakistan Institute of Development Economics, Islamabad.

as a means of accelerating economic development. However, efforts have also been made since the 70s to follow a more liberal, export-led development path.

Our objective here is to elucidate the decade-wise performance of trade and also provide a look at corresponding poverty levels in light of the literature pertaining to measurement of absolute poverty. This will help provide a clearer picture of the relationship we expect between trade reforms and poverty in the country.

Trade Liberalisation Efforts

The anti-export bias inherent in Pakistan's trade policy hindered the growth of exports. To combat this, export growth was promoted in the 60s by adoption of various measures, such as provision of incentives to export oriented industries, licensing of imports and expansion of scope of the Open General License List to accommodate items necessary for development of the country. Coverage of the OGL list was extended with the inclusion of new items each year till the late '60s, when, due to the prevailing economic conditions and various constraints, imports were severely discouraged.[1] So no measures, in the context of trade liberalisation, were adopted in this era.

The 70s saw implementation of three important measures of trade liberalisation, and movement towards more uniform exchange rates for exports. To promote exports, the export duties on a number of items were gradually removed and several rebate schemes were initiated in 1976-77. An Export Refinance Scheme (started in 1978), allowed commercial banks to provide loans to exporters, at much lower rates than the prevailing market interest rate, so as to finance their exports.

Several steps were taken to further liberalise trade during the 80s by reduction in the scope of non-tariff barriers. During the mid 80s, several items were removed from the Negative List and made freely importable and steps were taken to simplify the regulatory framework. Various measures were also introduced to allow the import of goods required in export-oriented industries. Most notable among these measures was the provision for import facilities. Import policies for the late 80's facilitated the purchase of raw material, capital and essential consumer goods included in the free list. Protection was also provided to some industries through tariffs instead of Quantitative Restrictions. Focus of the trade policy shifted to liberalisation of imports to enhance capacity utilisation of the local industry and to boost exports. The process of rationalising the tariff structure was initiated in the 80s.[2] From 1980 to 1986, compensatory rebates were provided on most manufactured goods to compensate for duties on capital goods, local taxes, etc.

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[1]A decrease in import levels was achieved by reducing the number of items on the OGL list from 67 to 10.

[2]Maximum tariff on imports was 225 percent in 1986-87, 125 percent in 1988-89, and 35 percent in the 1999-2000.

Export promotion measures of the 1994-95 trade policy focused on allowing concessional tariff treatment on the import of raw materials, machinery and other specified items. The average tariff rate declined from 29.54 percent to 11.95 percent in the 90s. The major decline in tariffs was on capital goods; i.e., from 16.03 percent to 8.31 percent, while there was a slight decline in the tariff rates on consumer goods, and on raw materials for consumer and capital goods.

Poverty in Pakistan

A number of studies have been conducted to obtain estimates for absolute poverty using varying techniques. Naseem (1973) and Allauddin (1975) showed that the poverty line declined in the '60s. Mujahid (1978); Kemal and Amjad (1997) and Ali and Tahir (1999) determined that poverty increased overall and in the rural areas while it declined in urban areas. Estimates by Irfan and Amjad (1984) revealed that rural poverty increased in the late 60s and Malik (1988), using HIES grouped data, came to the same conclusion.

Kruijik and Van Leewin (1985); Ercelawn (1988, 1989); Irfan and Amjad (1994); Kemal and Amjad (1997) and Ali and Tahir (1999) all found that poverty in rural areas was low and that poverty across rural and urban areas had declined in the 70s.

Ahmad and Ludlow (1989); Ahmad and Allison (1990) determined that during the period 1979–1984-85, poverty declined in rural as well as urban areas. Gazdar *et al.* (1994); Malik (1996); Ali (1997); Kemal and Amjad (1997) and Ali and Tahir (1999) all came out with the result that poverty declined in the 80s till 1987-88. Except Gazdar *et al*. (1994), these studies concluded that poverty increased after 1987-88.

Kemal and Amjad (1997); Ali and Tahir (1999) and Jafri (1999); Qureshi and Arif (2001) concluded that there was an increase in poverty in rural as well as urban areas. However, according to Jafri (1999), while rural poverty declined in 1990-91 and 1993-94, overall poverty levels in the country increased in the 90s decade. Pakistan has been plagued with the incidence of high poverty since the very beginning, so the development plans designed over the years have naturally tended to focus on this very important aspect of development and attempted to reduce it. The decline in poverty during the 1970s and 1980s is generally attributed to the high rates of economic growth and flow of remittances from overseas Pakistanis during that period. However, it is widely believed that poverty has increased during the 1990s. The reason for this unwelcome shift is ascribed to the low rates of economic growth, severe macroeconomic imbalances and a fall in the flow of remittances from abroad.

From the above discussion[3] we see that till the 70s, Pakistan followed a highly restrictive trade regime and poverty levels increased in the 60s era. In the 70s and

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[3]Results for the various studies are summarised in Table A1 of the Appendix.

especially in the 80s, Pakistan undertook trade liberalisation. Till 1987-88, Pakistan mostly removed raw materials from the negative list and reduced the tariffs imposed on these goods. During the Structural Adjustment Programme (SAP), when multinational funds such as the IMF imposed restrictions in return for providing funds, Pakistan reduced tariff rates on various final manufactured goods to 35 percent to 50 percent, but there was no major reduction in tariff rates on raw materials as was the earlier practice. During this era, poverty levels in the country increased.

We observe that when tariffs and non-tariff barriers are reduced on raw materials and on machinery and associated products (which are directly or indirectly used in the domestic industries through which exports will grow), poverty decreases in that period.

3. REVIEW OF LITERATURE

Fitzgerald and Perasino (1995) state that liberalising the economy encourages an inflow of resources that can lead to employment generation and increased productivity. This, in turn, leads to an increase in trade and wages and hence results in alleviation of poverty. The same conclusion is drawn by Kemal *et al.* (2000a) that trade liberalisation can have a significant impact on employment, productivity and growth and help in reducing the anti-export bias.

The simulation results given by Siddiqui and Iqbal (1999) show that tariff reduction reduces household income through decline in wages and dividends. But percentage decline in income from dividends more than the percentage decline in income of poor from wages. As a higher percentage share of income from dividends goes to the rich people and higher percentage share of wages and salaries goes to poor people. This shows that the fall in income of poor is less than the fall in income of the rich people. The simulation results show that the impact of changes in relative prices is disproportionately higher for higher income groups. Further, it shows that the reduction in tariff may reduce that gap between rich and poor.

Kemal *et al.* (2000a), suggest that the impact of tariff reduction lowers the price of imported goods, and affects the domestic relative price structure, supply of goods and demand for goods. The results show that the impact of these changes in relative prices is disproportionately higher for lower income groups. The study shows that returns to labour and capital decline in nominal terms, but increase in real terms due to decline in prices. As a result shares of labour and capital in GDP change.

In another study Kemal *et al*. (2000b) analysed the impact of reduction in non-tariff barriers on poverty and income distribution. The study focuses on the reduction in non-tariff barriers on consumer goods imports on consumers and producers directly and indirectly. Simulation results show that increases in quota on consumer goods imports result in a decline in real income and an increase in poverty.

Dan Ben-David *et al*. (2000) suggests that the trade liberalisation helps poor countries in catching up with richer countries and that this faster growth aids in alleviation of poverty. It was found that in general, living standards in the developing countries are not catching up with those in developed countries, but some developing countries are catching up. The only difference between the former and the latter is that the latter countries were characterised by openness of trade. According to economic theory, the more open an economy, the faster it will converge to the growth path of developed countries. The study also showed that people within the country gain from the trade liberalisation. This leads to the conclusion that trade liberalisation in general is a strong contributor to poverty alleviation.

It is to be noted that the empirical evidence in recent studies indicates that trade openness does indeed have a beneficial impact on poverty reduction by inviting more resources into the country, generating employment and bringing about increases in real wages. Moreover, experience, especially in East Asia, demonstrates that developing countries benefit from participation in the global economy through higher economic growth and living standards that help in reducing poverty levels [World Bank (2000)].

4. DATA AND METHODOLOGY

Data

The people whose income or consumption falls below a minimum acceptable standard of living are considered to be poor and the poverty line distinguishes the poor from the non-poor. Although the poverty line can be measured by three approaches: subjective, absolute, and relative, we have focused on the measure of absolute poverty in our empirical analysis due to non-availability of consistent data on relative poverty. Absolute poverty pertains to the position of an individual with reference to the minimum cost of food and set of basic needs required by the poor. Absolute poverty is further classified according to two approaches used to measure the poverty line: (i) the calorie based approach and (ii) the basic needs approach. In the calorie based approach, the recommended calorie intake for a person is connected with minimum food expenditure. On the other hand, the basic needs approach measures the cost of achieving the minimum basket of basic need including food requirement. The extent, depth and severity of poverty are monitored by measures such as the Head Count Ratio, Income Gap Ratio, and the FGT Index.

The analysis in this study is based on the estimates of absolute poverty obtained by various authors using the same methodology.[4] The available estimates of absolute poverty in Pakistan are discrete in nature, with gaps in the estimates. The total number of observations for poverty estimates is 16, so data on other variables is

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[4]Ali and Tahir (1999) for the period 1963-64 to 1993-94, *Economic Survey* (1999-2000) for the period 1996-97, and Qureshi and Arif (2001) for the estimate for 1998-99.

also taken for the same years. The other variables we include in our analysis are trade openness,[5] per capita income, Gini coefficient, economic growth[6] and unemployment as a percentage of total labour force.

Analytical Framework

The results in this study have been obtained using the ordinary least square technique. It is assumed that openness of trade; growth; Gini coefficient; real per capita income and rate of unemployment in the country have an impact on poverty levels. According to existing theory in this regard openness of trade, growth, real Per Capita Income and the rate of unemployment inversely affect poverty. However, increases in the Gini coefficient tend to bring about increases in poverty. For the purpose of comparison, and to provide a complete picture of poverty in the country, we have estimated models for urban as well as rural poverty.

We regress total poverty on various combinations of openness of trade index, growth, Gini coefficient, real per capita income and unemployment as a percentage of total labour force. The independent variables as well as the dependent variables in the regressions (results summarised in Table 1) have all been taken in logarithmic form, except growth rate of GDP, so that the coefficients of the variables represent elasticities. Durbin Watson statistics have not been reported for any of the regressions in this study since the data we are dealing with is not a regular series.

5. EMPIRICAL FINDINGS AND RESULTS

Four different regression models have been estimated for total poverty to determine the impact of trade openness on poverty with and without the inclusion of other variables known to have an effect on poverty. The coefficients of all the independent variables have the signs one would expect based on theory. The overall goodness of fit of the models, and the explanatory power of the variables, as represented by the R^2 coefficient, is quite high in all the equations, and significant according to the values of the F-statistic.

First, we regress total poverty on growth and trade openness. According to the results obtained (Equation 1, Table 1), openness has a statistically significant negative impact on poverty levels. Thus, an increase in openness of trade leads to a reduction in poverty. The variable of growth has a negative coefficient, representing a drop in poverty levels for an increase in growth levels.

When we regress log of total poverty on openness and Gini coefficient (Equation 2), the results indicate that a decrease in the Gini coefficient and a corresponding increase in openness would result in poverty reduction.

[5]Openness is calculated as (X+M)/GNP.
[6]Economic growth has been calculated as growth rate of GDP.

In the third instance, we regress total poverty on growth, openness and Gini coefficient and a clearer picture emerges. The coefficient of growth, though less in magnitude as compared with the other two independent variables, is still statistically significant. According to the model estimated here (Equation 3), an increase in openness results in a drop in poverty levels and an increase in growth has a similar impact on poverty levels, while the Gini coefficient has a positive association with the dependent variable.

Table 1

Regression Results

Regression Equation	c	$\log\left(\frac{x+m}{GNP}\right)$	Growth	Log(Gini)	Log (PCYR)	Log (UE/LF)	R2	F-Stat	n
Total Poverty									
1	2.63 (12.60)	-0.60 (-5.08)	-0.05 (-2.18)				0.69	14.28	16
2	4.91 (7.86)	-1.01 (-8.12)		3.15 (4.21)			0.86	36.54	15
3	4.80 (8.80)	-0.98 (-9.04)	-0.03 (-2.20)	2.87 (4.31)			0.90	33.74	15
4	14.14 (2.12)	-0.66 (-2.46)	-0.03 (-2.22)	2.09 (2.44)	-1.04 (-1.41)	0.30 (1.24)	0.92	20.77	15
Urban Poverty									
5	2.35 (11.07)	-0.67 (-5.58)	-0.04 (-1.83)				0.72	16.36	16
6	4.59 (6.79)	-1.06 (-7.88)		3.05 (3.76)			0.86	35.86	15
7	4.51 (7.00)	-1.04 (-8.11)	-0.02 (-1.53)	2.82 (3.59)			0.88	27.35	15
8	15.95 (2.33)	-0.44 (-1.59)	-0.03 (-1.90)	1.64 (1.87)	-1.31 (-1.73)	0.27 (1.08)	0.93	23.06	15
Rural Poverty									
9	2.68 (13.65)	-0.65 (-5.83)	-0.05 (-2.66)				0.75	19.12	16
10	4.83 (7.26)	-1.03 (-7.82)		3.03 (3.80)			0.85	34.93	15
11	4.70 (8.96)	-1.00 (-9.60)	-0.04 (-2.91)	2.67 (4.17)			0.92	40.58	15
12	12.57 (1.96)	-0.89 (-3.42)	-0.04 (-2.86)	2.18 (2.65)	-0.85 (-1.20)	0.32 (1.40)	0.93	24.94	15

The fourth model has been estimated based on the assumption that total poverty is affected by growth, openness, Gini coefficient, real Per Capita Income and unemployment as a percentage of labour force. The impact of the latter two variables on poverty levels is statistically insignificant at all conventional levels of significance. The remaining three variables have the expected impact on poverty and are statistically significant.

When this exercise is repeated for urban and rural poverty, similar results are obtained (as shown in Table 1) that the level of poverty decreases with increases in openness, growth, real Per Capita Income, while these levels increase when the distribution of income (as represented by the Gini coefficient) worsens and there are increases in unemployment.

6. CONCLUSION AND POLICY IMPLICATIONS

With restrictions on trade in the 60s, an increase in poverty levels was observed in the country. Since the 70s, various trade liberalisation policies were adopted, and in the era before structural adjustment programme, poverty levels declined from 40.81 percent in 1971 to 16.72 percent in 1987-88. Subsequently, in the 90s, poverty levels increased due to the fact that duties on final manufactured imports were reduced. The local industry was forced to compete, somewhat unsuccessfully, with foreign competitors, resulting in job losses and reduced wage levels.

The primary objective of this study has been to explore the association between openness of trade and total, urban and rural poverty. We have estimated multi-variable regression models that take into account the impact of other factors on poverty reduction as well.

The results obtained from these estimations are quite interesting and in accordance with the hypothesis formulated in the study. A statistically significant negative relationship is observed between trade openness and poverty (total, urban and rural) in Pakistan.

Based on the estimation carried out in this study, we conclude that openness of trade has a positive impact on poverty alleviation in the country. The results show that outward oriented policies give a boost to trade that in turn helps the Pakistani economy to grow faster. The increased tempo of economic growth has a significant impact on poverty reduction in the country.

Tariff rates and other restrictions on trade; especially those on commodities that are necessary for development of the country should be reduced to encourage an increase in trade. The restrictions on raw materials and intermediate goods used by local industries should be carefully reduced. This will allow the local industries to flourish and enhance production. There will be a reduction in unemployment levels and nominal as well as real wages will increase, resulting in a decrease in poverty levels. This is the transmission mechanism through which trade reforms can impact

poverty and enable the country to achieve socially desirable goals. However, trade reforms alone will not be sufficient in this regard, other macroeconomic policies (such as income distribution) will be needed to ensure that the benefits from trade liberalisation are enjoyed throughout the economy.

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Comments

The writers have called to our attention a vital question pertaining to the impact of trade sector reforms on poverty alleviation. Basing the main thesis of the paper on the growth experience of East Asian countries the authors on the basis of a simplistic model have hastily concluded that trade liberalisation in Pakistan has left a real positive impact on poverty alleviation. The paper has not shown essence of the East Asian experience. These countries liberalised their economies by reorienting their production and trade sectors to the demand of global market. They put in place an incentive system which not only removed all kinds of anti-export basis but also provided favourable terms for selling abroad rather than at home. Asset distribution was equalised and functional distribution of income was tilted in favour of workers. Social services provided by the public sector played important role in boosting education, health, and other services. In the backdrop of these measures the liberalised trade accelerated economic growth and reduced poverty.

The paper has not carefully looked into Pakistani data with respect to the role of the factors which played catalyst role in East Asian countries. Trade liberalisation started in 1980s. Tariffs and quantitative restrictions were considerably reduced. Inspite of these incentives performance of trade sector has remained lacklustre. GDP growth rate fall to 4.59 percent in 1990s from 6.45 percent achieved in 1980s. Thus the openness of trade has left a squeezing effect on the growth economy thereby accentuating poverty in 1990s.

It is important to examine nature, extent, and coverage of trade liberalisation. It has not removed anti-export bias in Pakistan. Still SROs are being issued and imports are subjected to 35 percent tariff rate. These measures have rendered selling at home profitable than abroad. Additionally, it has not extended its scope to influence flow of technology and FDI. Similarly the freezing of foreign currency account apart from its multiple adverse effects has reduced the flow of remittances. All these factors have constrained expansion of the economy in the wake of liberalisation period.

The paper using OLS regression technique has tested the causal role of exports, imports, per capita income, food debt and openness of trade variables. In specifying these variables it does not give satisfactory economic justification for their inclusion. Five equations each containing single explanatory variable have been estimated. The results have turned out to be encouraging. The estimated coefficients are both economically and statistically significant. However, it is very likely that these estimates may be capturing the effects of omitted variables. Therefore, no meaningful conclusion can be drawn from such findings.

Muhammad Ramzan Akhtar

International Institute of Islamic Economics,
International Islamic University,
Islamabad.